



**COMMUNICATION SKILLS TRAINING
FOR GENERAL PRACTICE**

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ABSTRACT OF THESIS

Rather than a linear progression of ideas, this thesis took a kaleidoscopic view of aspects of teaching medical students communication skills at a time when they were entering their clinical years. The work was done when the author was the Director of the General Practice Teaching Unit at Modbury in South Australia between 1990 and 2000. During this time the author co-ordinated and taught Communication Skills at this unit for all Fourth Year Medical Students from the University of Adelaide, South Australia.

This thesis integrated reports of 12 data-gathering exercises centred on medical student communication skills, with the international literature and also with the author's reflections as an experienced educator and general practitioner. A novel perspective of this thesis was the analysis in a general practice setting of the behaviour of both medical student and standardised patient (SP) with relation to communication in the consultation. Videotaping consultations between medical students and standardised patients allowed the observation of not only the types of questions the students asked, but also their non verbal behaviour. Similarly the non verbal behaviour of standardised patients was analysed.

Initially the literature on factors in the modern medical school which could possibly act as barriers to communication skills training (CST) were discussed. Then the literature on the reason for teaching CST was described and the first study

of the thesis presented the responses of a large sample of South Australians about discussing feelings and emotions with their usual general practitioner. Following this, the literature on whether CST for doctors could improve patient outcomes was described and the second thesis study followed concerning CST outcomes on students' questioning behaviour.

Next the literature about changes in medical schools was discussed and two thesis studies followed; one about CST and the impact of Problem Based Learning and the other about the motivation of the volunteer Standardised Patients.

Medical students' attitudes were analysed in the next four studies in the thesis. These included their perceptions of CST and general practice values, videotaping consultations, consulting and possible outcomes of consulting.

Next SPs' non verbal behaviour and their perceptions of the students' consulting behaviour was described followed by a study on SP satisfaction and the duration of student eye contact with them in the consultation. A further study on student eye contact involved subsequent use of open questions by the student as well as the SPs' feelings of "enablement" and satisfaction.

To see if students' confidence about psychological aspects of consulting matched their actual behaviour, a study was undertaken to assess this and also to see what the SP felt about the student's consultation.

Finally the summary of the study results were described and a personal view given of the future of undergraduate general practice teaching. It was felt that communication skills training in a general practice setting should be a crucial factor in all future training of medical students.

STATEMENT

- (a) This thesis contains no material which has been accepted for the award of any other degree or diploma in any University and that to the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the thesis being made available.
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I would like to dedicate this thesis to my late mother who constantly encouraged me in this endeavour and also to my two children Kathryn and Ian.

"Life is short, the art long, opportunity fleeting,
experiment treacherous, judgement difficult"

Hippocrates

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INTRODUCTION



It is now being increasingly realised that general practice has important social and political effects as expressed by Dr Kerr White in his Bicentennial Health Initiative Review of Public and Tropical Health in Australia. "Progress in preventive medicine, health promotion, behavioural health and community responsiveness to the population's problems can be substantially impeded or enhanced by the attitudes and performances of family physicians. It is largely by strengthening the primary care component of any health system that it is possible to keep people out of hospitals and to contain costs, to say nothing of treating them early in the natural history of disease" (White 1986).

The performance of family doctors is enhanced by their ability to communicate with patients. Because general practitioners are required to manage undifferentiated illness, to provide continuing care and to be an advocate for their patients they need to be able to communicate well. As a result, it may be that the best place to start teaching communication skills to undergraduates should be a general practice setting. Behavioural scientists and psychiatrists can make a valuable contribution to CST for undergraduates but such a contribution may be more valuable if these teachers work together with general practitioners. Anecdotally students seem more comfortable with CST that relates to every day clinical problems in general practice. In theory, every specialist

should be able to teach CST with relevance to their particular field but in practice, the literatures does not find that specialists as a rule teach CST in medical schools (Bickel 1987).

This thesis represents a series of perspectives of communication skills training of groups of fourth year medical students in a general practice setting. The studies occurred over eight years at the General Practice Teaching Unit in South Australia. This Unit was equipped with videotaping facilities and had 25 standardised patients (SPs) most of whom suffered from chronic illness.

The first aim of the thesis was to establish that communication skills are important to general practice. The role of communication skills training in medical schools is discussed as well as the educational changes going on in these institutions.

Secondly the thesis was concerned with the question: "Why teach communication skills?" The literature in this area was discussed as well a study of over 3,000 South Australians which explored their comfort in discussing their emotions and feelings with their usual general practitioner.

Thirdly the literature was described on how to improve communication skills in students and doctors. In this area a study was described which found that Communication Skills

Training (CST) at the General Practice Teaching Unit created behavioural change in students.

The fourth task was to look at changes in medical schools in educational outlook. This included the use of video feedback and standardised patients. The nature and attitudes of the volunteer SPs in the General Practice Teaching Unit were described. As Problem Based Learning (PBL) is now an important part of the way medical students learn, a study was reported on the impact of introducing PBL into a segment of the CST course at the Unit.

The fifth task of the thesis was to look at student factors in CST. Where did a student's confidence in their communication skills fit in with their beliefs in general practice and specialist values? This confidence surprisingly did not relate to values of looking after people which one would expect to be a general practice function. Other questions students were asked were about their attitudes to videotaping of their consultations and their attitudes to consulting. These attitudes changed significantly after the CST in both of these studies. Also studied was the confidence of the students about how their communication skills could improve patient care. Finding out about these student attitudes is important in planning experiential learning especially for creating changes in student behaviour. A further study attempted to link students' perceptions of psychological orientation to the consultation with various outcomes. These

include SP feedback and also measuring the questioning behaviour of the students.

Another theme to be explored in this thesis was non verbal behaviour. Two aspects of this were studied: the students' initial eye contact and also the SP's open or closed knee position. In one study at the end of CST longer student eye contact with the SP correlated with a better measure of SP enablement. A further study was undertaken to see if students' perception of how well they communicated in the consultation related to the knee position of the SP. When students reported that their communication in that consultation was good, the SPs closed their knees more. When the SPs felt that the student communicated well and that they would go to that student if he or she was a doctor, their knees opened more.

Finally a personal vision was described of future undergraduate general practice teaching and this was followed by a summary of the findings of the studies described with a discussion.

CHAPTER I

COMMUNICATION SKILLS TRAINING FOR GENERAL PRACTICE AND THE
MODERN MEDICAL SCHOOL

The importance of skilful interpersonal communication in the provision of general practice care is widely recognised. There are some that argue that it is more profitable to train counsellors for primary health care and to ignore improving communication skills training for general practitioners. This philosophy ignores the mostly easy access of patients to their general practitioner, the way they present often with undifferentiated problems and physical symptoms and the use of the general practitioner by patients at relatively frequent intervals (approximately 80% of Australians consult their general practitioner one or more times a year).

Furthermore the Royal Australian College of General Practitioners has stated as an aim of its Family Medicine Programme, that the competent general practitioner provides whole person care, promotes health and the prevention of illness, and encourages individuals and families to accept personal responsibility for life style (RACGP 1989). Also general practitioners manage more than 90% of the psychiatric illness in the community (Shepherd et al 1966, Goldberg et al 1980).

The general practitioner practises total or holistic care and also continuing care (with or without chronic illness). To be

comprehensive implies the ability to do many tasks and many tasks require good communication.

Communication skills (Hess 1969, Ivey 1983) are those skills with which (1) the doctor-patient relationship is created and maintained; (2) verbal information, relevant to the clarification and solution of patient's problems, is gathered; and (3) the solution to the problem is negotiated.

Communication has been defined as the process by which information, meanings and feelings are shared by persons through the exchange of verbal and non-verbal messages (Brooks et al 1985). Communication skilled behaviour means "a set of goal directed, inter-related, situationally appropriate social behaviours which can be learned and are under the control of the individual" (Hargie et al 1987). It is widely accepted that most forms of behaviour displayed in social contexts, apart from basic reflexes, can be learned. Verbal communication is such a behaviour. This counters the naive assumption that "good communicators are born, not made" with the implication that nothing much can be done to improve those who are weak (Dickson et al 1989).

Descartes has likened the human body to a watch and has considered the health of that body to be related to its individual parts (as a watch is related to cogs and springs). This reductionist view of health has become a dominant feature of medical education. In commenting on the report of Flexner

which was to have far reaching results on 20th century medical education, the famous 19th century Scottish general practitioner, James Mackenzie said "too much reliance has been placed on objective investigation to the neglect of subjective phenomena" (Mackenzie 1918). He also said "patients must be studied in association with their natural environment and the stresses and strains of real life" (Mackenzie 1920).

Clare (1993) eloquently attacks contemporary medicine for its reductionist approach to patients. He states: "But for the most part today's young doctors learn about the meat and drink of the consultation the same way as their predecessors and indeed, their teachers, namely from observing their elders. Unfortunately, their elders may no longer be the best people to teach them.

I say no longer because there was a time, perhaps 20 or 30 years ago, when senior physicians were indeed masters of the bedside manner, or at least the best of them were. Their skill derived from their being taught by a generation of doctors who had only their skill as communicators, listeners, guides and comforters to fall back on, given the few drugs that worked and the few surgical procedures that could be carried out without appreciable hazard. It has been biological medicine's very achievements that have caused the atrophy of what were at one time, valued, taught and learned skills".

Clare emphasises the public's anxiety and need for understanding of high technology medicine, the growth of more medical jargon, the fact that despite advances, disease (especially chronic disease) still exists. He feels that the atrophied skills must be relearned.

Discourse analytic research has documented patients as depowered, in that they marshal typically fewer interactional resources and operate in an alien climate. However some studies have shown that doctors and other professionals do not speak exclusively in the 'voice of medicine' nor do patients speak in the 'voice of the lifeworld' (Brown et al 1987).

This is also evident in a study of interactions between doctors and geriatric patients (Coupland et al 1994). In a study of the interaction during the first part of the consultation they found no pernicious interactional asymmetry or frame conflict. In answer to the question 'how are you' many patients in this study offered relatively conventionalised and positive responses. Health in old age has much to do with dignity and morale. Brown et al wonder if this interactional symmetry should apply to all doctor-patient interactions.

Winefield et al (1993) in a study of South Australian General Practice consultations found that doctors liked best, or felt most satisfied with their performance, in brief consultations where the medical problem was relatively easy to solve without

a lot of discussion. They also disliked hearing about the patient's private or unobservable symptoms. Patients on the other hand seemed to like the psychosocial aspects of consultations, feeling most satisfied when doctors had allowed or encouraged discussion in the second stage of the consultation and talked about the patients' opinions of the recommended treatment. Patients liked doctor reflections, having a third party present, and describing their actions and experiences, while doctors specifically disliked these features of a consultation.

In this study of 210 general practice consultations in South Australia (Winefield et al 1994) two-thirds of the speech by both parties were found to be devoted to information exchange about illness and the remainder to the relationship between the participants. Patient satisfaction could be predicted from discussion of private symptoms and psychosocial concerns. Doctor satisfaction was most clearly predicted by shortness of consultation, paucity of questions and patient responsiveness. There was no correlation between doctor satisfaction and patient satisfaction. Sources of stress relating to the doctor patient interaction were related to communication 32%, relationship 15%, patient expectations 26% and doctor expectations 14%. 65% of occupational stress in the general practitioner came from interpersonal stress between doctor and patient.

In a study of a stratified random sample of New South Wales General Practitioners (Phongsavan et al 1995) 64% of the 721 full-time general practitioners felt that patients felt uncomfortable about being referred to a psychiatrist. This coupled with the observation that general practitioners probably treat about 40% of the people who present to them with a mental disorder makes the practitioner a vital person to be involved in mental health care (Andrews 1991).

The main skills practitioners were interested in improving were crisis counselling (one-third), then strategies to prevent general practitioner burnout, individual counselling, family counselling, parental counselling, marital counselling and supportive psychotherapy. Of the general practitioner's perceptions of benefit of various strategies to improve mental health care more continuing medical education topped the list. This was followed by more money then opportunities for discussion with a mental health specialist (Phongsavan P et al 1995).

A North American study (Roter et al 1997) of communication patterns in primary care physicians had as its objectives the use of audiotape analysis to describe communication patterns in primary care, to relate these to ideal relationship types as described in the literature, and to explore the patterns' relationships with physician and patient characteristics and satisfaction. Its design was to describe the routine communication in primary care based on audiotape analysis and

patient and physician exit questionnaires. The setting was a total of 11 ambulatory clinics and private practices. The participants were 127 physicians and 537 patients coping with ongoing problems related to disease.

The main outcomes measures using Roter Interactional Analysis System (RIAS) and patient and physician exit satisfaction questionnaires were five distinct communication patterns:

1. 'narrowly biomedical', characterised by closed-ended medical questions and biomedical talk occurring in 32% of visits;
2. 'expanded biomedical', like the restricted pattern but with moderate levels of psychosocial discussion occurring in 33% of the visits;
3. 'biopsychosocial', reflecting a balance of psychosocial and biomedical topics (20% of the visits);
4. 'psychosocial', characterised by psychosocial exchange (8% of visits);
5. 'consumerist', characterised primarily by patient questions and physician information giving (8% of visits).

Biomedically focused visits were used more often with more sick, older and lower income patients by young, male physicians. Physician satisfaction was lowest in the narrowly biomedical pattern and highest in the consumerist pattern, while patient satisfaction was highest in the psychosocial pattern.

In the conclusions, primary care communication patterns range from narrowly biomedical to consumerist patterns and parallel the ideal forms of patient-physician relationships described in the literature (Roter et al 1997).

The 'patient centred' model was created by Levenstein in his own Canadian general practice. This was developed by the University of Ontario and appears in McWhinney's textbook of family medicine (McWhinney 1989).

Here the patient presents to the doctor and two pathways are offered. The art of course is to have the doctor on the right path at any given moment of the consultation. The first path emphasises understanding the meaning of the illness for the patient - an understanding of illness, expectations, feelings, fears and effects on life and the other pathway is history taking (which obviously in general practice is selective), physical examination (selective) and diagnosis (more realistically this should be hypothesis). The art is to integrate these pathways. Management occurs from the beginning of the consultation.

1.1 How does evidence based medicine which has been a trend in medical education fit in with CST?

With the advent of evidence based medicine comes a question of how to use it in general practice. To be relevant to general practice, evidence must be obtained there by randomised controlled trials.

Also Donald Show, in his book: The Reflective Practitioner offers the thesis that doctors are bound to a model of professional knowledge, called by him technical rationality. This leads to professional activity being defined as instrumental problem solving, made rigorous by the application of scientific theory and technique (Show 1995).

However in our actual practice we are increasingly aware of the importance of the phenomena of complexity, uncertainty, instability, uniqueness and value conflict. From this viewpoint, evidence based medicine may be the ideal to strive for in problem solving, but not applicable in the large part of our work which concerns problem setting. Problem setting involves the therapeutic power of the doctor's personality, the doctor patient relationship, compliance etc (Patterson 1997). Evidence based medicine cannot help if the patient presents with something that does not exist in textbooks or is difficult to measure.

1.2 Conflict between empathy in medical students and learning clinical medicine

Studies (Helfer 1970; Burstein et al 1980; Diseker & Micliezutte 1981; Whittemore et al, 1985) have shown a decline in empathy towards patients as medical students proceed from first year to graduation. Assessing communication skills in medical students over the long term show that they are easily learnt, but also they are easily forgotten (Kause et al 1980; Engler et al 1981; Elizur et al 1982) this may be because of students having to face greater ward responsibilities for patients with increasingly complicated diseases or adopting the role models of other doctors and clinical tutors (Mumford 1971; Zabarenko et al 1978). Resistance against a patient-centred style of consultation behaviour may be due to the predominance of a more doctor-centred style in senior consultants in medical and surgical hospital wards (Moorhead et al 1991).

Technology may overshadow human orientation in diagnosing and treating patients, and studies have noted this in doctor's bedside manner and teaching medical students (Jensen 1981, Cassel 1982). Medical students options of behaviour are either to 'join the crowd', or to retain a humane approach and thus become 'odd man out'. Empathetic listening to patients, responding to their emotional needs and expressing supportive caring are the

main components of an empathetic approach. Unfortunately, these are often considered a waste of time in the hospital setting and are discouraged by clinical tutors (Mumford 1971, Zabarenko 1978).

This problem is the devaluation of communication as a part of the clinical process. The art of talking and listening is a poor competitor of technology. A study of United States community based internal medicine practices (Laine et al 1996) has shown that patients rated information sharing as the second most important factor after clinical skill in obtaining good health care. Doctors rated it sixth.

Other influences which discourage patient-centred interviewing are student fear that they will not be able to offer solutions if psychosocial problems are raised, and their acceptance of a responsibility to provide solutions and corresponding dissatisfaction with consultations where problems are not amenable to rapid resolution. (Putnam et al 1988, Tuckett et al 1985).

When interactional skills are taught in medical schools, the focus is most usually on the techniques needed to take an accurate history from a patient. This has obscured the equally important need for adequate interactional skills when transferring information to the patient (Sanson-Fisher et al 1991).

A telephone survey of a random sample of United States adults (61% response rate) has shown that physicians were rated lowest on communication skills. The authors concluded that in the areas of communication and attention to the costs of treatment, public needs are not always being met (McBride C et al 1994).

McWhinney (McWhinney 1981) has made a plea for holism and has asked that reductionism enlarges its scope to overcome its limitations. He says the holistic view acknowledges that every illness is different, and that the physician himself is an important aspect of the healing process.

Medical schools around the world are addressing this imbalance. They are realising that instruction and experience in the clinical skills of communication, observation, examination, investigation, and sensible and sensitive management is the crux of personal medicine. For example, Harvard has a three year required longitudinal course in the patient-doctor relationship (Branch et al 1991). Interviewing skills are increasingly being taught in medical schools (Barsky et al 1991, Carroll et al 1979, Maguire 1979, Pilowsky 1978, Sanson-Fisher 1981, Van Dalen 1989).

In Britain Departments of General Practice as well as Psychiatry have a major role in CST (Communication Skills Training) for undergraduates. However time available in the academic year 1989/90 for CST was only 2% of the whole curriculum and despite reports advocating simulated patients in such training (Sanson-Fisher 1980), their use was not generally accepted. Only seven departments mentioned they used rating scales (Whitehouse 1991).

Some reported data suggest that medical graduates of innovative programmes communicate better with patients and are better prepared to deal with patient's social and emotional problems than are graduates from traditional programmes (Santos-Gomez et al 1990, Woodward et al 1983). However establishing CST in the curriculum may seem like Banquo's ghost making an appearance: impossible to completely ignore, but certainly not especially welcomed (Wrate et al 1990). Despite this a study of medical schools in the USA has shown the inroads of CST in the curriculum to the extent that 35% of schools are assessing CST by patient satisfaction or compliance (Kahn et al 1979).

In terms of postgraduate education at present there is a wide range of courses aimed at improving the psychiatric interviewing skills of general practitioners in the USA and Britain (Burns et al 1981). This contrasts with few major developments in the training of more experienced

general practitioners in Britain since the introduction of the Balint group (Gask et al 1987, Balint 1979).

CHAPTER 2

WHY SHOULD CST BE TAUGHT?

Communication is a skilled performance which is a vital part of the medical interview. There are reasons to teach CST and these include Public Health reasons, patient satisfaction, patient compliance, the placebo effect, outcomes of chronic illness and research findings.

2.1 Communication can be regarded as a skilled performance

Hargie and Marshall 1986 have created a model of dyadic interaction in interpersonal communication (Hargie O, Marshall P, 1986). The central processes in this model are the goals of the individuals involved and their motivation to pursue them. In the long term goal of obtaining an accurate medical history there are short term goals like establishing rapport. It is harder to achieve the long term goal if the subgoals are not achieved. Then there is a range of mediating factors including cognitions, emotions values and beliefs. Cognitions can be defined as: 'all the processes by which the sensory input is transformed, reduced, elaborated stored, recovered and used' (Meisser, 1967).

The skilled professional will have developed a wide range of cognitive schemas to facilitate problem-solving and decision making during interpersonal interaction, together with the ability to make rapid, accurate

judgements about people and situations. Emotions and values and beliefs also impinge on the consultation. Religious beliefs and dealing with a request for abortion is a case in point. Also in this model important factors are the responses of both parties.

It can be argued that much of general practice consulting is based on the creation of hypotheses and then testing them - Popper's hypothetico-deductive model. Sir Karl Popper was an Austrian born British philosopher of this century.

In his *Logics der Forschung* (The Logic of Scientific Discovery) he suggested that the true method of science was NOT one of observation, hypothesis and confirmation but one of conjecture and experiment, in which the concept of falsification played a crucial role (Popper, 1959).

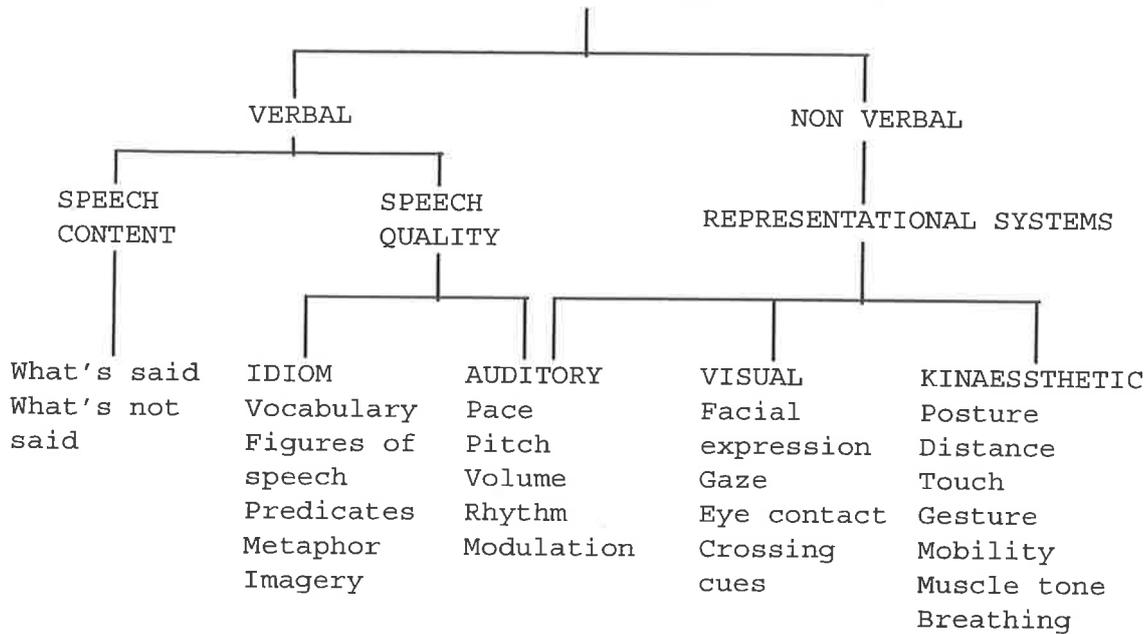
By this concept he meant that in science, there is a continuing process of trial and error: conjectures are put to the test of experiment, and those that are not falsified are provisionally accepted, thus there is no definitive knowledge but only provisional knowledge that is constantly being corrected.

It may be that good communication can lead to hypotheses that can be provisionally accepted because they are harder to falsify.

Roger Neighbour has demonstrated a systematic display of the verbal and non verbal indicators of people's thoughts and feelings. Arguably the skilled professional should be able to pick up these signs.

PHYSICAL SIGNS OF MENTAL STATES

('Minimal cues') (Neighbour 1994)



2.2 Communication between doctor and patient - the medical interview

The modern literature on the relationship between doctors and their patients contains over 8,000 articles, monographs, chapters and books (Goold et al 1999). The medical interview is the major medium of health care and has 3 functions and 14 structural elements (Lipkin 1997). The 3 functions which inextricably interact are:

- a) gathering information
- b) developing and maintaining a therapeutic relationship

c) communicating information.

The structural elements are:

1. Prepare the environment
2. Prepare oneself
3. Observe the patient
4. Greet the patient
5. Begin the interview
6. Detect and overcome barriers to communication
7. Survey problems
8. Negotiate priorities
9. Develop a narrative thread
10. Establish the life context of the patient
11. Establish a safety net
12. Present findings and options
13. Negotiate plans
14. Close the interview.

There are dangers in current practice in primary medical care that these aims of medical interviewing will be thwarted. The dangers are:

1. The rise of "evidence based medicine" and the use of standard protocols. This ignores the incredible variation in patient preferences and characteristics and biological diversity (Goold et al 1999).
2. Government requirements of general practitioners which are designed to save money. For example, forcing the doctor to spend time to get permission to

prescribe certain expensive drugs can mean less available time for the patient in the consultation.

3. Pressure by the doctor to make a better profit by "pushing them (the patient) through" more often. Less time means less accurate data collection; difficulty in recognising the real problems; less efficiency in test and treatment choices based on knowledge of the individual patient; less trust; less healing; more errors and more waste (Tamblyn et al 1997). The first thing that is discarded as visit length shortens is psychosocial discussion (Roland et al 1986).
4. The modern primary care doctor has a conflict - to care for individual patients and to co-ordinate or restrain access to services. Goold et al (1999) ask "Whose doctor is it anyway?" By this they mean, is the doctor really answerable to the funding third party or to the patient?

Patients correctly wonder if doctors are caring for them, the plan (Health Maintenance Organisations in USA, COAG trials in Australia), or their own jobs or incomes. This ambiguity encourages lack of trust, promotes adversarial relationships and inhibits patient-centred care.

2.3 Some reasons to teach CST

An increasing number of studies have demonstrated that patients frequently recall very little of the information given to them by doctors (Ley 1977). Direct observational studies of doctors' interactive skills have indicated that very few use techniques such as explicit categorisation, providing simple concrete directions and checking for understanding of information (Ley 1983).

Carroll 1991 reports that a telephone survey across the United States of 1000 patients has revealed that one in four had changed doctors. This was because of communication problems. These were - the doctor made them feel uncomfortable (55%), did not respect the patients' opinions or concerns (53%), did not relieve the patients' anxieties for the given treatment or diagnosis (52%), did not answer the patients' questions (51%), did not seem to care much about the patient or their health (50%), did not make sure the patient understood what was said (48%) and did not explain what he/she was doing and why (47%). What the sample said they wanted most from their doctors was, a clear explanation of the patients choices for treatment (57%), asking the patient what they thought was wrong (50%), checking with the patient for any questions he/she may have (50%), certainty that the patient has explained all of his/her concerns (49%), confirmation that the patient understands all the doctor

has said (48%) and explanation what procedures mean and why they may be necessary (47%).

CST must be justified to take its place in crowded curricula at Universities and in the postgraduate arena. While a body of evidence supports CST, the search for the Holy Grail of justification continues. Areas of support come from public health, patient satisfaction studies, compliance studies, clinical outcomes in chronic illness, somatisation studies and the demonstrable improvement in CST skills in students, trainees and general practitioners.

2.4 Public Health

One approach to health communication has been integrating the use of the media with interpersonal communication (Irwin 1990). While mass media can be independently successful in information diffusion campaigns, greater and longer lasting effects typically follow from interpersonal communication support (Rice et al 1989). A study of methods of patient education from New Mexico has shown no significant difference in the number of preventive procedures performed after the introduction of patient education materials into the waiting room (Mead et al 1995).

Studies have used this method to educate communities about health habits and heart, cancer and respiratory

disease. These started at Stanford University's Centre for Communication Research and Centre for Research in Disease Prevention (Maccoby et al 1977, Farquaar et al 1985, Flora et al 1989). Patients in an Australian study were more satisfied and less anxious with general practitioners who were trained in communication skills (Evans et al 1992). However doctors who act as communicating catalysts in the process of behavioural change in preventive medicine can achieve much by simply helping a patient move from the pre-contemplative to the contemplative stage of any behavioural change. Simple motivation and support will help the patient get from pre-contemplation to contemplation to action to maintenance and finally the goal of long term behaviour change and help the patient deal with any relapses along the way (Prochaska et al 1986).

Anti smoking campaigns in Finland (Puska et al 1985) and Australia have achieved better results with the integration of a community programme with the media programme. In NSW general practitioners with anti smoking kits achieved an abstinence rate of 48% at three months (Egger et al 1983). Heywood et al (1994) noted that those risk factors for cardiovascular disease amenable to pharmacological management (such as hypertension) receive more attention than those which require behavioural modification (such as smoking

cessation) despite the latter offering the greatest potential in the prevention of cardiovascular disease.

2.5 Patient satisfaction

Adequate medical interviewing skills are needed for patient satisfaction. Studies have shown that the level of patient satisfaction depends on the doctors' attitude and on the amount of information that they communicate to the patient (Korsch et al 1972, Comstock et al 1982). It has been found that eliciting the patient's view of the problem plays an important part in the successful outcome of a consultation (Tuckett et al 1985).

The impact of CST by general practice trainees on patient care is difficult to assess. One study cited by Gask (Gask et al 1991) has found that such training does have an impact on patient care and satisfaction.

Patients in an Australian study were more satisfied and less anxious with General Practitioners who were trained in communication skills (Evans 1992). An Australian study of patient satisfaction in 133 general practices has found three major factors using factor analysis. The most important to overall satisfaction was a collection of items which could be broadly characterised as 'measuring the patient's perception of the interaction between patient and practitioner'. This was more important than technical aspects of the consultation or

accessibility to the practice. The items in order of strength in the interaction factor were willingness to listen (by the doctor), ability to answer questions, respect shown by doctor, willingness to answer questions, explanation given by doctor, doctor's concern about problem, way doctor examines you, notice doctor takes of wishes, doctor's willingness to spend time, ability to treat problems, doctors knowledge, advice given by doctor and amount of time doctor spends (Steven et al 1999).

Patient satisfaction is one of the variables linked to compliance (Ley et al 1982, Korsch et al 1968, Becker et al 1984, Dimatteo 1979, Stone 1979). Patients who get more information are more satisfied than those who get less (Hall et al 1988) and an interviewing style that focuses on psychosocial concerns is also related to patient satisfaction (Berkatis et al 1991).

Patients' satisfaction shows some correlation with both compliance and symptom relief (Fitzpatrick 1984, Hall et al 1988). Although measures of patient satisfaction with medical care are always positively skewed the two areas most frequently noted to cause dissatisfaction are the doctor's lack of skill in communicating information and respect for the patient.

Rather than being beneficial only as a step on the way to greater compliance, the patient's sense of being

respected and cared for may reduce anxieties encouraging coping efforts, and supportively buffer him or her against the isolation, stigma and daily practical difficulties of illness. Hopefulness may have immunological correlates and this must be better for health than chronic stress, depression and social deprivation (O'Leary 1990). Posen (1993) has documented how non medical literature has portrayed the physician's bedside manner. In Zola's *Doctor Finet* (Zola 1887) information giving and patient respect get pretty short shrift.

"Monsieur Finet ... spent a long time examining the sick man while (Lise) and her husband watched anxiously. The doctor's silence confirmed their anxiety. When he sat down in the kitchen to write a prescription they decided to question him: "So, its serious is it? Might last a week eh? Heavens, what a long prescription. What's all that you're writing?"

Monsieur Finet made no reply. He was used to this sort of interrogation by peasants bewildered and upset by the sight of illness and he had taken the wise decision of treating them like horses, refusing to enter into conversation with them.

The attitude of a group of doctors to the consultation is described by Balzac in *Cousin Pons* (Balzac 1847):

"As they took leave of one another on the threshold of the main entrance they were letting science and truth out of the bag and chatting together as doctors do once the farce of a consultation is over".

Patient satisfaction in a meta analysis by Hall et al (1988) was more closely related to provider behaviours of information giving than to partnership building. The authors felt that giving information reflected the provider's caring disposition and positive regard. Being nice or caring on its own is not enough.

In a British study (Salmon et al 1994) of patient's intentions when attending a general practitioner, physical symptoms were unrelated to intentions and other factors such as patient beliefs about the origins of their symptoms were more important determinants of what such patients sought from their GP. By contrast, the level of psychological symptoms correlated with the desire for support from the GP. So emotionally - distressed patients attend primarily to seek support and this study showed that they do not seek greater levels of medical treatment or information than other patients. The amount of support already experienced from family and friends was unrelated to the further support sought from the GP.

The GP's were sensitive to the seeking of support. However they were insensitive to the patients intentions for explanation and reassure factors that patients specifically want from their GP (Salmon et al 1989) (Ingham et al 1986). When patients were asked a week later to comment on video recordings of their own consultations about whether the general practitioner was "good" or "bad" a pattern of practitioner behaviour emerged. The image of the "good" general practitioner was a caring human being, an individual who listens, understands and is concerned and who acts like an ordinary person and treats the patient as equal. (Arborecius et al 1992).

A general practice study (Snyder et al 1976) has shown that most patients fail to air the problems they had intended to.

Maguire et al report that patients can be provided with inadequate information about investigation, aetiology, prognosis or management (Maguire et al 1986)

Several studies (Ware et al 1978, Dimatteo et al 1979, Hulka et al 1975, Ware et al 1975, Ben-Sira 1976 and Dimatteo et al 1980) have shown that it is the ability of the physician to communicate concern, warmth and interest in the patient as a whole person which produces a

positive response from the patient. The physician's expertise in curing the illness is rarely seen to count more than his or her facility to care for the patient's psychosocial needs. These studies have covered a broad range of health settings. In the family practice study (Dimatteo et al 1980) older patients rated the affective care of their physicians more favourably than younger patients and so did patients who had been with their physician for a longer time. Dimatteo feels that the alarming popularity of unscientific approaches to health care where satisfaction is used to support questionable medical practices suggests that patients' needs for the interpersonal aspects of medical care are so strong that they are willing to reject the established technical advantages of the modern medical system in order to receive such care.

A possible explanation for the significance patients place on their doctors' affective behaviour is that reassurance and relief from anxiety are part of the reason people seek professional help in the first place. Sometimes somatic complaints are expressions of problems having more to do with psychosocial distress than with organic disease and satisfaction may result from the doctor's ability to engage them on an emotional level without disparaging their symptoms. (Ben-Sira et al 1976).

Also in an English study of consumer satisfaction with general practitioners (Williams et al 1991) it was found that while consumers expressed high overall satisfaction with their general practitioner, on specific questioning 38% of the sample felt that they could not discuss personal problems with their general practitioner. The specific criteria which yield the highest association with overall satisfaction scores had less to do with things such as access, availability, level and type of service provision etc and much more to do with the nature and quality of the doctor-patient relationship and the general practitioner's professional skills (i.e. psychosocial and interpersonal criteria).

Older people tended to be more satisfied with most aspects of general practice, than middle aged and younger counterparts. 59% of adolescents in a north London general practice study found it embarrassing to talk to their general practitioner about personal concerns (Kari et al 1997).

Analysis of videotapes of consultations show that general practitioners fail to understand why patients have come in as many as 25% of consultations. Some of this may be due to poor skills of communication on the part of the practitioner (Arborelius et al 1991).

The Department of General Practice in Edinburgh has been researching the 'definition, determinants and delivery of quality care in general practice' in a series of projects since 1983. Initial work showed correlation between consultation length and patient satisfaction generally which held after controlling for case mix and doctor style (fast, medium or slow consulter) (Howie et al 1992).

During this study a sub set of six questions was recognised with the general measure of patient satisfaction which appeared to give particular focus to patients' ability to understand and to cope with their illness. These enablement questions are considered by their creators to be both relatively valid, reliable and useful instruments for use in studies of the process and outcome of general practice consultations. In research into Scottish fundholding it was found that after controlling for case mix, 'enablement' again correlated with 'consultation length' at population level, practice level and at doctor level (Howie et al 1995).

This work has shown that 'enablement' can be scored in various different ways (mean score; zero, low or high scores; percentage above and below the median score) and that ranking doctors on those different measures again produce similar distributions.

2.6 Compliance

Ever since Hippocrates noted that patients often lie when they say they have taken their medicine, health care providers have been concerned with the issues of patient compliance and non adherence to treatment. Hippocrates once said: "keep a watch also on the faults of the patients, which often make them lie about the taking of things prescribed". Rosenstock 1985 states: "...clearly, the difficulty does not lie in any lack of interest in health matters, nor with any public reluctance to attempt cures of illness, but rather in people's unwillingness or inability to adopt those specific regimens prescribed by health professionals" (Rosenstock 1985).

The most typical range of non adherence is from 30% to 60% (Masek, 1982). Treatment non adherence can result in personal injury, recurrent infections, increased patient visits, unnecessary diagnostic tests, emergency care, alternative treatments, increased or additional medications, eventual hospitalisation, failure to obtain the therapeutic outcome, short term and long term degenerative changes, and inability to establish the efficacy of a therapeutic regimen (Meichenbaum et al 1987).

How doctors relate to their patients is critical in affecting the adherence process. Adherence enhancing procedures only work in the context of a concerned,

compassionate relationship where the patient is viewed as a knowledgeable ally who must actively participate in the treatment process (Anderson et al 1982).

There are many variables in patient compliance with advice or therapy. About half of all medical advice given tends not to be followed (Pendleton et al 1990). Unnecessary admissions, therapy, complications and investigations can result from poor compliance. An association has been demonstrated between the quality of a consultation using relatively simple measures and subsequent patient compliance (Korsch et al 1971, Lassen 1990). It has been also shown that patients comply better with advice in the consultation when they have been involved in making a decision (Fink 1976). Philosophically the word patient adherence may be a better word to use, than compliance has connotations of passive acceptance of advice or therapy rather than active participation. In a study of 271 general practitioner consultations the doctor-patient communication was examined in the context of decision making about prescription medications. The general practitioners tended to overestimate the extent to which they discussed patients' ability to follow the treatment plan as well as the extent to which they elicited the patients opinion about the prescribed medication and its side effects. Also 24% of the patients left the consultation with an "illusion of competence", a belief

that important topics had been discussed when, in fact, they had not been mentioned at all.

One prerequisite for compliance is the patient's recall of the doctor's instructions, and recall in turn is facilitated by specific and comprehensible terms, lack of jargon, repetition and hearing the most important parts of the message first (Ley, 1988).

Despite considerable research into the effect of medical advice on patient behaviour, only about 50% of patients comply with long-term drug regimes. When it comes to changes in lifestyle the percentage of patients who comply with medical advice is often in the order of single figures. Butler et al (1996) see patient resistance to change as not entirely the patient's fault. They view it as stemming partly from the way clinicians talk to patients. Giving advice is usually inadequate to motivate people to embark on major lifestyle changes. Butler et al propose a negotiation-based framework that harnesses patients' intrinsic motivation to make their own decisions. This approach encourages clinicians' acceptance of patients' decisions, even if these decisions run counter to current medical wisdom.

Many people are leaving orthodox medicine for complementary medicine. The main reasons that people embark on complementary medicine are:

- it is perceived as more natural
- it allows a more active role for the patient
- orthodox medicine has failed to provide relief for a specific complaint
- side effects have occurred with orthodox medicine
- a more positive patient-practitioner relationship is wanted (Vincent et al 1996)

2.7 The placebo effect

Balint in his book *The Doctor, His Patient and the Illness* (Balint, 1952) repeatedly referred to the concept of the drug "doctor". By this he meant the therapeutic potential in the doctor him or herself as a human being. The word placebo (Latin 'I shall please') was first used in the 14th century (Shapiro 1964). At present several theories are taken seriously as possible explanations for the placebo effect, and these include classic Pavlovian conditioning, response expectancy and a psychoneuroimmunological response (Anton et al 1999). A research design that can validly investigate components of the placebo effect is the balanced placebo design (Kleijnen et al 1994).

Thomas (1987), a general practitioner, used this research design. The results indicated the power of consulting "well" on patient satisfaction. Thomas randomly assigned 200 symptomatic patients in whom no definite diagnosis could be made to one of four treatment arms - a consultation conducted in a 'positive' manner, with and without treatment; and a consultation conducted in a 'negative' manner, with and without treatment. Two weeks after the consultation, he found a significant difference in patient satisfaction between the positive and negative groups, but not between the treated and untreated groups. This is a future method to assess the impact of extraneous factors on specific treatment effects.

2.8 Clinical outcomes in chronic illness

Chronic illness is defined as feeling unwell for more than six months, whether or not an objective cause can be found. Demographic changes in the age structure of our society with increases in the elderly population has meant that changing proportions of acute to chronic disease presented to today's general practitioner have been accompanied by changes in the general practitioners' role, and in the doctor patient relationship (Bates et al 1987, McWhinney 1989).

Chronic illness is usually but not always associated with an objective cause and produces often illness-related limitations to normal activities. Such aspects make chronic illness a far more physically, psychologically and emotionally involved and complex phenomena for both patient and general practitioner, than those of the simple acute care situation. The traditional role of the general practitioner is structured around the short term, diagnostic, biomedical model of illness, with medical power and authority retained by the doctor (Parsons, 1951).

A qualitative study of some Australian general practice patients has suggested that patients with complex chronic conditions may require longer review of their illness and treatment as well as an opportunity to raise issues and concerns about their illness, its impact on their lives and their personal management strategies (Martin 1999).

However this study did not emphasise on going chronic illness management where the relationship between patient and doctor, a professional and responsible doctor role and the provision of comprehensive and convenient services have been shown to be more important than consultation length.

Patients are considered to be changed so as to conform to the expectations of the doctor (Cox et al, 1975).

The general practitioner's aim in this acute sick role model is to return the sick person to good health and normal level of functioning within society. However, when taking such an approach with someone suffering a chronic illness, considering that the patient may never return to good health, or their normal levels of functioning, the patient's physical, psychological, emotional and social needs (as well as the doctor's professional expectations) are certainly not realised. The changing role of the general practitioner then, involves a different approach to the doctor patient relationship. Here more so the patient is seen as a human being, an integrated whole with many different aspects to be dealt with. A holistic rather than reductionist view is needed in chronic illness management thus unlike the biomedical acute-care model of medicine, the doctor patient relationship is characteristic more of a therapeutic team, (often also involving other members of the primary health care team and also some medical specialists). In such a team doctor and patient work together to help decide the best means of management of the illness instead of simply aiming to treat the illness.

In chronic illness the health care team can offer advice, but the patient, in the end must be responsible for its implementation, as he or she lives with the illness and

therefore administers appropriate therapy. (Buttfield et al, 1990).

Patient and doctor have far more of an equal relationship with each other, no compromise of the patient's possible well being arises through power struggles, or through lack of involvement of the most informed person of all in the illness management decision making: the patient. All of this is the more important as chronic illnesses have supplanted infectious and parasitic diseases as the pre-dominant medical disorders in industrialised nations (Gerson et al 1975).

Beneficial outcomes of medical consultations range not only from patient and doctor satisfaction and patient compliance but to improvements in health both by self report and in the relatively few symptoms of chronic illness that can be measured objectively. These objective measurements include blood pressure in hypertension and glycosylated haemoglobin in diabetes. There is now evidence of associations between all these desirable outcomes and a consultation style by the doctor which allows or encourages active patient participation in the consultation, particularly after the diagnosis has been made by the doctor (Henbest et al 1990, Kaplan et al 1989, Rost et al 1989, Winefield 1991).

Patients are active processors and recipients of information; there is therefore a clear need to develop a mutuality of expectations between patients and HCPs. Only when such expectations are congruent will patient satisfaction and accompanying treatment adherence be increased. Such joint consideration of mutual expectations will help to nurture a more equitable relationship between patients and HCPs, a relationship where patients can assume greater responsibility for the outcome of the treatment. The task for the HCP shifts to one of helping patients help themselves, as described by Szasz and Hollender's (1956) mutual participation model.

The advice of the doctor is only one of many sources of influence on the patient's decision to take the drug as prescribed or not. From this point of view, the three models of doctor-patient interaction proposed by Szasz and Hollender (1956) may have wider applicability than Parsons' (1951) description of the sick role.

They propose three types of doctor-patient relationships depending upon the severity of the patient's condition. The first they describe is activity passivity. This type of relationship applies when the patient is acutely ill, or injured and helpless and the treatment proceeds without any real effort on the patient's part.

The second type of relationship, guidance-co-operation or the building health care provider co-operating mode, is appropriate during the most acute conditions and/or acute exacerbations of a chronic illness. Here the patient is ill but aware of the situation.

The mutual participation relationship is an active partnership in which health care professionals are equal in power. It applies to chronic diseases, prevention and consultations with significant psychosocial factors.

Patients who already know their doctor, rather than those meeting her or him for the first time are likely to communicate better (Snyder et al 1976). While those with conditions that demand good communication, such as chronic diseases, emotional problems or ill defined disease, were also more likely to have consultations with markers of better communication (Bain 1979).

If a doctor is patient centred he or she should have the communication skills to understand whether the patient has a religious commitment or not. Studies have shown links between religious commitment and physical or mental health (Matthews et al 1998). In mental health there have been lower rates of substance abuse, anxiety, depression and suicide while in physical health lower rates of hypertension, heart disease and cancer (Levin et al 1987, Kune et al 1993). New data suggests findings

such as quicker recovery from depression (Koenig et al 1998, Koenig et al 1992).

2.9 Randomised controlled trials of doctor-patient communication in a general practice setting

These trials have been described by Stewart (1995).

Evans et al (1987) randomly selected from four hundred general practice patients with a variety of problems and studied the effect of an intervention of two three hour seminars with practitioners on history taking on the experimental group. Subjects were 17-75 years and there were forty general practitioners. There was no communication measure and the patient outcome measure was anxiety level. The results showed mean state anxiety scores on the state-trait anxiety inventory for groups treated by trained and untrained physicians of 42.9 (SD 7.1) and 45.3 (SD 7.2) respectively ($p < 0.001$).

Roter et al (1991) in a RCT of 652 consecutive family practice and primary care internal medicine practice (mean age 40, number of physicians 69) had as their intervention physicians receiving eight hours training on verbal skills to handle emotion or eight hours training on verbal skills for problem solving, or no intervention. All physician and patient statements were classified. For the 311 patients with high distress at baseline, the respective mean reductions in distress at two weeks were

6.55, 6.89 and 5.27 (out of 30) for the two intervention groups and control group respectively. ($p < 0.05$).

2.10 Randomised controlled trials of physician-patient communication during history taking in an outpatient setting

Despite an outpatient setting these studies are included. They are also different in that patient education is the intervention.

Greenfield et al (1985) studied 45 patients with peptic ulcer and the experimental group had a 20 minute session to improve their participation in the interview and information-seeking skills. Significant differences for the experimental and control groups for physical limitation were found.

The classical study of Kaplan et al (1989) involved 252 patients with breast cancer, diabetes, hypertension or peptic ulcer (age approximately 50 years).

The number of physicians was not specified and the experimental group had a twenty minute session to improve participation in the interview and information seeking skills. All physician and patient statements were classified. The patient outcome measures were health and functional status, blood pressure and blood glucose levels. The experimental group made more assertions and

received more information from doctors than the control group. Communication measures significantly affected patient health, functional status and physiological measures.

2.11 Randomised controlled trials of physician-patient communication during discussion of the management plan

The Roter, Greenfield and Kaplan RCT's also involved elements of communication in the discussion of the management plan.

None of these RCT's related to general practice but the closest was the study by Greenfield et al (1988). Here 59 patients with diabetes with a mean age of 49 in outpatients were randomised with the experimental group getting a 20 minute session to improve participation in the interview and information seeking skills. Patients in this group ended up with higher communication scores, better functional status and lower glycosylated haemoglobin level than control subjects < 0.05 .

2.12 Psychiatric Illness and Communication Skills

In Britain 10-15% of the population suffer mental illness at any point of time and double the number of contacts for mental illness occur in primary care. The main point of contact for people with psychiatric disorders is not psychiatry services or community psychiatric teams but the general practitioner (Sharp et al 1989).

The economic effect of these disorders shows that the costs of treatment are small in general practice compared with the costs of sickness absence and early retirement. The total cost of neurosis in general practice in Britain in 1989 was estimated to be 6000 million pounds. (Croft-Jeffreys et al 1989).

What makes a general practitioner a good detector of psychiatric illness? Goldberg et al (1993) feel that good detectors are, on the whole, more self confident, empathetic, interested in psychiatry with accurate knowledge and are overall of higher academic ability. Their interview style is characterised by the use of screening questions for psychological distress, questioning about the family and home, and greater clarification of complaints. They are more sensitive to verbal and non-verbal cues of distress and are better at dealing with over talkativeness. A higher detection rate has also been associated with the ability of the practitioners to provoke or enhance the emission of 'cues' indicative of psychological distress, e.g. sighing, tearfulness, agitation (non verbal) or direct mentioning of depression.

Goldberg also found that behaviours intuitively linked with poor detection are associated with decreased emission of such cues by patients. While further work is

needed in this field, it is clear that the type of interview conducted by the doctor plays a crucial role.

While it is sometimes suggested that interviewing ability is an innate, largely unalterable skill, detection can be greatly increased by improving knowledge about psychiatric illnesses and by paying attention to the factors which contribute to better interviewing technique. Video training courses with peer review are an effective tool for identifying errors in technique and enhancing case detection (Goldberg and Steele 1980).

A need for communication skills studies have shown that 50% of psychosocial and psychiatric problems are missed (Davenport et al 1987), 54% of patient problems and 45% of patient concerns are neither elicited by the physician nor disclosed by the patient (Stewart et al 1979). Patients and physicians do not agree on the main presenting problem in 50% of visits (Starfield et al 1981).

An American study suggests that the physician-patient encounter is strongly influenced by the patient's health. Using the medical outcomes study short-form general health survey Bertakis et al (1993) found in a sample of 150 new patients at a University primary care centre that better health scores resulted (when consultations were videotaped and analysed with the Davis observation code)

when a greater portion of the consultation was spent on physical examination and chatting and a smaller portion of the visit on history taking. Counselling was predicted by diminished patient mental health scores.

Thus it seems that patients need to feel comfortable about discussing their feelings and emotions with their usual general practitioner. This may be related to the age of the patient. This idea was explored in the following thesis study. I performed a study on 3004 South Australians concerning these feelings and emotions.

STUDY I**2.13 Does patients' age influence perceptions of comfort in discussing feelings and emotions with their usual general practitioner?****Introduction**

The consultation is a doctor's most important and intimate professional activity. In the space of a 40 year career the average practitioner will consult with patients 120,000 to 160,000 times which is an amazing number of times for any task (Lipkin et al 1995). It has also been suggested that the primary care physician spends from 20 - 25% of his or her time coping with emotional problems of patients (Kessler et al 1985). Patients have expectations during these consultations and wanting to talk about their own feelings during a consultation has been shown to be increasingly important. Williams et al (1995) have shown that a third of general practice patients in a British study wanted to express their feelings. Also people may seek help from a general practitioner in the first place to obtain reassurance and hence decrease their feelings of anxiety (Ben Sira 1976). Patients who express their feelings have been shown in other general practice studies (Stewart 1984, Romm et al 1976) to be more likely satisfied with the consultation and compliant ten days later and to have better symptom control. Actual positive health outcome from consultations with patients suffering from diabetes,

hypertension and peptic ulcer has been associated with more expression of emotion, more control by patients and more information sought by patients and given by the doctor (Kaplan et al 1989).

The general practitioner's behaviour in the consultation may influence whether the patient feels comfortable enough to express their feelings and emotions. Bertakis et al (1991) in a study of patients with chronic diseases found that patient satisfaction was greater when the doctor's emotional tone was less dominating and the doctor counselled the patient for psychosocial topics. Several studies have shown that it is the ability of the doctor to communicate concern, warmth and interest in the patient holistically that produces a positive response from the patient (Ben Sira 1976, Hall et al 1981, Wasserman 1984, Dimatteo et al 1979, Dimatteo et al 1980, Hulka et al 1975). This nature and quality of the doctor-patient relationship causes far more patient satisfaction with the practitioner than factors such as access, availability, level and type of service (Williams et al 1991).

In Australia this area has been under researched but one can assume that the findings of the previous northern hemisphere studies apply here. The data that we do have seems to indicate that what satisfies patients in general practice consultations may not be congruent with the

doctor's satisfaction (Winefield et al 1995). Older patients may be more satisfied as a study of Norwegian general practice patients has found that the practitioner recognised more sorrow, loneliness and the demands of caregiving with increasing patient age (Gulbrandsen et al 1997). There is therefore a need to explore patient satisfaction further and this study has been undertaken to analyse perceptions of a group of patients of comfort in discussing feelings and emotions with their usual general practitioner.

Method

A question concerning perceived comfort in discussing feelings and emotions with a person's usual general practitioner was included in a survey conducted by the South Australian Health Commission in October-December 1993.

Personal interviews at households throughout the state were held and the question asked by the interviewer was: "When you see your usual general practitioner, how comfortable would you be in discussing your feelings and emotions?" They were asked to nominate the categories: "very comfortable, fairly comfortable, not very comfortable, not at all comfortable and haven't a usual GP/have never seen a GP".

This question was included in an "Omnibus" survey with other questions from State health organisations and the total duration of an interview was 30 minutes.

The sample was selected from metropolitan and rural areas. The metropolitan sample was taken from 320 randomly selected collectors' districts used by the Australian Bureau of Statistics in the 1991 census. Within each collector's district, a starting point was randomly selected. From this starting point, using a predetermined selection process based on a 'skip pattern' of four households, 10 dwellings were chosen. Only one interview was conducted per household and, where more than one person aged 15 or over resided in the household, the respondent was the person whose birthday was next.

The country sample automatically included all cities/towns with a population size of 10,000 or more in the 1991 census. The balance of the country sample was selected from centres with a population of 1,000 or more in the 1991 census, with probability proportional to size. Thus the country sample was self weighting. A cluster size of 10 was also employed in the country sample at each of the 100 starting points. Again, one person was selected per dwelling using the same procedures as for the metropolitan area.

To ensure that the whole survey (including other questions) was constructed in an appropriate way, 50 interviews were conducted during September 1993. Where difficulties were apparent, users were contacted and changes made. The 60 interviewers who worked on the survey were briefed from 1st October 1993. Interviewing continued through October, November and was concluded at the end of the first week in December. Prior to data input 5% of each interviewer's work was selected at random and the respondents re-contacted. A number of questions were asked of respondents to ensure they had, in fact, been interviewed including confirmation that they were the person in the household to have their birthday next at the time of interview.

Data were weighted by the inverse of the individual's probability of selection, then re-weighted to benchmarks derived from the 1991 census of population and housing from the ABS by age sex and location. The relatively few missing responses to questions were followed up by telephone where possible.

Where a refusal was encountered, another interviewer called with up to 6 separate visits.

Results

From the 4,200 households in the sampling frame there was no contact after 6 visits at different times of the

day/evening and different days of the week for 330. For 117 the houses were vacant (including 14 holiday houses at Wallaroo and Kingston SE). For 27 the selected respondent was away for the duration of the survey and in 2 the dwelling was considered unsafe to enter.

This then left 3724 contacted households which gave a response rate of 89%. Of these households failure to answer the questions from the interviewer was due to lack of interest or being too busy (583), being ill or mentally not capable (74) or being unable to speak English (74). In 41% of the 3,724 households the selected occupant chose 'very comfortable' in response to the statement: "When you see your usual general practitioner, how comfortable would you be in discussing your feelings and emotions" (Table 1).

Table 1: When you see your usual general practitioner, how comfortable would you be in discussing your feelings and emotions?

	% of respondents
Very comfortable	41
Fairly comfortable	23
Not very comfortable	10
Not at all comfortable	4
Have not a usual GP/have never seen a GP	2
Not interested	16
Too ill	2
Cannot speak English	2
Total	100
n = 3724	

The 3004 respondents who agreed to answer the survey question were analysed by age and compared with the estimated South Australian population in 1993 (Table 2). This Australian Bureau of Statistics estimate was based on the 1991 census of the South Australian population and updated for subsequent births, deaths and overseas and interstate migration (Australian Bureau of Statistics 1993). There was a significant difference between this sample of 3004 and the overall South Australian population (1,162,177) for age groups, X^2 89.6, df 12, $p < 0.05$. There was also a significant difference for gender with 49% of the population male (compared with 41% of the sample) and 50.8% female (compared with 59% of the sample). (One sample test for proportion $z = -5.7$).

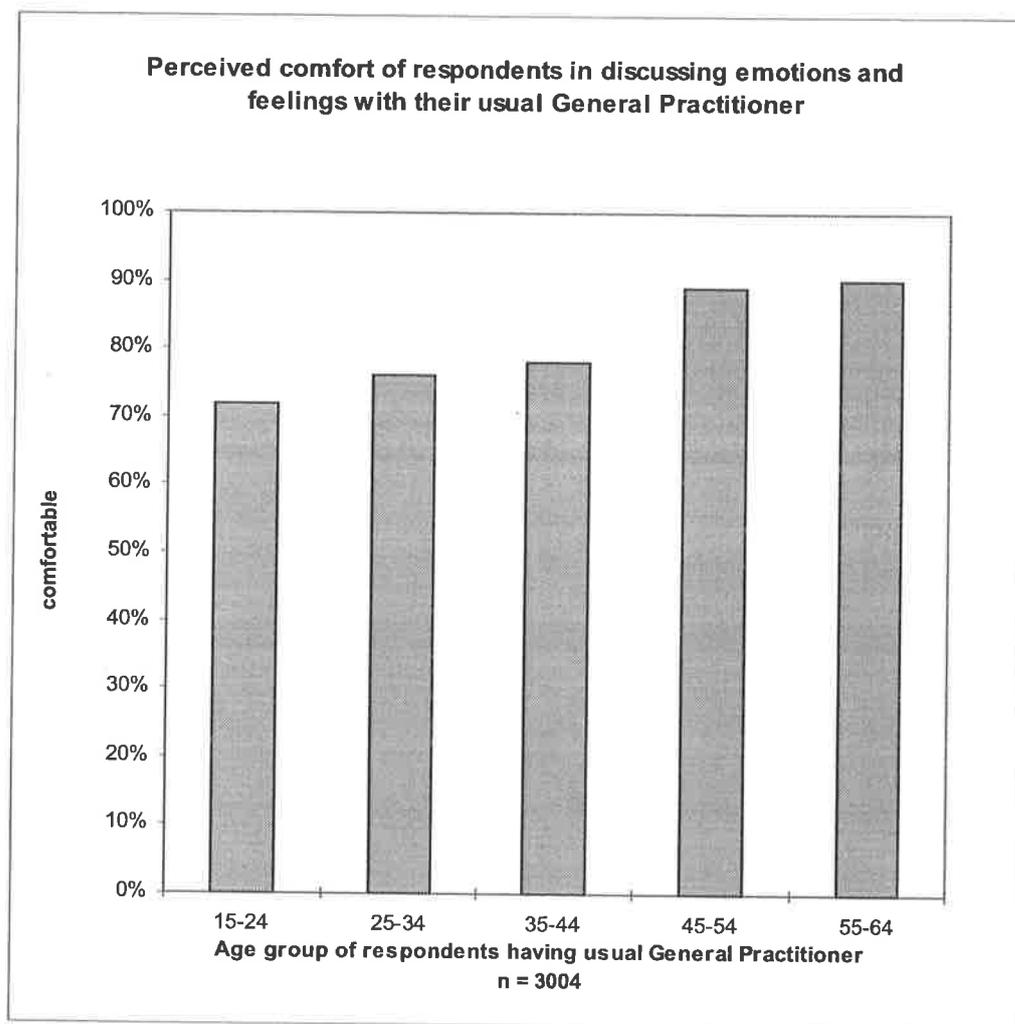
Table 2: ABS estimated population by age group South Australia 1993, compared with sample

Age groups	SA Population number	Sample number	SA Population percentage	Sample percentage
15-19	101,430	186	8.7	6.2
20-24	115,257	234	9.9	7.8
25-29	111,390	273	9.6	9.1
30-34	119,390	345	10.3	11.5
35-39	113,104	336	9.7	11.2
40-44	107,952	250	9.3	8.3
45-49	96,681	224	8.3	7.4
50-54	73,537	181	6.3	6.0
55-59	64,726	188	5.6	6.3
60-64	63,378	175	5.5	5.8
65-69	64,022	212	5.5	7.1
70-74	52,896	188	4.6	6.2
75+	78,414	212	6.7	7.1
Total	1162,177	3004	100	100

The 3004 respondents who agreed to answer the survey question were also examined by age group (Fig 1). The chi square test for a trend in proportions (X^2_{TR}) was used on the proportions of those in each age group who stated comfort with talking about feelings and emotions with their usual general practitioner (stated comfort) $X^2_{TR} = 113$, df 1 $p < 0.0002$. Thus the null hypothesis of no age group difference in stated comfort was rejected in favour of a trend of increasing proportions of stated comfort with age group membership. By subtracting the trend chi square (124, df 5) the chi square departure (X^2

DEP) of 11 was obtained which with 4 degrees of freedom was significant at the 5% level. Thus while the trend for perceived comfort increasing by age group was significant, it was not linear. Seventy one percent of those in the 15-24 year age group reported comfort and this percentage increased with each age group.

Figure 1:



Ninety seven percent of all these respondents stated they had a usual general practitioner. Analysing this by age group showed no trend of increasing or decreasing proportions. There was a significant gender difference in reported comfort between female respondents (81%)

compared with male respondents (77%) X^2 4.6, df 1, $p < 0.05$.

Seventy one percent of those who were never married reported comfort compared with 81% of those who were married, in a de facto relationship, separated, divorced or widowed X^2 36.3, df 1, $p < 0.0001$.

Of the 3004 respondents 114 were still at school compared with 2,890 who had left school. Sixty eight percent of those still at school reported comfort compared with 79% of those who had left (X^2 8, df 1, $p < 0.01$).

Of the 2,890 who had left school, 1,255 had qualifications (trade qualifications, certificates/diplomas, bachelor degrees) and 1,635 did not. Seventy seven percent of those with qualifications reported comfort compared with 81% of those without (X^2 6.4, df 1, $p < 0.02$).

The total gross annual household income was stated by 2,530 of the 3004 respondents. There was no significant difference in reported comfort in those who stated their income (77%) and those who did not (81%). Of those who stated their income as between \$20,000 and \$60,000 (1877) the reported comfort was 77.4% for \$20,001 to \$40,000, 76.3% for \$41,000 to \$60,000 and 72.8% for \$61,000 to \$89,000. However there was no significant trend in the

proportion reporting comfort by increasing total gross annual household income. There was no comparable South Australian economic data available for the year of this survey.

Discussion

In this study, a selected person was contacted face to face in 3,724 out of a sample of 4,200 households (89%). The characteristics of those who could not be contacted were not known and it is possible that many of them were itinerant and hence may not have been comfortable in discussing feelings and emotions with their usual general practitioner. Of those who were contacted 476 were not interviewed because of their lack of interest, being ill or mentally not capable and being unable to speak English.

This left a sample of 3004 (72%) respondents who were not a representative sample. Compared with the population of South Australia in the year of the study there was a little under representation in the age group 15 to 29 years and a little over representation of those 55 years and over. There was also an under representation of people from remote rural areas.

In this sample of 3004 there was a significant non linear trend for respondents to state more that they were comfortable in discussing their feelings and emotions

when they see their usual general practitioner as the respondent's age increased. Significantly fewer of those who said they were never married stated comfort in discussing feelings and emotions with their usual general practitioner compared with those who said they were married, in a de facto relationship, separated, divorced or widowed. Those respondents who were still at school stated significantly less comfort than those who had left school. It seems that the less stated comfort in those who were still at school and also in those who were never married could possibly be a reflection of the younger age of the respondents.

There was no significant difference between age groups of the number of respondents stating they had a usual general practitioner. Also the respondents between 15 and 29 were a little under represented and those 55 and over a little over represented so the lesser stated comfort in young people in this area may in fact have been an understatement.

Other studies support this possibility with younger people having fewer encounters with the general practitioner (Bridges Webb et al 1992), less sensitivity to the affective care of their general practitioner (Dimatteo et al 1980, Al-Bashir 1991) and less continuity of care (Haigh-Smith et al). In Australia people aged 15 to 24 have half as many consultations as those between 65

to 74 with a doctor. However the younger group has three quarters as many health related actions as the older group (National Health Survey 1989-90). In this analysis 'health related actions' were defined as those actions involving the use of health services, specifically hospital episodes, consultations with doctors, dental consultations and consultations with other health professionals: and those actions indicating a person's response to illness/injury other than the use or non use of health services, and including self treatment. Identified actions in this group were days away from work or school, other days of reduced activity, and the use of medications, including vitamins and sunscreens. A more recent Australian study using the SF36 subjective health measure has found no difference between younger and older people in perceived emotional health scores (National Health Survey SF36 1995). This suggests a reluctance of younger people to consult with their doctor about psychological distress and future research is needed in South Australia to look for barriers to consulting in this group. A Victorian (Veit et al 1995) study of general practitioners has identified barriers in the health system which hinder provision of effective adolescent health care. These include confidentiality problems because of having a family rather than an individual Medicare Card. Some general practitioners were less willing to charge for longer consultations because they feared Health Insurance Commission

investigation. This is a problem if long consultations with young people are being discouraged, as there is evidence that such consultations may be linked to dealing with psycho social problems and health promotion (Howie et al 1991). Another barrier identified was poor undergraduate medical training. Research is also needed to see if those young people who have discomfort in discussing feelings and emotions with their usual general practitioner actually consult less.

Of great concern is the perceived discomfort of 1 in 4 of the 15 to 29 year olds in the sample, in discussing feelings and emotions with their usual general practitioner. Twenty percent stated they were not very comfortable and 6.6% were not at all comfortable. A recent UNICEF report of fourteen industrialised nations ranked Australia as having the highest suicide rates for males 15 to 24 years (UNICEF 1993). Australia and New Zealand have been described as unique among world nations for having suicide rates in young people that are greater than the overall suicide rates and South Australia has similar rates (Australian Bureau of Statistics 1994, Pritchard 1992).

It has been calculated that of 1000 young people who have suicidal ideas approximately 50 to 100 will attempt suicide and one will die by suicide per annum (Cantor et al 1997). Also, as many people who suicide are depressed

and many who suicide have seen a doctor recently, feeling comfortable with your doctor to talk about feelings seems important.

In the sample of 3004 there was a significantly higher number of female respondents who stated comfort compared with males. More research is needed to see if this applies to young male patients. There was no significant difference between those respondents who were born in Australia or overseas, or living in the metropolitan area or the country, or by total gross annual income.

More research is needed to see when people feel comfort in discussing feelings and emotions with their general practitioner, especially with relation to the patient's age. Perhaps frequency of consultation affects this, or perhaps chronic illness management in the older patient develops a mutual participation (Szasz et al 1956) form of consulting which involves patient disclosure and in which the doctor may even be taught by the patient that feelings must be listened to. The barriers to the expression of patient feelings and emotions must be explored further and the role of the general practitioner examined.

Clearly communication skills training for medical students for young patients needs to be reviewed in Australian Medical Schools. As the general practitioner

is the first line of contact in the health system, academic departments of general practice should largely be responsible for this training. How many Australian academic departments of general practice are there that can demonstrate a significant improvement in communication skills of their attached medical students? At the postgraduate level should the Royal Australian College of General Practitioners re-evaluate the assessment of communication skills in the Patient Consultation and Management Interview parts of the Fellowship Examination? The College has an excellent track record in assessing such skills but perhaps assessing candidates while they interview young standardised patients might be a worthwhile innovation.

A recent encouraging step has been taken by the Australian Government with the provision of a multi media education kit for general practitioners on youth suicide. The College is also offering a practice assessment audit for patients aged 15-24 years for interested general practitioners as part of their continuing medical education.

Conclusion

A sample of 3004 South Australians was asked in a face to face household interview: "When you see your usual general practitioner, how comfortable would you be in discussing your feelings and emotions?"

There was a significant non linear trend for respondents to agree more that they were comfortable in discussing their feelings and emotions when they see their usual general practitioner, as the respondent's age increased. It seemed that the less stated comfort in those who were never married and those who were still at school could be a reflection of the younger age of the respondents.

More research is required into possible barriers in the health system to effective adolescent consulting as well as how effectively medical students are being trained in communication skills, with younger patients.

2.14 Conclusion

In this chapter the literature has been described in response to the question: "Why should CST be taught?" there is evidence that doctors' communication skills need improvement. There is also evidence that a doctor who communicated well has a better chance to help patients with preventive health behaviour and to improve patient satisfaction and compliance. Good communication by the doctor can create better chronic illness outcomes. This is important as patients suffering from chronic illness will be very much part of future general practice.

A study of 3004 South Australians, which was an unrepresentative sample, has raised questions about how

to address the discomfort of some younger patients about discussing feelings and emotions with their usual general practitioner. If further studies support these findings this would be a good reason to use CST with undergraduates with a focus on communicating with young patients.

CHAPTER 3

CAN CST FOR DOCTORS IMPROVE PATIENT OUTCOMES?

There are outcomes related to the ways doctors communicate. As well as these outcomes there are ways in the consultation to deal with somatising patients and these can be taught with CST. There is also long term value in teaching general practitioners communication skills as well as medical students. A study is described about CST for students which improves open ended psychological questioning with SPs.

3.1 Communication practices in relation to outcomes

Studies have shown that the quality of clinical communication is related to positive health outcomes (Kaplan et al 1989, Headache Study Group of the University of Western Ontario, 1986). Reduction in blood pressure was significantly greater in patients who during visits to the doctor, had been allowed to express their health concerns without interruptions (Orth et al 1987). Subjects in a recent study with lower perceived control over decisions about their health have higher blood pressure (Legg-England et al 1992). Concordance between physician and patient in identifying the nature and seriousness of the clinical problem is related to improving or resolving the problem (Stewart et al 1979, Starfield et al 1979, Bass et al 1986).

Explaining and understanding patient concerns, even when they cannot be resolved, results in a significant fall in anxiety (Macleod 1991). Greater participation by the patient in the encounter improves satisfaction and compliance (Roter 1977) and outcome of treatment (eg diabetic and hypertensive control) (Kaplan et al 1989). The level of psychological distress in patients with serious illness is less when they perceive themselves to have received adequate information (Fallowfield et al 1986, Fallowfield et al 1990).

In a Canadian study of the closing phase of a general practice visit the doctor using open ended questions, showing responsiveness to patients, being self disclosing and in engaging in psychosocial discussion with patients significantly increased the closing phase in time (greater than 2 minutes) (White et al 1999). Also comments which allow patients to be more expressive and assertive like: "Do you have any other concerns?", "How do you feel about?" and "You seem hesitant about", improve doctor patient communication in a general practice study (Street 1991). Open ended questioning by the doctor has been shown to elicit more information more efficiently (Roter et al 1987).

If controlling questions are used however, (ie largely closed ended questions as clinicians rarely ask open ended questions in medical interviews) there is a

negative effect on patient satisfaction, increased patient absenteeism from work and functional limitation (Hall et al 1988, Kaplan et al 1989).

Beneficial clinical communication is feasible routinely in clinical practice and can be achieved during normal clinical encounters, without unduly prolonging them, provided that the clinician has learned the relevant techniques (Greco et al 1966, Stewart et al 1989). The length of a general practice consultation may be linked to dealing with psychosocial problems, more long-term health problems and health promotion (Howie et al 1991).

A recent systematic review of ten analytical studies and eleven randomised controlled trials indicated that, in sixteen studies, more effective communication was significantly related to improved health outcomes (Stewart 1995).

It is not clear whether interventions in health care are more effective in informed patients who are involved in decision making about their care or whether the exercise of choice itself is therapeutic. An example of this phenomenon is in the Coronary Drug Project (Coronary Drug Project Research, 1980) and the β Blocker Heart Attack Trial (Horowitz et al, 1990) where it seemed that the subjects who chose to take their medication (the compliers) had significantly lower mortality irrespective

of whether they were taking the active drug or the placebo.

While meta-analyses (Hall et al 1988) have established a moderate relationship between doctor information-giving and patient satisfaction the relationship between patient satisfaction and health improvement is not yet clear (Winefield et al 1995). Until we can quantify health sensitively and Kaplan et al (1989) have pioneered this there is little hope that the most sophisticated analyses of communicatory process can be correlated with health improvements. Recent recognition that health status measures must include emotional well being as well as physical functioning (Ware 1995) is a step in the right direction as is the recent review by Stewart (1995) on communication and health outcomes is also encouraging.

Using a scale based on three questions asked of patients after the consultation about participating decision making style Kaplan found that patients of low participation changed doctors more. Those doctors with primary care training or training in interviewing skills scored better than those without such training. Doctors with lower volume practices and those who were satisfied with their level of autonomy scored higher on the participatory scale (Kaplan et al 1996). On a Likert scale of five points three questions were asked:

1. If there was a choice between treatments would this doctor ask you to help make the decision? (Definitely yes to Definitely no).
2. How often does this doctor make an effort to give you some control over your treatment? (Very often to Never).
3. How often does this doctor ask you to take some of the responsibility for your treatment? (Very often to Not at all)

Kaplan et al (1995) have defined physician participatory decision making style (PDM) as the 'propensity of physicians to involve patients in treatment decisions by providing treatment options, a sense of control over treatment conditions and a sense of responsibility for care'.

Higher scores were associated with greater patient satisfaction. It was concluded that participatory decision-making style is influenced by the physicians' background, training, practice volume and professional autonomy. Because participatory decision-making style is related to patient satisfaction and loyalty to the physician, cost containment strategies that reduce time with patients and decrease physician autonomy may result in suboptimal outcomes.

Physicians who routinely involve patients with chronic diseases in treatment decisions (presenting options, discussing the pros and cons of those options, eliciting patient preferences, and reaching mutually agreed-on treatment plans) can be said to have a "shared" or "participatory" decision-making style. Such physicians may have greater success in securing patient co-operation - and therefore may have better patient health outcomes - than physicians with more controlling decision making styles.

Howie et al (1997) looked at various aspects of care in six Scottish fundholding practices, involving 49 doctors, over 5,000 patients and almost 9,000 consultations. They devised, in an attempt to define quality in the general practice consultation a measure of 'enablement'. This is based on the response to six questions designed to elicit patient's feelings of confidence, ability and coping after a consultation. They found that enablement scores correlated highly with consultation length.

Howie points out that their instrument needs to be compared with other measures such as patient satisfaction and tested in other types of practice and social settings. They have done careful psychometric work on construct validity and reliability of the instrument but present no evidence of external validation of their

measure. Do patients who say they feel more enabled actually cope better with their illness? Is it simply quantity of time that matters, or does the nature of what goes on during that time make a difference?

Howie et al (1998) have later compared their patient enablement instrument (PEI) with two patient satisfaction instruments - The Medical Interview Satisfaction Scale (MISS) and The Consultation Satisfaction Questionnaire. They concluded in a multicentred United Kingdom study that the PEI measures a dimension of patients' experience of the consultation that is different from satisfaction. At the consultation level, enablement correlates best with the duration of consultations and how well the patient knows the doctor. These correlates apply at doctor level as well - more enabling doctors work in smaller practices than less enabling doctors (Howie et al 1999).

Laerum et al (1998) are developing in Norway an instrument for consultation improvement and patient involvement for complex general practice consultations. The biopsychosocial model was used and the questionnaire (102 questions) was appreciated more by the patient rather than the doctor. Argent et al (1994) are developing a complex communication skills rating scale which measures each utterance. The 'how' 'why' of the utterance as well as content, relevance, level of

psychological depth, responding to simulator cues, use of blocking strategies to avoid sensitive issues and which speaker is in control are measured. This scale is cumbersome and is being simplified.

Looking at an array of United States practices both the duration of the patient's relationship with his or her physician and longer length of office visit were significantly and linearly related to PDM style. The most participatory visits occurred among patients who had been seeing their physician at least five years. Participatory style increased with increasing length of office visit, up to visits of 21 to 30 minutes; after 30 minutes, PDM style tended to increase but the increase did not reach statistical significance.

Argent also found that patients over 75 and adults younger than age 30, those with high school education or less, minority patients and male patients had the least participatory visits with their physician.

Male patients seeing male physicians had the least participatory visits compared with male patients seeing female physicians, and compared with female patients seeing physicians of either gender. Female physicians exhibit more "partnership building" conversation, provide more information, and engage in more conversation that is

emotionally positive, compared with their male colleagues (Roter et al 1991).

Residents trained in primary care-track or interviewing skills training programs are more likely to receive better ratings of communication skills from simulated patients (Roter et al 1990).

There are measurable differences in practice styles between family physicians and internists in a Californian study (Bertakis et al unpublished 1997). Improved health status (as measured by MOS SF-36) was significantly related to patient-physician interactions characterised by a more extensive use of counselling. Family physicians used more counselling and devoted more time to health behaviour, while internists' medical encounters placed more emphasis on the technical aspects of care.

The element of physician practice style which most strongly influenced patient satisfaction was increased patient participation.

3.2 Somatisation Studies

Somatisation has been defined as how patients come to seek medical help for bodily symptoms misattributed by them to organic disease (Murphy 1989). Goldberg and Bridges in a study of general practice patients attending their doctor added two further criteria to the

definition (Bridges et al 1985). They are psychiatric disorder shown by standardised interview and the likelihood that treatment of the disorder would reduce or eliminate the physical symptoms. When all these criteria were applied to all new episodes of illness in the general practice study, one in five patients fulfilled them.

It is possible to deal with this problem in some patients. The problem of what to say when the general practitioner has performed an essentially negative physical examination was described by Cheyne (Cheyne 1733) a long time ago

"... often when I have been consulted in a case, and found it to be commonly call'd nervous, I have been in the utmost difficulty, when desir'd to name the distemper, for fear of affronting them, or fixing a reproach on a family or person"

Gask et al 1989, has devised a CST package which aims to improve the management of somatisation by general practice trainees and has demonstrated that the skills required can be effectively learnt.

A teaching package consisting of a videotape of reattribution of somatic presentation of psychiatric

conditions in general medical settings plus role play and video feedback has been successful with general practice trainees. A significant improvement occurred with general interview skills and reattribution skills (Kaaya et al 1992).

In a study of 69 community based primary care physicians, 308 adult patients were identified as having psychological distress on the 28 item general health questionnaire. This American study showed that if primary care physicians enquire, most psychologically distressed, somatically presenting patients will disclose psychosocial problems (Wolraich 1982). Primary care physicians can engender a substantial increase in psychosocial disclosure simply by adding one or two questions about mood or interpersonal problems to their clinical interviews.

**RE-ATTRIBUTION OF THE SYMPTOMS OF THE SOMATIZING PATIENTS (20%
OF GENERAL PRACTICE PATIENTS)**

Linking Somatic Symptoms to Psychological Distress

3 Stages: Feeling understood
 Changing the agenda
 Making the link

Stage 1: Feeling understood

Take a full history of the pain

- elicit other associated symptoms
- ask about a typical pain day

Respond to mood cues

- clarification
- empathetic comments
- probe mood state

Explore social and family factors

Check for biological symptoms

Carry out a brief, focussed physical examination.

Stage 2: Changing the Agenda

- feed back results of the physical examination
- acknowledge the reality of the pain
- reframe the patient's complaint - remind the
 patient of mood symptoms and link to life events.

Stage 3: Making the Link

(7 different strategies for doing this) only 1-2 of these may be needed:

- between anxiety and physical symptoms
- between depression and physical symptoms
- by practical demonstration
- to life events
- in the 'here and now'
- with illness in other family members

(by explaining shared symptoms - 'identification'
by explaining shared illness behaviours)

Moriss et al (1998) found that training experienced general practitioners to use the reattribution model of Linda Gask as described on the previous page was highly cost effective, partly by improving the psychiatric symptoms of patients with somatized mental disorders and partly by reducing direct health costs. Direct saving was made by:

Lower referral and lower costs of referral with a negligible increase in primary health care costs. The research methodology could not eliminate improvements in the after training cohort from natural improvement or changes in health care provision. A randomised controlled trial is needed.

3.3 Long term value of teaching general practitioners interviewing skills

When considering how best to teach interview skills, it has been asserted that certain fundamental criteria must be fulfilled: teaching should be effective in the sense that skills are acquired and be superior to other methods; acquired skills should generalise to a variety of clinical settings and be maintained over time; and finally, and most important of all, teaching should favourably influence patient care (Sanson-Fisher 1981). That interview skills can be taught is beyond doubt and this includes the area of general practice (Gask et al 1988).

Furthermore, it has been clearly demonstrated that specific teaching is superior to classical medical educational practice i.e. student clerkships (Rutter et al 1976, Stillman et al 1976). Kauss et al (1980), along with Maguire et al (1986) have demonstrated that these skills last. Maguire found that young doctors who as students had been randomly allocated to video feedback training in interviewing, maintained their superiority over conventionally trained peers after 5 years. Both groups, however, performed poorly in using open questions and asking about the psychosocial impact of health problems. Kauss found that the interview skills of doctors inducted to a medical rotation were related to

the degree of specific training reported by their respective medical schools.

Gask et al (1992), have followed up a group of general practice trainees at 18 months and found that acquired interview skills were maintained and further change took place during the follow up period.

She measured questions probing the problem by doctor's utterances. This included directive (open) and closed, physical, psychological, social and cue source, verbal, non verbal, delayed, notes check list, other.

She had 10 trainees and after training there was a significant rise in the percentage of open questions asked by the trainees as well as a significant decrease in the percentage of close ended questions. Significant improvement in the percentage of social questions occurred but a decrease occurred for the percentage of psychological questions.

Gask has defined her cue source as follows:

Category	Example
Patient-led	
a) verbal	Pt: "The headaches make me awful to live with". Dr: "How are things at home?"
b) non verbal	Dr: "You seem very low in spirits, are these headaches getting you down?"
c) delayed-verbal	Dr: "You said earlier that the headaches make you awful to live with, how are things at home?"
Doctor led:	
d) notes	Dr: (inspects the notes) "How are your headaches?"
e) check list	Pt: "I've been having terrible headaches" Dr: "Do they affect your eyesight?"
f) Other	

The most common utterances fall under the verbal, checklist 30, 22, 14 (beginning, 18 months and follow up) and other 49, 43, 47. There was no change in empathetic statements (mean percentage of all utterances) 1, 2, 1. (Dr: "This must be very difficult for you) facilitation 1, 1, 1. (Dr: Patient falters "Go on ...") clarifying comments 2, 2, 1. (Pt: "... and I get "shirty").

The checklist 30, 22, 14 was significant 30 to 14 $p < 0.01$ two tailed Friedman two way anova. Checking out was

described as Pt: "... and I get "shirty". Dr: "Do you mean irritable?"

3.4 Improvement of CST skills in students, trainees and general practitioners

According to Gray 1982, the majority of patient complaints about doctor behaviour deal with interpersonal skills. It is generally agreed that the quality of communication determines the success of the general practice consultation but studies have suggested that this is poor (Byrne et al 1976, Maguire 1986, Cartwright et al 1981, Haynes et al 1979).

It is possible to improve communication skills in students, trainees and general practitioners. Most published reports concern students in training. Maguire 1986 demonstrated a lasting effect of video feedback on medical students five years later with interviewing skills associated with accurate diagnosis, empathy and warmth. Wakeford 1983, demonstrated improved questioning and listening skills with CST for medical students using video feedback while Omololu 1984 demonstrated improved eye contact, positive reinforcement and encouragement of patient involvement. Irwin et al 1984, found better use of confrontation, better cover of psychosocial issues as well as clarification and exposition skills.

Gask et al 1988, have shown that general practice trainees taught in a problem-based model with group video feedback can improve the ability to identify psychiatric illness accurately and can change their interview behaviours. General practitioners after group meetings and audiotape feedback have been shown to improve their general interviewing skills (Verby et al 1979).

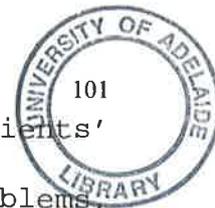
Gask uses a teaching model that concentrates on behavioural skills like asking open questions, facilitating, summarising, clarifying, requesting specific examples, responding to affective cues, reflecting feelings and demonstrating empathy. The main role for the teacher is to facilitate this process of reflection, discussion and rehearsal. Her teaching model therefore concentrates on behavioural skills and uses a reflective, student-centred approach (Boud et al 1985) which differs from the pedagogic feedback described in some other courses (Maguire et al 1978; Williams 1987).

General practice trainees who are better able to detect emotional disorder are also very much better at giving patients information and advice about their treatment. It is possible that both these skills reflect a common variable - the possession of good communication skills (Millar et al 1991).

There may be any extra clinical spin off in the consultation for attending to psychosocial aspects. In a Dutch study of 75 general practitioners, a positive correlation was found between performing obligatory physical examination and paying attention to psychosocial aspects (Smits et al 1991).

The traditional way of teaching medical students to take histories often fails to teach them enough interviewing skills to enable them to obtain a full and accurate account of their patients' problems (Maguire et al 1976). Most students however can acquire these skills through training, which includes four components: handouts dealing with the information to be obtained and the skills to be used; systematic practice with patients; feedback of performance by audio or video replay; and discussion with a tutor (Maguire et al 1978, Wakeford 1983). Viewing of students' videotapes by students themselves has been shown to be ineffective (Scheidt et al 1986).

Maguire et al (1986) followed up undergraduates for 4-6 years who had been randomised to a video feedback training group and a control group. Maguire et al studied their subsequent interviewing behaviour when they became doctors. Compared with the control group, the doctors who had previous video feedback as undergraduates clarified patients' statements more, used



more open questions, noticed verbal clues to patients' problems, enquired about patients' psychosocial problems, prevented needless repetition, kept patients to the point, gave verbal and visual encouragement, got precise information, used brief questions and reduced the use of jargon. The doctors from the video feedback group were considered to be more competent and empathetic than the doctors from the control group. They were also perceived as somewhat warmer and more self assured. However neither group demonstrated skill in beginning or ending a consultation. The trained doctors used interviewing skills more for the three categories of illnesses - life threatening, chronic disabling and psychiatric.

Other studies show that postgraduate basic group video feedback can improve the psychiatric interviewing skills of primary care residents (Gask et al 1988) and experienced primary care physicians (Gask et al 1987). Studies of the patients of doctors with video feedback training have shown effectiveness of the doctor to occur with patients who were both significantly anxious and depressed - it appeared that the training helped these doctors to "contain" the anxiety of their patients and this finding was confirmed by patient satisfaction ratings (Gask et al 1993).

A new orientation is appearing in western medical schools and emphasis is increasing on both ambulatory clinical

training and the doctor patient encounter (Tauber 1992). Most of the studies on undergraduate communication skills training (CST) have been done in a hospital setting so there is a need to demonstrate improvement in students' communication skills after training in a general practice setting.

In order to assess the effect of CST on the questioning technique and the aspect of fourth year students' consultation with standardised patients, a study was undertaken at the General Practice Teaching Unit (Study II).

STUDY II**3.5 Improving the communication skills of medical students in a general practice setting**

In a consultation the doctor-patient communication can be assessed by measuring (amongst other things) the types of questions asked by the doctor. Questioning by the doctor is a common form of exchange between the two parties and a literature review (Roter et al 1988) has shown the questions asked are mostly closed questions, i.e. a "yes" or "no" answer is expected. Open questions asked by the doctor in the consultation prompt the revelation of substantially more relevant information than closed questions. When family practice residents use open directive questions (How...?, Where...?, What...?, and when they use open questions followed by closed questions, their ability to detect psychiatric illness improves (Goldberg et al 1983). It has also been shown that patients who suffer from cancer disclosed more of their significant concerns if their doctors use open rather than closed questions (Maguire et al 1996).

Usherwood (1993) studied a small group of volunteer medical students in a general practice setting and found that those who had audiotape feedback about their consultations had, during interviews with simulated patients, recorded more open questions, fewer questions referring to physical symptoms, more questions referring to feelings, beliefs or behaviour and fewer questions of

a check list type by the end of training. A student centred model was used (Gask 1988) in this training which used video feedback using a problem based approach and encouragement of student reflection on their consulting skills.

While it is known that Gask's model of training with feedback can improve communication skills when used in one group compared with a control, it is not known what would happen if both groups received this model of training and the experimental group received more video feedback than the other. There are no studies on the effect of greater exposure of undergraduates to video feedback on the types of questions asked in their consultations in a general practice setting compared with some exposure and the following study endeavours to measure this.

Aim

The aim of the study was to evaluate the effect of two types of communication skills training on fourth year medical students from the University of Adelaide in a general practice setting. The setting was the Modbury General Practice Teaching Unit in South Australia which the author established for Communication Skills Training. This unit has several consulting rooms, video cameras and access to standardised patients.

Methodology

Subjects

During 1993 to 1994, 242 fourth year medical students attended the General Practice Teaching Unit at Modbury in South Australia. Groups of 4 students entered the study (which excluded larger or smaller groups) if 20 hours of teaching communication skills in a general practice setting were available (some weeks had public holidays and when this occurred the training was less than 20 hours). The Teaching Unit structure and function is described in Appendices A and B. An overall philosophy of communication skills training is described in Appendix C.

After a fifteen minute introduction to videotaping, the concept of interviewing standardised patients and the timing of each consultation (10 minutes using a timer); the 4 students were immediately given 4 consultations with standardised patients. The author personally trained each standardised patient to accurately reproduce in each consultation the skeleton of a story in a consultation that was very close to their own health. Examples of the histories and information sheets are given in Appendix D. The story was recorded and memorised by the standardised patient and checked with prior videotaped dummy consultations where the standardised patient received feedback from the author.

Each standardised patient suffered from a chronic illness. Each standardised patient's notes had a health summary and some basic notes about the condition from which they were suffering. These were read by the student for 3 minutes before they called their patient into the consulting room from the waiting room. The students were not told what to do, save 'behave as you think a locum general practitioner would'. These 16 consultations were then videotaped. The method of training these standardised patients is described in Appendix E. A tutorial for all 4 students followed on the use of Szasz and Hollander's mutual participation model in consulting for patients suffering from chronic illness (Szasz and Hollender 1956). A detailed description of the training is given in Appendix F.

On the next morning the students received a tutorial on safety netting in general practice, non verbal communication and hypothetico-deductive reasoning. This was followed by the video debriefing of four of the previous day's videotapes (1 per student) by the tutor who taught them on the previous day. The tapes were debriefed using Pendleton's Rules (Pendleton 1990), and each student received a written analysis of the questions they asked during the consultation. These were 'probing the problem questions', whether the standardised patient gave verbal cues, whether they were picked up by the

student and whether the student gave information (Gask et al 1988).

Process

On the next day students were placed into either an experimental or control group using random numbers. The students and their subsequent standardised patients were blind to which type of group they were in, but the trainers were not. The curriculum in the next six hours was different for the experimental and control group.

Each student in the experimental group received tutoring on listening skills; three episodes of video feedback from the tutor and fellow students, following consultations with standardised patients; three episodes of verbal feedback from the same standardised patients and one written analysis of probing the problem questions, cues given, cues received and information given from a consultation.

The control group received tutoring on holistic and preventive care following an observation of the tutor's videotape of a consultation. They also watched a videotape on reattributing symptoms in somatising patients to a psychosocial cause (produced by Gask and Goldberg) and practised some mini skills in this area. Each student in this group had only one episode of video feedback following a consultation with a standardised

patient, no verbal feedback from the standardised patient and no analysis of questions asked, cues given or received or information giving. The time spent learning was identical for control and experimental groups.

Measures

After this six hour segment of the course all students (in experimental and control groups) were videotaped consulting a new group of standardised patients four times. The videotapes from the beginning of training and at the end were rated by an assistant researcher with a degree in psychology. The psychologist was blind to whether the tapes were from the beginning or the end of the course or whether they were from the experimental or control group. Prior to this analysis a pilot analysis of tapes was conducted and agreement reached on how to classify some of the observations that could have overlapped categories. A list of definitions of questions and cue giving and receiving was drawn up and adhered to (Appendix G). An eighth of the consultations were reassessed for inter-rater reliability using a weighted Kappa statistical analysis. The video tapes were analysed by measuring the number of "probing the problem questions". These questions were open non directive questions, (e.g. How are you getting on?); open physical, (e.g. How are you sleeping?); open psychological, (e.g. How are you feeling?); open social, (e.g. When did you lose your job?); closed physical,

(e.g. Do you have a cough?); closed psychological (e.g. Are you depressed?) and closed social (e.g. Are you married?) questions. Also measured were the number of cues (affect laden statements) given by the standardised patient and the number of cues picked up by the student and finally whether the student gave information or not.

Using this form of analysis four pre and four post training videotapes of consultations with standardised patients were studied for each student. Communication skills as defined above were then compared by the author by experimental or control group.

Repeated measures analysis of variance were carried out on the rate of the questions asked, cue behaviour and information giving to determine the effects of training.

Results

Two hundred and forty two medical students in their fourth year attended the Modbury General Practice Teaching Unit over the duration of the study. One hundred and sixty two students were excluded from entry into the study because their group did not contain four students or the existence of a public holiday during their attachment made their course less than 20 hours in duration. There was no significant difference in the proportion of males to females in the evaluated students compared with the excluded students (Chi square 0.07 df 1

$p > 0.1$). Also there was no significant difference in the proportion of students aged 22 and over and under 22 in the evaluated students compare with the excluded students (Table 1). (Chi square 1.89 df 1 $p > 0.1$).

Thus it shows that participating students were representative of the entire class of fourth-year students at this University for two consecutive years.

Table 1

NUMBER OF STUDENTS				
	Evaluated groups		Non evaluated groups	
Male	42	(52.5%)	86	(53%)
Female	38	(47.5%)	76	(47%)
Under 22 years	48	(60%)	82	(51%)
22 years and over	32	(40%)	80	(49%)

From the 80 students who entered the study 40 were members of the control group and 40 members of the experimental group. All of the students produced 4 pretraining and 4 post training videotaped consultations. The total number of videotaped consultations was 640 and from these 14,683 observations were made which included 12,417 probing the problem questions. All of the videotapes were assessed by a qualified psychologist.

A pilot study was performed which produced agreement on borderline interpretations of some questions. Ninety-six consultations (14%) were reclassified for inter-rater reliability of the coding method using a weighted Kappa analysis for every observation except for those under the classification, information given, where a Kappa analysis was used. The values for inter-rater reliability are shown in Table 2. Very good agreement is shown for 9 of the categories measured and perfect agreement for the category, information given.

Table 2

INTER-RATER RELIABILITY	
Category Assessed	Score
Open questions	Kw = 0.97
Open physical questions	Kw = 0.9
Open psychological questions	Kw = 0.89
Open social questions	Kw = 0.9
Closed physical questions	Kw = 0.94
Closed psychological questions	Kw = 0.9
Closed social questions	Kw = 0.93
Number of cues given	Kw = 0.95
Number of cues not picked up	Kw = 0.94
Information given/not given	K = 1
Kw = Weighted Kappa K = Kappa	

To determine the effects of training on the rate of each of the 7 "probing the problem" questions, 2 measures of cue behaviour and 1 measure of information giving, repeated measures analyses of variance were carried out. As can be seen from Table 3, after the training there were significantly more open non directive questions, open psychological questions, open social questions but also more closed psychological questions. There were significantly fewer cues given by the standardised patients but also fewer cues not commented on (Table 4).

There was only one statistically significant interaction between group and training. Before the training the control group asked significantly more open psychological questions than the experimental group. After training the trend was reversed, ie the experimental group asked more open psychological questions than the control group.

Table 3

Means, standard deviations, F test for before and after and F test results for the main effect of training for the probing-the-problem questions (in 4 consultations)						
Type of Probing Question			Student Group			
			Control n = 40	Experi- mental n = 40	F	F training
1 Open non directive	Pre ^(a)	Mean	7.65	7.88	4.41	*0.00
		SD	3.33	4.98		
	Post ^(b)	Mean	8.78	9.03		
		SD	3.11	3.33		
2 Open physical	Pre	Mean	12.20	11.58	3.59	0.16
		SD	6.26	6.39		
	Post	Mean	13.58	13.68		
		SD	5.27	7.60		
3 Open psychological	Pre	Mean	1.35	0.93	81.01***	4.95*
		SD	1.88	1.10		
	Post	Mean	3.18	5.60		15.27***
		SD	2.66	3.72		
4 Open social	Pre	Mean	2.63	2.83	11.92***	0.39
		SD	2.69	3.38		
	Post	Mean	3.88	4.63		
		SD	3.01	2.99		
5 Closed physical	Pre	Mean	34.30	33.88	2.93	0.56
		SD	16.29	13.81		
	Post	Mean	32.40	29.03		
6 Closed psychological	Pre	Mean	6.50	7.83	25.22***	0.00
		SD	5.14	5.01		
	Post	Mean	9.90	11.18		
		SD	4.82	5.41		
7 Closed social	Pre	Mean	7.83	8.35	3.49	0.37
		SD	6.68	7.79		
	Post	Mean	10.33	9.63		
		SD	6.33	6.50		

*p < .05, ** p < .01, *** p < .001

(a) Pre = Pre-training
(b) Post = Post-training

Table 4

Means, standard deviations, F test for before and after and F tests for the main effect of training for the cue behaviour and information giving (in 4 consultations)							
Cue behaviour and information giving			Student Group				
			Control n = 40	Experi- mental n = 40	F	F training	
1	Cues given	Pre ^(a)	Mean	8.33	7.25	4.57*	0.09
			SD	6.73	5.24		
	Post ^(b)	Mean	6.88	6.15			
		SD	6.54	4.10			
2	Cues not commented on	Pre	Mean	3.55	4.28	11.06***	0.54
			SD	3.69	4.65		
	Post	Mean	2.40	2.48			
		SD	3.16	2.96			
3	Information given	Pre	Mean	3.93	3.73	0.13	0.52
			SD	0.27	0.60		
	Post	Mean	3.90	3.80			
		SD	0.30	0.41			

*p < .05, ** p < .01, *** p < .001

(a) Pre = Pre-training
(b) Post = Post-training

Discussion

It seems that reinforcement of video feedback by tutor and standardised patient and analysis of questions asked is an effective way of increasing open ended psychological questioning by these medical students. Most of the feedback was from the tutor in this experimental group but standardised patient feedback may have been very important also as it has been found in another study of medical students that standardised patients were at least as effective in producing an increase in post training student open ended questions as medical faculty members (Vannatta et al 1996).

This student behaviour was measured while they consulted with standardised patients. While the standardised patients were presenting with scenarios closely related to their own health, they were not real patients, so we do not know if the student behavioural change would have occurred with real patients. However a Dutch study of trainees in a general practice setting found that trainees who demonstrated poor communication skills with standardised patients did the same with true general practice patients (Pieters et al 1994).

Asking open ended questions about feelings is an important part of the effective primary professional care consultation. Teaching doctors to ask open ended psychological questions has been shown to contribute to a reduction in patient's emotional distress in a primary professional care setting (Roter et al 1995). This seems to require at least 2½ days of training (Levinson et al 1993) which is a similar overall time to our training. If controlling questions are used by the doctor (i.e. largely closed ended as this is the most common type) studies have shown there is a negative effect on patient satisfaction, increased absenteeism from work and increased functional limitation (Hall et al 1988, Kaplan et al 1989).

Patient compliance has been linked to explicit requests by family doctors for patient's opinions and open ended psychological questions obviously could be part of that process (Stewart 1984). There is an important link between the patients' perceptions of socioemotional aspects of the physician-patient relationship and their reported satisfaction with medical care (Dimatteo et al 1980). Also patients are more satisfied when they are allowed to discuss their own experiences (Winefield et al 1991) and talk about psychosocial issues (Bertakis et al 1991). Use of psychosocially oriented interviewing techniques has been associated with disclosure about family and child health and behaviour (Wisson et al 1994). During history taking patients who give information with their own words rather than by answering the doctors' closed ended questions have good patient satisfaction and compliance (Cecil et al 1997) and good measurable health outcomes (Orth et al 1987).

Whether the student behaviour in this study will last is not known. Maguire (1986) found lasting benefit in CST training that spanned five years and attributed the success to video feedback. The group that received no video feedback scored poorly on open questioning and covering psychosocial problems. In our study the students who received less video feedback scored lower in these same areas. It seems that video feedback is a very

powerful CST tool for improving the frequency of open psychological questioning in consultations.

While the students in this study increased their number of closed psychological questions in both experimental and control groups significantly there was no significant difference between these two groups before or after training. Greater video feedback seems to encourage open questions that involve the standardised patients' feelings and emotions. The use of open questions suggests a releasing of power by the student to allow the SP to freely express themselves. While this is encouraging and in Maguire's study the positive results of video feedback lasted for years there may be need for caution. It seems that hospital history taking with its closed ended systems review questions does not encourage much open ended psychological questioning. Kagan (1979) has observed that "students do not 'naturally' discuss with a patient their mutual relationship" and that students fear the time commitment needed if patients are allowed to express their feelings. Reiser et al (1984) also feel that students compartmentalize their thinking about the goals and techniques of interviewing and do patient-centred interviews for the communications part of the curriculum and biomedical symptom-focussed interviews everywhere else. If these things are true then the student has overcome at least in this part of the curriculum several barriers in order to behave with open

patient centred questioning. Perhaps students are unaware of the extent to which they dominate the patient until their behaviour literally stares them in the face repeatedly on the video screen and they are 'safely' encouraged to reflect on this.

However there may be students who ask open ended psychological questions for strategic learning purposes (ie to pass the course). If (and this was not our aim) we have students who speak differently but do not develop basic skills at cultivating and using the therapeutic relationship then as teachers we are wasting our time (Winefield 1992). In this training we tried to focus on the deep attitudinal base of the students' work and as Skelton et al (1997) suggest, let that form their skills in the belief that this will materially alter their attitudes. Perhaps the only way to measure deep attitudinal driven communication skills is to look at outcomes in their patients when they get into practice, and more research is needed to develop such outcome measures. This study suggests that medical students need to receive more video feedback to help them ask more open ended psychological questions than is needed for improving open non directive questioning and open social questioning.

3.6 Postgraduate communication skills training

Many general practitioners recognise the need for CST

In 1985 The Royal Australian College of General Practitioners conducted a major field survey (Anderson and Co, 1985) and one of the areas studied was which factors determine quality of care. It showed almost unanimous agreement between 3 groups (RACGP members, non members and specialists) on the following statement. The ability to detect and treat emotional and social problems as well as physical illness has a significant effect on quality. Surprisingly patients did not consider this skill as relevant to ensuring quality care. However a survey of 3000 Adelaide general practice patients (Stevens et al 1982) indicated patient concern about communication difficulty with their doctor.

In a survey of 720 South Australian general practitioners nearly 1/3 stated the main area where they needed additional knowledge and skill was in counselling and/or psychiatry. (Review of General Practice Education in South Australia 2nd Report 1989)

The educational needs of 534 full time New South Wales general practitioners were assessed by self administered questionnaire with reference to mental health care practices (Phongsavan et al 1995). It was found that mental health problems recognised by general practitioners at least once per week were psychosomatic

(93%), emotional (89%), addiction (79%), social/economic (71%) and family (69%). At least two-thirds recognised sexual problems, sexual abuse and major psychiatric problems less frequently than once per week. The practitioners' educational priorities were diagnostic and counselling skills, with particular emphasis on crisis, family, individual and marital counselling and strategies to prevent general practitioner burnout.

A study by general practitioners of the number of heartsink patients they report on their list in Sheffield, United Kingdom has shown that individual characteristics of doctors are associated with the reported number of these patients. Sixty per cent of the variance in the number reported was accounted for by the following four variables: greater perceived workload; lower job satisfaction; lack of training on counselling and/or communication skills, and lack of appropriate postgraduate qualifications. The authors concluded that to reduce the number of such patients experienced it may be necessary not only to reduce workload and increase job satisfaction, but also to get some training in communication skills (Mathers et al 1995).

Known problems in practice about doctor-patient communication

Communication problems in medical practice are both important and common. 54% of patient complaints and 45% of patient concerns are not elicited by physicians

(Stewart et al 1979). Psychosocial and psychiatric problems are common in general medical practice, but these diagnoses are missed in up to 50% of cases (Schulberg et al 1988, Freeling et al 1985). In one study patients were interrupted by physicians so soon after they began describing their presenting problems (on average within 18 seconds) that they failed to disclose other significant concerns (Beckman et al 1984).

Most complaints by the public about physicians deal not with clinical competency problems, but with communication problems (Richards et al 1990) and the majority of malpractice allegations arise from communication errors (Shapiro et al 1989). Residents or trainees (Platt et al 1979) and practising physicians (Byrne et al 1984) have shown substantial deficiencies when studied. Only a low proportion of visits with doctors include any patient education (Waitzkin 1984), and a surprisingly high proportion of patients do not understand or remember what their physicians tell them about diagnosis and treatment (Ley 1988).

Poor communication has been implicated in medical accidents (Ennis et al 1990), and in subsequent litigation (Vincent 1992). There is a growing practice amongst United States malpractice insurance carriers to offer discounts to practitioners who take CST courses (Carroll 1991). Cultural differences also impede the

work with patients (Kleiniman et al 1978, Waxler-Morrison et al 1990). Patient anxiety and dissatisfaction is related to uncertainty and lack of information, explanation and feedback from the doctor. However, doctors often misperceive the amount and type of information patients want. Doctors' language is often unclear, both as regards the use of jargon and in relation to a lack of the expected shared meanings of relatively common terms (Faden et al 1981, Mackillop et al 1988, Frances et al 1969, Simpson 1980).

Crouch and McCauley (1986) studied the consulting behaviour of 20 family practice residents and found that the closed-ended style of questioning appeared to interfere with the doctor's gathering and responding to important family information.

Concern has been expressed that using computers for record keeping during the doctor-patient consultation may be detrimental to the doctor-patient relationship (Royal College of General Practitioners 1982; Sheldon et al 1980, Evans et al 1984).

However prior studies have shown that differences among physicians affected the physician-patient relationship more than whether the physician used a computer during the clinical encounters (Cruikshank 1985). Because patients lack training in medical vocabulary they may

misunderstand or not recall what the doctor said. The translation problems of medical versus lay language have been described by many authors including Scott et al (1984) and Gibbs et al (1987). Bourhis et al (1989) further point out that the use of medical jargon also has affective significance: efforts by the doctor to converge to the language style of their patients will be seen as signs of liking or respect. Primary care patients can be summarised as wanting explanations, emotional support, medical advice or more general information (Salmon et al 1989).

Norell (1983) feels that the professional upbringing of most clinicians has been based on the model, 'curative medicine', with patients regarded as disease bearers or not genuinely ill. The main concern has been to correct the pathological conditions whether inherited or acquired, to restore patients to better health, ... first patients are invited to recite any of their symptoms; and then, 'please answer these questions. Now kindly keep very still and remain quiet while you are examined and tests arranged. Well this is my advice; here is the prescription; follow those instructions; trust me. Next patient!'

A study of the verbal exchange of general practitioners consulting in their surgeries by Byrne et al (1976) has shown that doctors are remarkably consistent in the ways

in which they consult with patients. Training for consulting skills was considered deficient and blame attached to medical schools. Just as the bad teacher will: "Teach all day without anyone learning a thing", so the bad doctor will doctor all day whilst the patient refuses or is unable to cure himself.

Michael Balint, son of a family doctor from 1951 ran regular seminars in London at the Tavistock clinic and published his book: 'The doctor, his patient and the illness'. It was the first time anyone had ever put the illness last, doctor and patient first.

His work describes 3 previously unrecognised aspects of the patient-physician relationship. The first was the recognition of the physician as a "drug" which emphasised the dynamics of the interaction between patient and doctor with dosage of the doctor in visits or interactions being appropriate or inappropriate. The second is the "deeper diagnosis" which meant understanding the psychosocial context of the patient and the third the 'apostolic function' which implies the doctor's role of teacher, trainer and molder of the patient (Balint 1964).

There are many such analyses of the consultation and examples are as follows -

Oxford University and the Oxford Region's vocational training scheme for general practice have after years of research and medical practice, developed an approach to learning and teaching the consultation. This method can be used with video feedback.

Pendleton (1981), described how at the consultations antecedents and consequences come together into a cycle of care. Before the consultation there is a change of health and the patient's health understanding determines whether to exit with no treatment, self treatment or alternative care or to take the problem to the general practitioner.

At the consultation some results may be immediate (eg the patient's concerns may have decreased or increased), intermediate (compliance linked to patient satisfaction, patient's health understanding etc) and long term effects (changes in the patient's health following patients adherence and health understanding). Pendleton believes health understanding plays a crucial role in the cycle of care.

Pendleton et al (1990), have defined seven tasks in the consultation. They all require good communication skills. These tasks are:

1. To define the reasons for the patient's attendance including:
 - i the nature and history of the problems
 - ii their aetiology
 - iii the patient's ideas, concerns and expectations
 - iv the effects of the problems
2. To consider other problems
 - i continuing problems
 - ii at risk factors
3. To choose with the patient an appropriate action for each problem
4. To achieve a shared understanding of the problems with the patient
5. To involve the patient in the management and encourage him to accept appropriate responsibility
6. To use time and resources appropriately
7. To establish or maintain a relationship with the patient which helps to achieve the other tasks

Pendleton et al (1990), use this framework to assess a consultation and for debriefing map the consultation on the first five headings. A mark is put on the map at the relevant heading after either the doctor or patient speaks. At the spots the observer can write comments, what was said or the number indicating the spot on a video recording. Then a line is marked on a Likert scale without numbers for the consultation rating scale which covers the same headings. The result is the basis for

debriefing a trainee on the consultation with precise comments about the consulting tasks. The format used is to ask the trainee how they felt the consultation went, positive feedback from the trainer, how the trainee would "do" the consultation if there was a next time and specific criticism from the trainer in a similar view. Also the method allows for different styles of general practitioner consulting.

The teaching method for general practice trainees at Sheffield is based on the model of problem-based interviewing devised by Art Lesser at McMaster University (Lesser 1985). This is skill-based and problem-oriented and emphasises skills needed to detect, explore and clarify the patient's current psychosocial problems.

Teaching is in groups and the trainee is encouraged to present videotapes that have caused him or her difficulty. The trainee prior to viewing the tape of the consultation provides background details and tells the group in what way they can help and what they would like the group to focus on. The key step for the trainer in improving skills is stopping the tape and rehearsing what could have been done or said differently at that point in the interview (Gask et al 1991).

When the tape is stopped the facilitator does not tell the trainee what to do, but uses prompts like "why do you

think I stopped the tape? Did you notice anything happening at that point? What did you notice about the patient's voice? Did you notice how her voice changed when she started talking about her husband? How did it change?" New ways of phrasing statements or using different strategies can be dealt with similarly: "how would you have done it? What would you say?"

The teaching focuses on three important sources of information which have been described in detail by Lesser (1985).

1. What the patient tells the doctor
2. What the doctor 'sees' - the appearance and behaviour of the patient
3. How the doctor feels. Neighbour (1987), stresses self awareness during the consultation

Replaying on video the beginning of the consultation may create questions for the trainer on eye contact, putting the patient at ease and beginning with an open ended question. Further on verbal, non-verbal and vocal cues (pitch and tone) are located. Teaching focuses on how one can respond to these cues. This can be done by asking open-ended questions, clarifying, asking for an example and commenting on non-verbal cues in a non-threatening way. Gask et al (1991), teach how to ask the patient specifically about health beliefs and concerns.

They have a very specific way of demonstrating empathy and say that it requires explicit statements that are supporting with a clear link between the "I" of the doctor and the "you" of the patient: "I can see that it is very difficult for you to talk about this".

When the group has been meeting for a while trainees include management skills training. Gask feels that for groups that meet regularly, skills are improved most if participants can bring back another recording made with the same patient, when they have tried to use the skills and strategies suggested by the group. Here audiotapes may be easier to obtain from trainees who lack a video in their surgery.

Evaluation includes subjective evaluation by participants (easy), subjective evaluation by role players, objective evaluation of change in skills, and impact on patient care (referred to earlier).

Gask et al (1988), have developed a real practice assessment for trainees and general practitioners. Four different types of rating are made:

1. Classification of the doctor's statements. The unit of analysis was the medical utterance and the rating scale allowed all utterances to be placed into one or more of 14 categories (eg open question, directive,

closed - physical, psychological, social, clarifying comments etc).

2. The trainee was rated as to whether or not he/she mentioned the patient's name or established eye contact at the beginning of the interview, whether there was a sense of how distressed the patient was, whether the patient's main problem was accurately defined and whether specific examples of problems were asked for.
3. Percentage cues missed. Counts were made of the total number of affect laden comments (e.g. I can't cope, I feel sad) and non-verbal cues expressed by the patient and the number of each not commented upon by the trainee.
4. Finally a simple rating scale was used to assess "appropriateness of advice to presenting problem" and frequency of empathetic statements or gestures and the ability of the trainee to focus on the patient's problem.

Using this rating scale, Gask found that after training, trainees were more likely to sense the patient's distress and to define the main problem accurately, ask more psychosocial questions, comment on affect-laden comments, give more psychosocial advice and this was appropriate to the patient's presenting problem. They also demonstrated a more empathic interviewing style. The psychiatric

diagnostic skills also improved and this benefited less able trainees the most.

Gask et al (1987), rated experienced general practitioners before and after a CST course using the same rating scale. Comparison with trainees showed them to possess considerable interviewing skills before training, but none the less instruction in a defined technique of assessment and management enable them to improve these skills significantly. It seems a postgraduate course of this type has much to offer the experienced general practitioners and trainers. A follow-up study is in progress looking at the general practitioners post training interviewing style in their own surgeries and also assessing patients' satisfaction following their encounters with general practitioners.

Goldberg et al (1989), state that patients commonly present to general practitioners with somatic symptoms for which no adequate physical cause can be found, which are accompanied by the symptoms of an anxiety state or a depressive illness. This is a major public health problem and a model has been created to encourage patients to re-attribute these symptoms and relate them to psychosocial problems.

The first part of the model is "feeling understood":

1. Take a full history of the pain, elicit other associated symptoms, a typical pain day.
2. Respond to mood 'cues', clarification of complaint, empathetic comment, probe mood state.
3. Explore social and family factors.
4. Explore health beliefs.
5. Carry out a brief, focused physical examination.

Then changing the agenda:

1. Feedback results of physical examination.
2. Acknowledge reality of pain.
3. Re-frame patient's complaint: remind them of other symptoms, and link to life events.

Then making the link:

1. Explanation: anxiety (when people are anxious they secrete more adrenalin in their blood and; this makes their heart go faster).
2. Explanation: depression.
3. Demonstration: practical (patient asked to hold a heavy book to demonstrate muscle tension).
4. Demonstration: life events.
5. Demonstration: here and now (symptoms now).

6. Projection using family member (anyone else with same symptoms?).

A training package comprising a training videotape in which this model is described, plus material for paired role play of new skills and small group video feedback was given to general practice trainees in Manchester (Bridges 1985). Evaluation of this teaching package revealed that the skills can be effectively learned.

In the United States communication skills training programmes for practising doctors is increasing. Seventy percent of malpractice litigation is said to be due to poor communication and doctors attending training programmes are eligible for discounts on their malpractice premiums. One out of five Americans have changed their doctor because their physicians made them feel uncomfortable, did not relieve anxieties or did not answer questions properly (Esajian 1991).

Other issues are emerging which demand proper CST. In a British study careful qualitative and quantitative measures were used (Tuckett 1986) and the authors conclude that because of the change in the nature of illness (more chronic disease) and the greater public awareness of health issues, physicians need to allow patients to articulate more of their own conceptions of illness. In other words when dealing with chronic

illness it takes two to tango. This puts the power of the doctor and the patient under focus.

The term 'patient centred medicine' was first devised by Balint, Hunt, Joyce, Marinker and Woodcock (1970), as a contrast to traditional illness-centred medicine (or disease or doctor-centred medicine).

The Royal College of General Practitioners in Britain has established mandatory performance criteria to be demonstrated for the examination for membership in 1996 and 1997 which include skills in communication (Tate 1996). The criteria listed are:

- The candidate is seen to encourage the patient's contribution at appropriate points in the consultation.
- The candidate is seen not to totally ignore cues that are present in the consultation
- Appropriate details are elicited to place the complaint(s) in a social and psychological context.
- The candidate obtains sufficient information for no serious condition to be missed.

- The physical examination chosen is likely to confirm or disprove the hypothesis that could reasonably have been formed or is designed to address a patient's concern.
- The candidate appears to make a clinically appropriate working diagnosis.
- Diagnosis, management and effects of treatment are explained.
- The content of what the candidate says and the language used are appropriate to what the patient needs.
- The management plan is appropriate for the working diagnosis, reflecting a good understanding of modern accepted medical practice.
- The candidate shares management options with the patient.
- The candidate prescribes appropriately.

O'Hair (1989), has argued that the doctor patient relationship in a consultation can be analysed by relational communication theory. Here the intensity of

control by the doctor or patient in the interview is studied - on analysis of power of the players. The amount of "upness" (attempts to control) "downness" (submission to attempts to control) and "acrossness" (neutrality) in the communication is measured. Friederichs-Fitzwater et al (1991), from the University of California, Davis, have developed this measure to study a family practice clinic, an AIDS clinic, an institutional or home hospice programme and hospital rooms or doctors' offices. The consultations were audiotaped and each individual's utterance given a three digit code. The first digit represented the speaker; 1=doctor, 2=patient, the second described the format of the message (assertion, question, talk-over, non complete, other) and the third digit the response mode of the message (support, non support, extension, answer, instruction, order, disconfirmation, topic change, initiation-termination). Future studies with videotape will consider non verbal communication. These three digit codes are then translated into control codes. There are three types of control directions (Rogers et al 1975). One Up (|) which indicates gaining control of the interaction (eg orders, topic changes, instructions etc), one down (|) which indicates moving towards allowing, seeking or accepting control of the interaction (eg support measures) and one across (|) which indicates moving towards neutralising control of the interaction.

The control directions of the two speakers are then paired based on sequential responses. For example a pair of responses from speakers with both assigned a one-up code is described as competitive symmetry (|)|). A pair of one-down messages (|)|) is called submissive symmetry, (}|) or a pair of one across messages is called neutralised symmetry (neither speaker is allowing or attempting control of the interaction). Complementary messages are (|)|) or (|)|). A computer programme has been devised (De Saeger 1988) to visually display the consultation. The programme prepares a graph where the consultation is plotted to visually display competitive, submissive or neutralised symmetry. Total frequencies are created for the message format for each communicator and of the paired sequence response modes.

The findings from the Family Practice Clinic suggest differences in relational control from the predominantly neutralised symmetry pairs found in the AIDs clinic, the hospice and hospital room. Here there was a mainly complimentary mode. This finding indicates that physicians responded more often to patient's one-down messages with one-up messages (277 times), and the patients were more willing to yield control to the physician (228 times) in the Family Practice Clinic. Physicians talked over patients more in the Family

Practice Clinic as well as in the hospital office but not in the AIDS clinic or the hospice. Domineering behaviour by patients was seen in the Family Practice Clinic, the AIDS Clinic and the hospice but not the hospital office.

Overall physicians and patients in the study tended to concentrate their messages into only three of the nine possible relationship categories: extension, support and answer. These findings indicate doctor-centred interactions with a pattern of the doctor frequently changing the subject, asking more questions and talking more than the patient. Many examples from the transcripts of this study were obtained where the patient would raise an emotional issue or question and the physician would respond with a question about physical symptoms, thus, controlling the meaning of the illness. If this finding can be translated to larger studies, there is cause for concern. This is because in studies of the effects of the physician-patient relationship on physiological health status of the patient. Orth et al 1987, found improvements in follow-up blood pressure among patients who were allowed uninterrupted communication of their health concerns. Also patients are most satisfied with interviews that encourage them to talk about psychological issues in an atmosphere where there is no physician domination (Bertakis et al 1991).

The Royal Australian College of General Practitioners' Training Program in Australia promotes training in communication skills for trainees (an example of this is the first year trainee programme in South Australia). Here small group tutorials are followed by practice with simulated patients or role play and immediate feedback. Davies and Farmer (1991), emphasise the critical role of a group leader in the programme. He or she has to be a guardian (to maintain the correct environment for constructive criticism), a resource person and a role model of appropriate group behaviour. There are different ways to debrief videos in consultations in small groups. Medical educators in South Australia have developed an approach to debriefing videos called "the five C's" (Farmer 1986). This model creates a supportive environment by giving the trainee control of the video recorder and encouraging them to first explore positive aspects of the consultation. Here the group leader acts as a catalyst, not a critic.

In 1996, the Queensland branch of The Royal Australian College of General Practitioners Training Program implemented an active listening module for its general practice Registrars. One of the aims of this module was to enhance the interpersonal skills of general practice Registrars within the consultation. While patients' assessments were significantly higher for Registrars who participated in the interpersonal skills module, the

study was not a randomised one and the control group had more rural Registrars who had high scores at the beginning (Greco et al 1998).

The qualities of the teacher are important in CST. When a small group is involved the leader (according to Davies and Farmer 1992) should have complementary roles - guardian, resource person and role model of appropriate group behaviour.

As guardian he/she should encourage maximum participation of all members while maintaining a protective and non-threatening environment. As resource person he/she should have the special knowledge skills and experience of a general practitioner to share with the group.

As role model of appropriate group behaviour he/she should follow the following prescription "one of the best things a facilitator can do is to engage in the kinds of behaviour that make for a good group interaction: he accepts, encourages, engages in relevant self disclosure, invites others to self examination, responds to confrontation by examining his own behaviour in the community of the group, expresses his feelings, cooperates with others, sticks to the here and now, owns the interactions that take place between others, tries to involve himself with others, encourages others to involve

themselves with him, and generally searches for new ways of being present to others (Egan 1973).

Trainees in the General Practice Teaching Unit at Modbury Hospital in South Australia are tested at each consultation for picking up the patient's hidden agenda. This is done by studying the Nottingham Health Profile of the patient after the history is taken. Not surprisingly trainees miss depression and psychosocial concerns in the patients the most (Moorhead 1991). The Unit also uses a feedback form which has been used to assess interpersonal skills. Des Marchais et al (1990), redefined the Flanagan method (Flanagan 1954) which evolved from nurses', receptionists' and patients' views of critical incidents in an optimal doctor-patient relationship. From 101 descriptions, 20 were selected from a team comprised of clinicians, psychologists, psychiatrists and medical educators. The items selected were thought to reflect four major dimensions of adequate interpersonal skills: politeness, empathy, communication, and quality of the information given to the patient. The test chronologically follows the steps of the consultation and can be used quickly. A rank out of a hundred can be given.

In Queensland a rating scale for assessing clinical performance of trainee general practitioners has been developed (Hays 1990). The aim of this scale is not only

to allow evaluation by the training supervisor but also for self-evaluation. Trialling the scale led to the addition of measuring eye contact and where the doctor sits during consultation, also open ended questions and psychosocial history.

Patient satisfaction has been linked to CST in an Australian intervention study (Evans et al 1987). General practitioners who received six hours of training on patient satisfaction and on the psychological variables in the physician-patient interaction had patients who were more satisfied and less anxious after a visit as compared with patients of a control group of physicians.

The value of the practitioner's communication skills in the consultation is widely recognised. An increasing body of literature is supporting communication skills training for general practice in such areas as public health, patient satisfaction, malpractice litigation, compliance, somatisation and clinical outcomes in chronic illness.

There are increasing reports of the success of communication skills training for medical students, general practice trainees and experienced general practitioners. Use of videotapes to provide feedback is universally recognised but critical to this process is

the trainer's empathetic, constructive yet challenging feedback. Communication skills training is expanding in medical schools, in post-graduate training schemes and in continuing education schemes for experienced general practitioners.

Bridges-Webb et al (1992), in a study of 495 Australian general practitioners recorded information about all surgery and home encounters with patients. Treatments by counselling and advice were recorded at a rate of 25.5 per 100 encounters. Advice, including reassurance/support, was the most commonly recorded subgroup at 15.7 per 100 encounters followed by counselling about health (5.5) and psychological counselling (3.4) "treatment advice" was the most common individual other treatment and was recorded at a rate of 5.7 per 100 encounters. This was followed by unspecified advice (4.6) counselling about nutrition (3.1) and individual psychosocial counselling 2.7. Bridges-Webb et al feel however that advice and support probably occur as part of most doctor-patient encounters being an inherent part of general practice. Some of the general practitioners in the survey rarely recorded it. The rates for counselling and advice were slightly higher for females in all age groups except under 15 years. To put counselling and advice into perspective, therapeutic procedures had a rate of 10 per 100 encounters and other procedures 4.8 and for every 100 problems managed, 68 prescriptions were recorded. It

could be argued that communication skills are important in all encounters - not just counselling and advice encounters.

Continuing medical education in communication skills may not change general practitioner behaviour if the course is too short. A course of 4 x half hour workshops in Oregon USA found no difference in doctor's communication skills between the experimental and control groups. However, there is evidence that a longer course has the possibility of changing the frequency of open ended questions and giving information using the Roter Interactional Analysis Scheme (Inui et al 1982).

Seldom has the patient population of those who do or do not benefit from the attitudes and skills learned by practitioners, been consulted by researchers. Some think that family practice training programs will only "meet the needs of the providers and their speculation about consumers". For a majority of problems patients expect their family physician to be caring, show concern for family problems, ask questions and be sympathetic but not be an expert.

Consumers may be valuable as a resource for the training and assessment of the communication skills of medical practitioners. This is supported by a New Zealand study where an examination of the general practitioner -

patient communication skills of postgraduates were assessed by non medically trained nominees of community organisations. To estimate the reliability of the consumer examiner, the examiners rescored a random selection of videotaped candidate encounters. The test-retest correlations of consumer scoring were demonstrated to be at a level consistent with adequate examination reliability hence consumer examiners are seen to be reliable, with a different perspective on performance. It is not appropriate to medicalise them in the exam training (Thomson 1994).

A standardised patient is a performer trained to represent a real patient case for use in teaching and evaluation they can be used for medical students, but also for practicing doctors. Validity of standardised patients related to their adequacy as substitute patients, one measure of which is the degree to which they have gone undetected by practising physicians. However it remains to be determined whether physician performance with SP's can be used to predict certain clinical outcomes such as compliance or altered health states (Burri, McCaughan and Burrows 1976; Norman et al 1985).

SP's have carried recording devices so that details of the encounter could be accurately reassessed (Hoppe et al 1990; Roter and Hall 1987). One study noted significant

discrepancies between observed physician performance and that which was documented in the patient record, with important implications for quality-of-care assessment (Norman 1985). About a third of family doctors in a study in Manchester were unable to make ratings of psychiatric disturbance which agreed with the number of symptoms reported by their patients on a psychiatric screening questionnaire (Davenport 1987).

It is possible to train family doctors to recognise psychiatric illness with more accuracy. A trial of 24 residents in the training program of the Department of Family Practice of the University of South Carolina who were selected because of poor correlation between symptom ratings of psychiatric disturbance and symptom levels as reported on the general health questionnaire, was undertaken (Goldberg 1992).

Twelve residents in the index group were each given individual teaching with David Goldberg of four sessions of 45 minutes each. In the first session the instructor set forth a simple model for making psychiatric assessments in a family-practice setting and showed the trainee videotaped excerpts of his or her own interview style, which had been recorded during Phase 1 of the project. The trainee reacted to the recording of himself within the framework of the model; the instructor was there to provide microteaching for any specific

behaviours that the doctor needed to acquire by giving him opportunities to practise them in the supervision session, and he was generally supportive and encouraging. In subsequent sessions the trainees were shown excerpts from videotaped interviews with patients that had taken place between teaching sessions: the instructor selected excerpts which either showed the trainee practising a behaviour which was new for him or illustrated a moment in an interview which might have been handled better. It was seldom necessary for the instructor to point out these moments to the trainee, since they tended to be very critical about their own performance. As the study proceeded it became clear that many of the doctors made an almost conscious decision not to probe for symptoms of minor psychiatric disorder, since they did not know what to do about these disorders once they had elicited them. The instructor therefore found himself adopting a less critical stance towards the trainees, and providing much more advice about the management of individual patients than had been envisaged when the study was planned.

After the training sessions this group had significantly improved the accuracy of their assessments.

3.7 Communication skills and Australian rural general practitioners

Communication skills in rural Australian general practitioners have been seen as important by patients.

Rural Australians have demonstrated a preparedness to travel further than necessary, often bypassing the closest general practitioner, to consult a doctor with whom they feel more comfortable (Humphreys et al 1993). In one of the few Australian rural case studies into patients' attitudes to general practice services it was found that the most important qualities sought in a doctor were compassion and an ability to communicate. The authors of this study acknowledged that these priorities were not reflected in undergraduate medical education at the time (Cymbalist et al 1988).

A recent rural study in NSW shows that overall, rural residents consider social accessibility (or acceptability) and continuity of care to be more important than geographical proximity in both their decision to consult and their choice of a doctor (Humphreys et al 1997).

3.8 Practical aspects of teaching CST to experienced general practitioners with respect to managing somatising patients

The following comments are a personal reflection on a training session provided by the author to 16 experienced general practitioners at a Division of General Practice Continuing Medical Education (CME) evening. It was held in the Division's headquarters in a suburb of Adelaide with a light meal at 6.30pm followed by the CME session

which was scheduled from 7pm to 9pm in August 1998. There were 10 male and 6 female practitioners who had chosen to attend CME sessions run by the division. The topic for CME was heartsink patients with an emphasis on managing somatising patients. Half of the male doctors would have been over 50 years of age and most of the female doctors under 50.

The Preparation

The aim was to give a short introduction on heartsink patients followed by a quite amusing videotape on a consultation with a heartsink patient, then a short information giving session on somatisation. The next interactive component was using Gask's tape on Reattribution which had as its second component 8 mini tasks to perform in a roleplay scenario with patient and doctor and finally 2 standardised patients who somatise were used.

To transport material to another site really means that all the material should fit in the boot of a car. The following items can create a 2 hour workshop on Reattribution of Somatising Patients (as part of the heartsink patient management strategy):

1. 2 TV monitors which play videotapes with 2 remote controls. (If flying to a venue arrange to hire them at the nearest large town beforehand).

2. Video camera and tripod would be helpful for a 2½ day workshop but from our recent CME experience with experienced general practitioners would not be suitable for a 2 hour session as it may take a lot of time to video desensitise the participants.
3. 2 sphygmomanometers.
4. 2 tables and 4 chairs to be organised by the people at the venue beforehand. There should be two rooms capable of housing 7 maximum plus a standardised patient. A small screen monitor is adequate for such a room.
5. 2 desk writing pad compendiums.
6. 2 mechanical timers (for 10 minute consulting)
7. Handouts:
 - i on the 10 heartsink types of patient
 - ii on characteristics, of somatising patients
 - iii on reattribution techniques (a summary of Gask's videotape)
 - iv a copy of one standardised patient's Royal Australian College of General Practitioners' Health Summary

v a copy of the second standardised patient's Health Summary. This helps the observers to read what the "doctor" in the consultation is reading. Any test results or Xray results are not given to the observers.

8. 3 videotapes:

- i a segment from the British TV series by Andrew Davies called "A Very Peculiar Practice". This is a 'fictitious' depiction of the behaviour of a group of general practitioners in a University medical practice. The segment is about a heartsink interview between a young general practitioner and an overbearing University Professor. There is an element of somatising and manipulative behaviour involved.
- ii 2 Gask and Goldberg tapes on Reattribution Techniques.

Reflections in chronological order:

1. We need to know that the numbers are less than 15 and there are two separate rooms where each group of approximately 7 can work without hearing the other group.
2. We need to fax our timetable to inform beforehand that we start on time so we can have 2 hours of time.

3. It seems that our Division was comprised of acquaintances who were frightened to show their consulting skills to their competitors for patients. On reflection one should not assume that all the experienced general practitioners are confident about their communicating skills enough to do simple tasks let alone consult standardised patients. I noticed that the older male doctors laughed more at the warm up tape (especially about jokes about the low status of general practitioners and doing rectal examinations) and contributed the least to the interactive learning. They partially sabotaged one group who was lead by a non decisive woman leader who colluded with them and did not volunteer herself for a single task.

It seems that pedagogy is alive and well in continuing medical education for general practitioners. At the final plenary session the practitioners continually tried to make me into a guru and asked me what to do about management of patients who are too secretive, or who have personality disorders. It was like some undergraduate teaching where the teacher is there to give knowledge. On asking what the questioning practitioner did about the patient in question an answer which showed careful thinking would emerge. Their previous CME obviously was from specialists who told them what to do in managing particular diseases. Despite informing them, this

session was to help brush up on reattributing skills, some students still took notes.

Conclusions:

1. It is possible that many general practitioners have poor communicating skills.

2. Many experienced practitioners resist adult learning in their CME preferring to passively absorb information from a perceived guru who is not a general practitioner. The system of allocating points for pedagogic education rewards this and is an out of date and ineffective approach. This system involves organisations like the Royal Australian College of General Practitioners and much funding (in the form of food) comes from drug companies. Studies on general practice CME have shown the practitioners' concern is about updating clinical skills not consulting skills (Munro et al 1982, Forrest et al 1989, Moorhead et al 1994 and Appendix).

3. Many general practitioners may not perceive the need to have CST, they may feel CST is an innate art which cannot be taught and they may feel that CST can threaten the very foundation of care they have been practising all their lives. My experience with this CST session is that the practitioners felt the same way (Havelock 1990).

What to do for next time?

1. Ask how many are in the audience?
2. Do they know each other well enough to trust each other?
3. Are they younger doctors?
4. What sort of CME do you usually do - androgogy (adult learning) or the ubiquitous pedagogy (child learning) (Watt 1990)?
5. Issue cards (some with tasks some blank) so receiving a number implies a certain task. This might avoid having no volunteers.

3.9 Conclusion

Improved blood pressure, diabetic control and better mental health are outcomes that have been linked to good doctor communication according to studies. Work has been done to create measures of outcome for general practice and Howie's enablement score and Kaplan's participatory decision making score have been described. Somatisation is common in general practice patients and it is important to teach doctors to reattribute such patients' symptoms back to the underlying psychosocial cause.

Studies have noted how CST improves communication skills in medical students and the study at the General Practice Teaching Unit described how improvement in open psychological questioning occurred with more student video feedback.

CHAPTER 4

CHANGE IN EDUCATIONAL OUTLOOK IN WESTERN MEDICAL SCHOOLS - A BACKGROUND FOR CST

In this chapter changes in Western medical schools are discussed. Does problem based learning sit comfortably with CST and how valuable are standardised patients?

4.1 Changes and problems in medical schools

A new orientation is appearing in western medical schools and a new emphasis is appearing on ambulatory clinical training and the doctor patient encounter (Tauber 1992). The new orientation is probably best represented by the report of the panel on the general professional education of the physician and college preparation for medicine. (GPEP) (Association of American Medical Colleges 1984). The pre-GPEP standard for medical education was established in the first decade of this century as encapsulated in the Flexner Report. (Flexner 1910). Flexner was influenced by Welch who was a supporter of German reductionism. Here clinical medicine was seen as a scientific discipline to be taught by famous scientists (Temkin 1950). Osler disagreed with this approach as he saw it creating a scientific ethos which would impose itself between physician and patient (Osler 1962).

Problems which have been recognised in these medical schools include rigidity of the curriculum, overloaded

students, too many detailed and irrelevant lectures, an emphasis on teaching rather than learning, memorisation rather than the understanding of concepts, lack of integration within the course or the examinations, a separation from the intellectual life of the university, and a serious disjunction between societal need and the education of doctors (Rappleye 1932, Karmel report 1973, Sheldrake et al 1978, Thompson 1981, The GPEP Report 1984, Renwick W 1988, The Edinburgh Declaration 1988, Doherty 1988).

The Edinburgh Declaration of 1988 stated the reforms needed as:

1. Widening the educational settings in which medical education takes place.
2. National health priorities as the context for education.
3. Active learning through life (with appropriate reforms of the examination system).
4. Professional competence as the purpose of all learning.
5. Training of medical teachers as educators.
6. Health promotion and prevention of illness.
7. Integration of science and clinical practice.

8. Selection of entrants, for non cognitive as well as intellectual attributes.
9. Co-ordination of education with health delivery services.
10. Balanced production for the national need for doctors.
11. Co-operation of the health professionals (multi professional training).
12. Continuing medical education as a main sphere of medical education.

In the USA, the association of medical colleges in its GPEP Report (1984) idealizes the new physician as 'caring, compassionate, ... committed to work, to learning, to rationality, to science and to serving the greater society'. This broadens the Flexner approach which endorsed an optimistic reliance on the application of basic research. The emphasis on the laboratory, the heavy reliance on the objective, i.e. quantifiable data, the overwhelming concern with disease as a malfunctioned component (as opposed to holistic health concerns) oriented the Flexnerian physician increasingly towards a technocracy. His report (Flexner 1910) was influenced by Welch who was a supporter of rigid German reductionism flying on the successes of microbiology at the turn of the century. Here clinical medicine was seen as a scientific discipline to be taught by famous scientists

(Temkin 1950). Osler disagreed with this approach as he saw it creating a scientific ethos which would impose itself between physician and patient (Osler 1962).

When psychometric testing using the Californian psychological inventory was performed on Monash University students in Australia during the basic science component of the medical curriculum it was found that high academic achievement in many components of the curriculum in students was linked to personality profiles that seemed inappropriate to their chosen careers as physicians. Medical schools espousing humanistic qualities in their educational objectives may be offering a contradictory message to their students by rewarding those with inappropriate personal qualities (Tutton 1996).

When clinical skills and communication skills were assessed by standard patient consultations which were rated, the final year students in medical schools in Catalonia demonstrated that there was no correlation between scores with the method of clinical skill assessment and academic knowledge assessment (Gomez et al 1997).

Characteristics of teachers and their environment may affect the quality of CST. Most CST trainers today were themselves educated in an era when communication skills were hardly taught at all. Too frequently it has been assumed that CST trainers, through their very practice of

medicine will have gained sufficient knowledge of the specific skills involved in medical communication (Silverman et al 1998). This of course is not always true.

Administration in areas of medical education can help or hinder CST. Silverman et al (1998) feel that it is vital that the importance of communication skills teaching is understood by those in positions of authority and power - Deans of medical institutions, administrators of health management organisations, hospitals and health authorities, medical societies, royal colleges, medical associations, funding agencies and medical politicians.

Among teachers of communication skills are some who confess to being ignorant of the whole subject of communication skills (Eastwood 1985). Hargie et al (1987) have argued that because of the current lack of expert staff within the health professions in respect of skilled trainers of communication skills, the use of both a behavioural scientist and a tutor representing the professional background of trainees is needed. This type of work necessitates the marriage of two separate bodies of knowledge and if neither is not adequately represented then the training experience may be impaired. Hargie et al feel that the behavioural scientist will ensure that training focuses upon the communication issues without paying too much attention to professional contents, while the practitioner - tutor can ensure that any discussion

of communication takes place within the realities of the actual practice situation. A fine balance can occur here between 'process' and 'product'. Trainees have endorsed this approach (Morrow et al 1986).

The Welch/Osler conflict may today have harmful effects on CST training in a general practice setting (Moorhead et al 1991). The criticism of the Flexner model on which many medical schools have operated occurred at a conference on medical communication in Toronto in 1991.

The Toronto consensus statement of 1991 agrees that traditional medical education at all levels is generally ineffective in teaching clinical communication (Kahn 1979, Kern 1989, Maguire 1984).

Sufficient data have now accumulated to prove that problems in doctor-patient communication are extremely common and adversely affect patient management. It has been repeatedly shown that the clinical skills needed to improve these problems can be taught and that the subsequent benefits to medical practice are demonstrable, feasible on a routine basis, and enduring. There is therefore a clear and urgent need for teaching of these clinical skills to be incorporated into medical school curricula and continued into postgraduate training and courses in continuing medical education. If current knowledge is now implemented in clinical practice, and if the priorities for research are addressed, there may be material improvement in the patient-doctor relationship.

4.2 Problem based learning

Many concerned medical educators believe that traditional medical schools are so bad that it is easier to leave them and start all over again. They work in new medical schools which are often referred to as community based and/or problem-oriented medical schools (Kantrowitz et al 1987).

However the luxury of starting from scratch is rarely possible in traditional medical schools (Kamien 1993). Given the wide range of personalities and professional interests involved in traditional medical schools and the general lack of interest in the literature, it is unlikely that members of such a school will be able to reach a consensus for action without some external help. The Educating Future Physicians for Ontario Project (McMaster University 1992) is collecting information from a wide spectrum of people and resources to match education with what the public wants and needs from its doctors (Rosser et al 1984).

The study is in regular consultation with representatives from 5 Canadian medical schools in Ontario and a health care consumers' advisory committee which includes people with chronic disease and disabilities.

This raises the question - is a medical school a community of scholars or scholars of the community? Cox (1984) argues that community expectations have risen that

the medical graduate will accept responsibility for sensitive handling of delicate interpersonal relations, counselling in sexuality and bereavement, and empathising with the patient's emotional needs during consultation, as well as helping sort out welfare, occupational, housing and other environmental problems. The fascination with the scientific and technical side of medicine, and the effect of specialisation in shifting practice from the home to the hospital and clinic, have led, however, to the relative neglect of this caring side of medicine in order to deal effectively with the curing side. He argues that universities have not clearly debated whether the medical task legitimately and realistically includes the social and psychological aspects of illness, and what the responsibility of the medical school may be in ensuring appropriate attitudes and skills in its graduates.

Teaching CST requires educational and administrative skills, Cox argues that in universities research and service have well codified patterns for their reward systems, teaching and administration do not.

Abrahamson (1988) argues that it is time for us (academics) to acknowledge that curriculum development in a medical school is not logical or even educational; it is political and emotional. He feels the solution is to empower faculties with the curriculum not individual departments.

It is instructive to learn what patients expect from a doctor. An extensive review of the literature has revealed 9 major groups of factors (Spiegel & Backaut, 1980):

1. Accessibility and convenience of services
2. Availability of resources
3. Continuity of care
4. Efficacy of outcomes of care
5. Financial arrangements for payment of health care
6. Humaneness of care given
7. Quality of competence of the staff providing the care
8. The thoroughness of information gathering by health care staff
9. Pleasantness of surroundings.

Five of these have the requirements of the doctor possessing good communication skills.

Integrating epidemiology, pathophysiology and therapeutics through a problem-solving approach to casework has been tested at McMaster and Newcastle NSW and shown to produce graduates with better analytic and communication skills (Hamilton 1992, Saunders et al 1982).

Improving communication and patient education skills by teaching them as specific techniques has been shown to

improve not only history taking but also, examination technique and diagnostic accuracy (Maguire et al 1986).

A British study (Cartwright 1967) found when people were asked the question: 'If you could have 10 minutes uninterrupted discussion with your doctor or with another doctor you found sympathetic, is there anything you would like to ask him about - either for yourself or your family?' The response was yes for 18% of the respondents. Better communication skills in the doctor might remedy this situation.

A "personal doctor" according to patients should have the following characteristics:

1. A good full explainer of things (75%).
2. The doctor would know them by name if he met them in the street (66%).
3. The doctor patient relationship is friendly rather than business like (44%).
4. They feel they might discuss a personal problem that was not a strictly medical one with him (28%).

Only 11% of patients had a general practitioner who was a 'personal doctor' on all these criteria, but most people (88%) had a doctor who met one or more of them.

The emphasis in problem based learning (PBL) is that the problems must be based on reality. Of course most health

problems are community not hospital based. In PBL small group learning with tutor supervision is the norm. PBL as a method of instruction stands firm within the rationalist tradition (Schmidt, 1995).

Rationalism presupposes that our knowledge of the world is primarily the product of our thinking activity. Theories are developed through deduction - not so much systematic descriptions of reality derived from careful observation but cognitive structures resulting from logical reasoning (Popper 1950).

It is possible that students learn better in PBL if they only have limited knowledge of the subject and work with small groups rather than individuals (Schmidt et al 1989, DeGrave et al 1985).

The history of PBL starts with the promotion of independent learning in children (Dewey 1929) and the idea of an intrinsic curiosity that drives people to know more about their world (Bruner 1959).

It may be that those medical schools who use problem based learning create doctors who feel they are better prepared for interpersonal interaction. Data from 139 first year doctors from the University of Newcastle in New South Wales showed that graduates from this problem-based medical school rated their undergraduate preparation more highly than traditional medical school graduates to prepare them for practice in the areas of

interpersonal skills, confidence, collaboration with other health care workers, preventive care, holistic care and self-directed learning. These findings persisted when ratings were adjusted for the effects of age and gender (Hill et al 1998).

Medical students who learnt with PBL in the new pathway curriculum at Harvard demonstrated greater psychosocial knowledge, better relational skills and more humanistic attitudes (Moore et al 1994). Medical students are not the only ones to experience these thoughts. Occupational therapists at the University of Illinois perceived that a PBL approach which was adopted consistently across the curriculum contributed to the development of communication, information management, critical reasoning and team building skills, whilst those from Duquesne University in Pittsburgh responded that PBL enhanced their professional behaviour and this included interpersonal communication skills and teamwork (Stern 1997). This leads one to look for further evidence of the effect of PBL on communication skills training. We felt we should assess the impact of PBL on a session of CST with our own students at the General Practice Teaching Unit.

STUDY III**4.3 What is the impact of adding PBL to Communication Skills Training?**

Problem Based Learning offers considerable overlap with Communication Skills Training methods and provides an ideal opportunity to extend the Communication Curriculum. What could be more problem based than a Standardised Patient case which learners work through over time, moving from information gathering to problem solving, then to investigating knowledge gaps and learning opportunities and later returning to the Standardised patient to explain findings and plan further care (Kurtz et al 1998)?

It may also be that those medical schools who use PBL create doctors who feel they are better prepared for interpersonal interaction. A group of Australian medical graduates from a PBL based medical school rated their undergraduate preparation more highly than traditional medical school graduates to prepare them for practice in the area of interpersonal skills, confidence, collaboration with other health care workers, preventive care, holistic care and self - directed learning. These findings persisted when ratings were adjusted for the effects of age and gender (Hill et al 1998).

Four qualities of PBL have been described. They are the activity addresses a situation which might or might not be a problem; the situation is multifaceted; much of the activity is conducted with small groups of students and students are expected to participate actively in their own learning. Sometimes PBL does not fulfil all of these objectives and PBL which is mechanical in practice with the only aim of problem solving based on knowledge acquisition may miss the potential for stimulation of deeper, holistic and creative thought and the opportunity for the development of interpersonal and communication skills (Boud et al 1994).

At the General Practice Teaching Unit at Modbury in South Australia we studied feedback about the tutor and student questioning style in a segment of a communications course where PBL was introduced.

Aim

We wished to find out whether introducing PBL to a segment on communication skills training made any difference to the students' feedback on the qualities of their tutor and also how many open ended psychological questions they asked of their standardised patient before and after the PBL part of the segment.

Method

The students were 35 Fourth Year medical students attending the unit between May and July and a further 35 in August and November in 1999. These two training periods were compared.

In the first, each medical student (from a group of 4) interviewed a standardised patient (SP) after 3 minutes reading about the SP's general history, test results and some information about the SP's condition. The consultations were all timed to last 10 minutes with a timer and videotaped. After SP feedback and a tutorial on communication skills (CST), feedback on the students' videotapes was given by the tutor. Evaluations of the tutor at the end of the training were obtained from 35 students. Despite good feedback about the tutor, students reported difficulties in knowing what action was required to manage the patient in their consultations and this was felt to impede their concentration on communication skills. This prompted us to change the session to allow the students to find out more knowledge about the problems presented by the SP.

The new session which commenced in August involved students in two pairs. In each pair, one student consulted an SP while being videotaped, while the other observed. Brief feedback was then given by the SP in the form of a Participatory decision - making style

questionnaire (Kaplan et al 1996). The SP was asked to rate the student's style, on a 5 point scale "using the following questions: 1) "If there were a choice between treatments, would this doctor ask you to help make the decision? (definitely yes to definitely no)"; 2) "How often does this doctor make an effort to give you some control over your treatment? (very often to never)? ; and 3) "how often does this doctor ask you to take some of the responsibility for your treatment? (very often to not at all)?" Resources related to their SPs' problems were then made available for a self-directed learning session for one hour ie PBL.

There were 2 SPs. One presented as a lady in her forties who had missed her period. The resources provided for the students for the self directed PBL about this standardised patient were a brief summary about Prenatal Diagnosis which included information on Chorionic Villus Sampling, Down Syndrome and Neural Tube Defects; a handout from the Queen Elizabeth Hospital in South Australia about Chorionic Villus Sampling which they give to their patients and their patient consent form for patients who are about to undergo Chorionic Villus Sampling. The students could if they chose read about Genetic Disorders (Taylor 1997), Chromosomal Abnormalities (Nelson 1996) and Dealing with Pregnancy (Rosenfeld 1997). A videotape was supplied on Prenatal Diagnosis (NSW Genetic Education Program 1992).

The other SP was a man in his late fifties who was concerned about Erectile Impotence. The resources provided for the students for the self directed PBL were articles on the General Practice Approach to Managing Impotence (Johnson 1996); the Management of Erectile Dysfunction (Handelsman 1998) and New treatment Options for Erectile Dysfunction (McMahon 1999). Two videotapes on particular types of pharmacological management were also provided.

The remaining student was videotaped consulting with the same SP. Detailed SP feedback followed and the students of both groups met together with their tutor for feedback on their tapes.

After 35 students had undertaken the new session, feedback about their tutor was compared in the following areas using five-point Likert scales:

1. Communicated effectively
2. Encouraged student participation
3. Well organised
4. Stimulated student interest
5. Enthusiastic about teaching

The new students were also asked to respond to the statements:

6. The PBL process was helpful to my learning
7. I have developed new skills/ strategies as a result of this session

On the Likert scale 5 indicated "Strongly agree" and 1 "Strongly disagree". The measure of student communication skill was the number of open psychological questions asked in the 10 minute consultations.

There were 12 consultations that were checked by another rater who had been trained to assess open ended psychological questions from videotaped consultations

Results

There were 35 responses on the tutor feedback questions for the Before PBL group and 35 for the After group. There was no statistical difference in the 2 groups for the students' sex - both groups had 24 males and 11 females. Neither was there a significant difference in age (Before group - 21 years or under 15 students and After group 9 students Chi square 2.28 df 1 p 0.2). Also there was no significant difference in the students' country of birth (Before - born in Australia 17 and After 10 Chi square 2.2 df 1 p 0.2).

There were no significant differences in the feedback about the tutor in the two groups. Table 1.

There were 12 consultations that were checked by another rater who had been trained to assess open ended questions from videotaped consultations. There was perfect agreement in the number of open ended psychological questions (which was the measure of student skill) between raters in these consultations. The mean number of open ended psychological questions in the first consultation was 1.55 (SD 1.04) and the second 1.16 (SD 1.01) however this was not a significant difference ($t = 2.04$ df 34 $p = 0.38$).

All of the 35 students in the new PBL session responded to the question: "The PBL process was helpful to my learning." The mean score for this statement was 3.83 (SD 0.95). The second question they responded to was: "I have developed new skills/strategies as a result of this session." The mean score for this statement was 4.23 (SD 0.88).

Table 1

STUDENT FEEDBACK ABOUT THEIR TUTOR IN TWO GROUPS OF STUDENTS - BEFORE AND AFTER THE INTRODUCTION OF PBL					
<i>QUESTION</i>			<i>Before PBL</i>	<i>After PBL</i>	
1.	Communicated effectively	Mean	4.43	4.43	NS
		SD	0.65	0.65	
2.	Enthusiastic about teaching	Mean	4.54	4.54	NS
		SD	0.61	0.61	
3.	Encouraged student participation	Mean	4.40	4.43	NS
		SD	0.77	0.65	
4.	Well organised	Mean	4.37	4.29	NS
		SD	0.77	0.75	
5.	Simulated student interest	Mean	4.43	4.26	NS
		SD	0.74	0.70	

Discussion

There seems to be little difference in the feedback given by the group of students who did not have PBL included in their session to their tutor compared with those who did. The tutor remained the same for both groups and so did the education setting. It seems that the good tutor feedback did not suffer with the introduction of PBL into this Communication Skills Training segment.

The sex, age group and country of birth was similar in both groups. The standardised patients in the training were trained to a strict protocol and were the same people on most of the occasions. They were consulted the same number of times in both groups and the duration of the consultation was equal on each occasion. However the

groups were not matched as the tutor feedback was given by the student marking a questionnaire that contained no method of identification.

It appeared that students' consultations were no less biomedically focussed (in the sense of fewer open ended psychological questions) after the self-directed PBL session compared with their performance in the consultation before it. What this means is not clear as there is no data for comparison from the old course. The second consultation followed the first with the presumed advantage of feedback about the students' negotiating skills and acquired new knowledge.

The students did ask open-ended psychological questions in their consultation after self directed PBL. One would think that the second consultation would be more about management rather than gathering information and asking open-ended psychological questions would help in the negotiating process of patient management. An effective negotiator understands the perspective, needs and aspirations of the other party and therefore understands the nature of the disagreement or conflict. In the medical interview this responsibility falls to the clinician, especially in the management aspect of the consultation. Open psychological questioning is one of the specific elicitation skills needed to find out about the patient's ideas concerning the nature of the problem,

fears, goals, requests and relationship needs (Lipkin 1995). Knowing about this should lead to a management that is shared and this should lead to better compliance if the patients were real. The need to ask such questions was emphasised to the students on the previous day of the course. Open ended psychological questions were used as a measure because previous work in the GPTU benefits students to ask more such questions.

The problems themselves may have been threatening to the student. One consultation was for a man presenting with erectile impotence and the other a woman in her forties whose pregnancy test was positive (a real test done on donated urine from the ante natal clinic). These problems would test the ability of the student to negotiate an outcome satisfactory to the patient.

The implications of finding no differences in open ended questions are unclear. Other benefits or losses of including PBL into CST are speculations. For example, does the communication between the students as they do their PBL segment between the consultations improve other aspects of their communication skills or decrease them? Does acquisition of new knowledge enhance or decrease their communication skills?

The measure of communication skills in this study was only one of many that could have been used. Future

research should include such things as open and closed physical, psychological and social questioning and response to the patient's cues. Measures of negotiating skills would be helpful here like administering Kaplan's Participatory Decision Making Questionnaire to the SP.

Most of the resource materials whether journal articles, videotapes or textbook readings were in a pure biomedical reductionist mode. This also could have influenced the behaviour of the students but they still managed to ask some open ended psychological questions.

It appears that including a segment of self directed PBL into a Communication Skills Training session is acceptable to the students in this study and had no impact on how they rated their tutor. While the students' open-ended psychological questioning appeared not to significantly change in the consulting immediately before and after the PBL the meaning of this remains unclear. Future research is needed to evaluate the impact of Problem Based Learning on Communication Skills Training.

4.4 Evidence based medicine and communication in general practice

There is currently a wave of evidence based medicine sweeping the world and it is making some inroads into general practice. There are three criteria however for evidence based medicine to work (Howitt et al 1999).

Firstly the evidence must be obtained by population studies. Then the practitioner has to identify the patient who may benefit from the treatment (this assumes the practitioner knows about the best practice). A key factor in the implementation is the patient and his/her beliefs. Often patient beliefs like perceived vulnerability, perceived seriousness, seeking to prolong life, accepting death and attitudes to change mean that evidence based medicine is likely to have only limited applicability in general practice as these beliefs may block compliance with the evidence based regimen recommended by the general practitioner.

4.5 Medical schools and general practice research

Howie (1996) has identified a credibility gap in general practice research from medical schools. During 1996, 1000 examples of British academic general practice research centred written reports were reviewed. Many of them were published in the British Journal of General Practice but this Journal has received persistent criticism from its readers about accessibility, interest and relevance of its contents. Howie feels there should be a greater determination to pursue projects and programmes of enquiry that unite researcher and researched by which he means general practice research should benefit everyday general practice (Howie 1996, Personal Communication). Any research that helps

students or doctors to learn how to be an effective communicating general practitioner hopefully fulfils Howie's requirements. The intellectually important parts of Howie's patient care model are consulting skills and these are particularly resistant to quantification.

4.6 Patient-doctor negotiation

The idea of patient-doctor negotiation is not a new one.

In the 1950's Szasz and Hollender noted that negotiation can help patients help themselves (Szasz et al 1956), and this has since been described as a voluntary alliance (Siegler 1981, Balint et al 1996).

This voluntary alliance can help patients and doctors in clarifying role ambiguities, in resolving differences of interest and in reaching shared decisions (Charles et al 1997) which help both themselves (Quill 1983) and society (Balint et al 1996). Balint et al writing in an American environment feel that the first duty of the physician is to continue to act as the patient's advocate for appropriate care against all comers. At the same time, the physician as teacher must educate the patient as to what is appropriate care so that the patient can also be responsible and fully informed in making autonomous decisions. They believe that this is the "basis for alliance of patients and physicians in society that can effectively ensure the preservation of the essential basics of the therapeutic relationship and influence the

evolution of our health care system so that it can indeed provide optimum care for all citizens while being responsible in the use of social resources."

Concordance of belief between doctor and patient has been positively associated with outcomes such as adherence to treatment, (Donovan et al 1992, Homedes 1991), problem resolution as judged by patients (Starfield et al 1979) and doctors (Starfield et al 1981) and doctor recognition of problems at follow up (Starfield et al 1979).

Buetow (1998) believes that the need is not merely for an agreement but for an integrated strategy that reconciles the main interests of the patient and doctor, and other groups such as family and community. He has four strategies of negotiation when non concordance occurs in a patient centred consultation. The best is "bridging" because it does not necessitate a compromise that leaves both patient and doctor unsatisfied.

The example given is: "a 33 year old professional woman, a primipara, attends for an antenatal visit at 36 weeks' gestation. She requests a vaginal delivery and states her preference for a 'natural' birth but her doctor favours a caesarean section because the foetus is presenting by the breech". Here bridging could involve a trial of labour if the woman delivers before 40 weeks gestation.

Another negotiating tactic is "trading", or compensation for costs (including non financial costs). While this can also satisfy the needs of each party it requires one to "sacrifice one's own needs in the area under discussion in return for full satisfaction in some other area". Here the doctor could agree to a trial of labour but suggests an epidural anaesthetic because it would be useful for a normal vaginal breech delivery and also in the event of a caesarean section becoming necessary.

A third approach is "log rolling" where patient and doctor reach a compromise which "only partly satisfies one or both but which can be developed and monitored over time". Here the doctor and the expectant mother might agree to a caesarean section under epidural anaesthesia if the baby has not emerged spontaneously.

"Damage limitation" is the least desirable strategy. It means prescribing a Benzodiazepine to a sleepless patient but not to do it again.

4.7 Undergraduate Communication Skills Training

There are many such training schemes but a refined example is found at Maastricht. In 1974 a new medical faculty was founded in Maastricht, The Netherlands. It adopted the problem based learning approach of the University of McMaster, Canada. Learning is guided by problems and in small groups. The subject matter is theme oriented and there is the possibility to apply

clinical skills with ample time and facilities for self study. The teachers are given credits for block or clinical co-ordination in hours and promotion is based on demonstrated teaching skill. Assessment is by central examination and examinations are for educational feedback, not decision making.

In response to a faculty wish that students preparing for their encounters with patients should not be dependent on the hospital population present at a certain time, and that clinical competence should be an integral part of the curriculum, the Skillslab was established in 1975.

Four skills are addressed. Physical examination (50% of training), therapeutic skills (15%), laboratory skills (15%) and communication skills (20%). Much use of dummies and models is made.

In communication skills training the quality of the doctor-patient interaction is the topic of training. Topics include how to ask open ended questions and how to explore the reasons for encounter. As students go through their course the complexity of skills, practising situations and integrating skill with knowledge increases.

Interviews with simulated patients are carried out once every three weeks throughout the course. In first year

limited knowledge demands simulated patients with one complaint and the emphasis is on how the problem affects the patient's life style. Several students meet with these patients and compare information. In second year the interview with simulated patients represents an area related to the block they are working in eg examination of the abdomen. Physical examination is gradually worked into the encounter. These simulated patient encounters take place without the presence of a teacher and are recorded on videotape. Immediately after the encounter the simulated patient provides feedback (re empathy, congruence and trust).

The videotapes are watched by the students of one group of eight. They write down remarks and comments with the tape. One week later these remarks and comments are evaluated by the same group with a general practitioner (in the second year) and a behavioural scientist (in the third and fourth year). In fifth and sixth year the students take part in clinical rotations (Van Dalen 1989). It has been observed in the final two years of the course (the clinical years) greater medical knowledge seems to inhibit the good results of CST in the earlier years (Van Dalen 1991).

Pascoe et al (1976), proposed a list of characteristics needed for teaching and learning interpersonal skills and this was modified by Riccardi et al (1983). Van Dalen et

al (1989), have applied these criteria to the CST programme at Maastricht. The following characteristics are given:

1. Isolate the essential elements of the communication skill, define them and teach them systematically (At Maastricht the basic skills of CST are taught in first and second year)
2. Let students practice the skills in either simulated or actual interpersonal situations (in second and fourth year each student has 30 simulated patients and observes their peers' situations. Excursions to health practitioners to allow CST practice occurs also. In fifth and sixth year real patients are interviewed and examined)
3. Give immediate descriptive (not normative) feedback on student performance, including self assessment, patient and peer feedback (At Maastricht feedback for role playing and simulated patient contact is guided by the Maastricht history-taking and advice checklist (Crijnen et al 1985, Kraan et al 1987).
4. Give training in small groups. At Maastricht the number in a group ranges from 8-10.
5. Utilise the dynamics of the group process to promote both support and stimulation for learning. CST

groups remained unchanged for 12 months then new groups are formed and a new teacher obtained.

6. Provide for repetition, reinforcement and ongoing assessment as integral parts of the training programme. Evaluation and feedback is part of Maastricht training and because of the large number of simulated patient contacts opportunities exist for repetition.
7. Carry out assessment by direct observation of students in action and let students know what specific criterion will be used. Students role playing and performances with simulated patients are videotaped and reviewed. Videotapes can be dissected into separate elementary skills, eg turning off the sound can enable non-verbal communication to be studied. The Maastricht history taking and advice checklist has identified specific criteria to be used.

4.8 The role of Standardised Patients

At the Skillslab heavy use is made of simulated patients. 130 simulated patients are used and are paid FL 17 (A\$10) per hour. There are 17 full-time equivalents of staff and 26 training rooms.

Van Dalen et al has listed items that should be included in the script for simulated patients (Van Dalen et al

1991). He believes the script should include the following elements:

1. Biographical data which includes age, gender, profession, marital status and social circumstances.
2. Starting position: Which doctor does the patient visit and under what circumstances? For example, your former physician has retired and a young female physician has taken over his practice. You do not know anything about her, but she has the information your former physician had about you (your medical history).
3. Main complaint: The reason for visiting the doctor. This can either be told at the beginning but it is possible that the doctor does not get to the bottom of it without persistently asking a number of questions.
4. Spontaneous information: This is information that should be given to all students/trainees in every simulated patient contact. This information is given bit by bit in the course of the interview.
5. Non-spontaneous information: This includes the rest of the essential information necessary to understand the patient's complaint. It is information given to the student/trainee as a "reward" for attending to the patient. The way in which the simulated patient

gives non-spontaneous information can range from a clear and complete answer to a vague answer or no reply at all to the student's first question. Open questions are meant to stay within the patient's frame of reference, with which the simulated patient must naturally be familiar.

6. The psychological meaning of the patients complaint: Everything the patient thought about his complaint - fears, wishes, expectations.
7. Expectations: What does the simulated patient expect from the doctor? Reassurance? An extensive physical examination? Moral support? or a combination of these?
8. Reasons for visiting: What induced the patient to visit the doctor.
9. Interpretation of the role: All the necessary remarks about the way in which the simulated patient must perform the role eg way of entering the room, non-verbal signs, clothing.
10. Physical symptoms: The simulated patient must be informed about the nature of these symptoms - how painful the pressure on the abdomen is in a case of appendicitis?
11. Physical examination: What examination is required and what is not allowed.

12. Data patient share: Past history and biographical data must be on a patient chart for the student/trainee and the simulated patient must know what is on this chart.
13. The educational objectives of a simulation should be specified eg to cope with a distressed, worried patient and explained to the simulated patient. It should also be made clear how the information is given by the simulated patient during the simulation eg verbalising the complaint, expressing nervousness, non-verbally, implicitly and expressing expectations, and concealing symptoms and complaints.

Van Dalen trains six simulated patients who play the same role together and opportunity is given to practice the role. The trainer can test the simulated patient's improvisation abilities with unexpected questions and by bringing up subjects that received minimal attention in the script. Then simulated patients are trained to give descriptive non-threatening feedback with a balance between positive and negative feedback.

Assessment in the Skillslab is done according to the OSCE's (Observed Subjective Clinical Examinations) which were introduced in 1975 by Harden et al (1975) and require students to rotate around a series of stations. They are given various tasks which are marked according to a re-arranged strategy. At Maastricht great care is

taken to test observable behaviour and a revised version of the Maastricht history taking and advice checklist (MAAS-R) is used to assess medical interviewing skills. MAAS-R includes basic interviewing skills (exploring reason for encounter, structuring the consultation, exchanging reciprocity by inviting reaction to the doctor's statement, exploring and reflecting emotions and giving proper summaries and avoiding jargon and multiple questions) and medical content. Van Thiel et al (1991), conclude in assessment reliability of MAAS-R that generalisability analysis results considering the influence of doctors, raters and cases are encouraging. Reliability improves considerably if assessment is restricted to basic interviewing skills. Using a different rater for each case, basic skills had better feasibility and reliability and a testing time of two hours which was much better than including medical content and scoring the total MAAS-R.

In analysing performance-based tests with standardized patients Van der Vleuten et al (1990), conclude that intercase reliability is a far greater problem than inter-rater reliability. In all studies reviewed, it was consistently found that performance of an examinee on one case is a poor predictor for performance on another case. This has been termed the case-specificity problem. Case variability has been shown to be important in assessing a doctor's patient centredness. Winefield et al (1995)

have shown significant differences in the doctors' patient centredness when consultations were classified as psychosocial, complex and straight forward with the highest patient centredness reserved for psychosocial consultations. While doctors were significantly more satisfied with short consultations, patients' satisfaction did not differ significantly by type of consultation. However patient satisfaction was positively related to the doctor's patient centredness in psychosocial consultations.

This has consequences for medical education when teaching communication skills. The cases on which they consult and are assessed should ideally be similar and reflecting a common theme. All our standardised patients at the Modbury General Practice Teaching Unit present with chronic illness. We know that successful outcomes of consultations with patients who suffer from diabetes or hypertension are linked to more information seeking by the patient, more patient control, more patient involvement and more emotional exchange in the initial visit (Kaplan et al 1989). Achieving such goals in a consultation would require the psychosocial aspects to be discussed if only to identify the patient's ideas, thoughts and expectations (Pendleton et al 1990). Psychosocial consultations would include chronic illness management with its Szasz and Hollender model of mutual

participation (1956) which advocates ideas of power sharing, mutual interdependency and mutual satisfaction.

Simulated patients have been predominantly used for teaching and evaluating skills in history taking and physical examination. Barrows (Barrows and Abrahamson 1964, Barrows 1971) has defined the simulated patient as:

"A person who has been trained to completely simulate a patient or any aspect of a patient's illness, depending on educational need. A simulated patient can reproduce faithfully the physiological, emotional, historical and physical manifestations of a patient on observation, interview and examination".

Newble (1979), states that simulated patients are more readily available, can be scheduled, can overcome certain risk problems, can play ethically and medically unacceptable problems and can be trained to give feedback to the student.

Little research has been done on standardised patients themselves. Professional actors who had simulated a variety of patient disorders for educational purposes were shown to be at no greater risk of physical and/or emotional distress than actors who had not role-played as an SP (Naftulin et al 1975). SPs may have developed a more balanced

view of health professionals, developing better communication skills and becoming more tolerant of others (Woodward et al 1995). However a study of SPs in Alabama (Rubin et al 1998) has shown SPs health to be worse one year after participating in objective structured clinical examinations (OSCEs)

The objective structured clinical examination has now been applied to several disciplines and has been described in general practice (Hall-Turner 1983). Its advantages and disadvantages have been summarised by Fabb et al (1989).

The Department of General Practice at Edinburgh has an examination circuit of 16 stations of five minute duration each. They test 'knowledge', 'interpretation' and 'problem solving' from the cognitive domain, 'communication' from the psychomotor domain and 'attitudes' from the affective domain. There are two tests of communication skills with simulated patients. One involves observing history taking and the other giving advice (Thomson 1987). However the inter examination correlations in communication fell below the minimum standard recommended by Ebel (1979).

Thomson feels from the Edinburgh experience that the ability to demonstrate communication skills is dependent not only on the possession of that skill (process

dependent) but also on the candidates knowledge of the illness concerned (content dependent). Candidates were 4th and 5th year medical students and general practice trainees. Thomson agrees with the statement that certain aspects of communication skills deteriorate during undergraduate education (Sanson-Fisher et al 1980) but feels they substantially improve through postgraduate experience.

Van der Vleuten and Swanson (1990), from Maastricht have listed eight suggestions for improved use of simulated patient bases tests in OSCE's. They are:

1. Scores on short simulated patient based tests are not meaningful, because they are not sufficiently reproducible.
2. There is no need to have more than one rater per station. If extra raters are available, the number of stations should be increased instead.
3. Non-physicians can also be used as raters given appropriate training; often they are more readily available and less expensive.
4. Simulated patient based tests should emphasise assessment of hands-on skills, such as history taking, counselling etc.

5. Selection of station formats follows from the hands on clinical skills to be assessed.
6. Relatively little measurement error is introduced by training multiple simulated patients.

In a study from the George Washington School of Medicine (Sasson et al 1999) senior medical students who had served as volunteer SPs for fourth year students were assessed to see if they had improved in their own interpersonal communication skills. Compared with their inexperienced peers, senior medical students with prior SP experience consistently demonstrated superior scores when their own communication skills were tested in a similar manner. The United States Medical Licensing Examinations aims to incorporate SP clinical examinations, in response, medical schools will use more SP examinations in their own curricula. These examinations are expensive if professional standardised patients are used and the authors of the article feel that an SP program using senior students will prove an attractive alternative. Such programs may have the added advantage of making better communicators of senior medical student teachers as well as the students they teach.

In assessment of students SP's opinions may be important but sometimes these opinions clash with those of academic general practitioners (Cooper et al 1998).

How valid is the use of simulated patients? Does competence and performance make a difference? A Dutch study (Pieters et al 1994) compared general practice trainees' performance with SPs and selected practice patients. Interpersonal skills were assessed on the same level for trainees for both types of patient. The predictive rate of an inadequate rating in communication skills was high. The assessment of consultation behaviour in a general practice setting with simulated patients reflects well with trainees who perform badly with true practice cases. Therefore simulated patients can be useful for feedback. The practical aspects of using standardised patients are described in the Appendix.

When medical schools will not pay SPs, volunteers need to be sought. What influences people to volunteer as an SP? The following study attempts to answer this:

STUDY IV

4.9 A comparison of Volunteer Standardised Patients and Hospital Volunteers - What motivates them?

Standardised patients are now used commonly in Medical Schools for the teaching and evaluation of history taking, interview skills, physical examination skills, patient examination skills, problem based learning,

patient counselling and interpersonal skills and physician/patient relationships. They are also useful for teaching specific skills like dealing with difficult or sensitive issues. A standardised patient (SP) is a performer trained to represent a real case for teaching and evaluation (Barrows 1971).

It takes considerable time and effort to create and maintain a group of standardised patients. Apart from the costs of training and the maintenance of rooms and cameras and the human cost of supervising, there are SP financial costs. The medical school with the largest number of standardised patients in the world belongs to the University of Limburg in Holland (Zuidweg 1986). In the late 1980's SPs at the Medical School in Limburg were paid the equivalent of A\$10 an hour for their services (Van Dalen et al 1991). About the same time in Southern California SPs were paid A\$20 and A\$25 per hour depending on the location of the medical school and other factors (Abrahamson et al 1992). A study of senior medical students from the University of Minnesota Medical School found that students were motivated to participate as SPs and examiners for a second year OSCE exam for several reasons. These were the money they were paid, an interest in medical education and improving clinical evaluation as well as the perception that it would be fun and interesting (Feickert et al 1992).

The current educational climate supports the use of SPs but the realities of large medical school classes limit their use, as SPs work best in a small group learning environment. Also limited faculty resources inhibit their use (Nieman et al 1987). When medical schools do not provide funding for payment of SPs, or give the use of them a low priority, there is a need to decide whether to use them at all or to call for volunteers.

This study aimed to gain understanding of the motivations and needs of SPs. The Volunteer Functions Inventory is a questionnaire that has been trialed in the United States and in that process a diversity of motivations of volunteers has been demonstrated (Clary et al 1998). People have needs and motives which are important to them and volunteer tasks do or do not afford opportunities to fulfil these needs and motives. If these needs are not met then volunteers will cease their helpfulness to whatever organisation they have nominated to work in.

Even if rates of volunteering decline with age however, substantial numbers of the elderly, even among the old-old (75+) and the oldest-old (85+) still continue to volunteer. About an eighth of Americans over the age of 80 are volunteers (Fischer 1991). In Australia a survey of volunteers aged over 65 has shown that 48% of them volunteered because they wanted to help others/community and 29% because they wanted to do something worthwhile.

Just over 1 in 10 reported as their activity teaching and instruction (Australian Bureau of Statistics 1995).

In Australia, as in other Western countries, policy-makers are turning their attention to older people, particularly the early retired, as a rich potential source of volunteers. Nothing is known about the motivation which drives people in Australia to volunteer to become, in particular, Standardised Patients. This study attempts to find out what motivates the Standardised Patients to volunteer at the General Practice Teaching Unit at Modbury Hospital in South Australia.

Aim

The aim of this study is to compare the perceived motivations of a group of volunteer standardised patients with a group of volunteers working in other roles in the same hospital.

Method

In 1999, 23 volunteer standardised patients filled out the Volunteer Function Inventory at the General Practice Teaching Unit and placed the completed questionnaires in a box. Similarly other hospital volunteers filled out the same questionnaire at the Unit. Twenty one of the 23 volunteer SPs were then matched by age groups (30 - 49,

50 - 69, 70 - 89) and retirement status to other (non SP) hospital volunteers.

The Volunteer Functions Inventory was used for measuring 6 functions. These were social function, career benefits, values benefits, enhancement benefits, protective benefits and understanding function (Table 1). Each function had 3 items for the respondent to reply to and this was done on a 7 point Likert scale. The volunteers were asked "In motivating you in your volunteer work how important to you are the following ideas?" The items ranged from 1 = not important to 7 = extremely important. The response to the 18 statements were analysed for both groups. Responses for the 18 questions were scored by the number the respondents chose on the Likert scale. A paired t test was used to compare the mean scores of each statement for each case and control. Social class was determined according to the Australian Standard Classification of Occupations (Australian Bureau of Statistics 1995).

Results

All of the standardised patients (23) completed the questionnaire. It was possible to match 21 SP volunteers with the other volunteers. Forty seven percent (10) of the SPs were female compared with 63 percent (17) of the control group (Chi square with correction for continuity 6.64 df 1 $p < 0.01$). There were 16 current or past

professionals, associate professionals and trades persons (76%) among the SP group compared with 5 (24%) in the control group (Chi square with correction for continuity 4.45 df 1 $p < 0.05$). There were 16 (76%) of those who were retired in both groups.

The mean scores for each statement for the Functions Inventory for SP and control are shown in Table 1. There was a significantly lower mean score in the SP group for the importance of the statement in the Social Function area "People close to me learned that I do volunteer work" and this group had significantly lower mean scores for the importance of the 3 statements in the Enhancement Benefits area. These were "My self-esteem was enhanced"; "I felt important" and "I felt better about myself". As well the same group had lower mean scores for the importance of all of the statements in the Protective Benefits area. These were "I was able to escape some of my troubles"; "I was able to work through some of my own personal problems" and "I felt less lonely". In the Understanding Function area the same group reported a lesser importance to the statements "I learned how to deal with a greater variety of people" and "I was able to explore my own personal strengths".

Table 1

RATED IMPORTANCE OF MOTIVATIONS TO VOLUNTEER				
	FUNCTIONS INVENTORY SCORE			
		SP	Control	
SOCIAL FUNCTION				
People close to me learned that I do volunteer work	Mean SD	2.57 2.13	4.24 2.34	p < 0.05
People that I know best saw that I volunteered	Mean SD	2.57 1.96	3.43 2.27	NS
My friends found out that I did volunteer work	Mean SD	2.81 1.94	3.67 2.10	NS
CAREER BENEFITS				
I made new contacts that might help my business or career	Mean SD	1.90 1.51	1.66 1.35	NS
I was able to explore possible career options	Mean SD	2.05 1.53	1.62 1.16	NS
I was able to add important experience to my resume	Mean SD	2.86 2.08	2.24 2.17	NS
VALUES BENEFITS				
I am genuinely concerned about the people who were helped	Mean SD	5.95 1.20	6.43 1.08	NS
I did something for a cause I believed in	Mean SD	6.05 1.12	6.43 1.08	NS
I performed a service for an important group	Mean SD	6.38 0.74	6.05 1.72	NS
ENHANCEMENT BENEFITS				
My self esteem was enhanced	Mean SD	3.05 2.11	4.86 2.13	p < 0.05
I felt important	Mean SD	2.67 1.98	3.74 2.24	p < 0.05
I felt better about myself	Mean SD	3.90 1.89	5.38 1.72	p < 0.05
PROTECTIVE BENEFITS				
I was able to escape some of my troubles	Mean SD	2.38 1.91	4.10 2.36	p < 0.05
I was able to work through some of my own personal problems	Mean SD	2.91 2.12	4.05 1.96	p < 0.05
I felt less lonely	Mean SD	2.47 1.97	4.10 2.32	p < 0.05
UNDERSTANDING FUNCTION				
I learned more about the cause for which I worked	Mean SD	5.10 2.05	5.86 1.42	NS
I learned how to deal with a greater variety of people	Mean SD	4.33 2.27	5.48 1.66	p < 0.05
I was able to explore my own personal strengths	Mean SD	3.71 2.22	5.05 1.99	p < 0.05

Discussion

Proper choice of adequate controls is a weakness in this study as the control group was not randomly selected from the non SP volunteer group. The control group was made up of those hospital volunteers who volunteered to fill out the Volunteer Inventory. As the hospital did not know how many volunteers they had, the total pool of volunteers was not known.

The highest mean scores of motivation for the SP volunteers were given to the statements "I performed a service for an important group"; and "I did something for a cause I believed in" and "I am genuinely concerned about the people who were helped". However these Values Benefits received similar scores in the control group. It may be that the SP volunteers see themselves as helping a different group. The recruitment of the SP volunteers was achieved by word of mouth and advertising in the local newspaper. The control group was recruited by word of mouth only. The newspaper would have reached a wider pool of people and perhaps the educational theme of the volunteer task was more appealing to the professional, associate professional and trades people than other socioeconomic groups of people. The SP volunteers included engineers a solicitor, accountant, general practitioner, naval officer, social worker, nurse and a teacher.

Warburton et al (1998), has found that Australian volunteers are significantly more likely to come from the higher occupational classes, are less likely to be self employed and are more likely to view their health positively. Why the SP volunteers should be more like this stereotype is hard to assess. As mentioned, our volunteers were advertised for in the local newspaper which is not done by the hospital for their volunteers. Other studies have shown that the possession of a higher degree does not predict the dependability of the impact of a volunteer's work and neither does religion, but it does predict how much of an impact a person is likely to have. (Cnaan et al 1993, Wineberg 1990, Zweigenhaft 1996). We have no data on the impact of SPs on the students by the SP's socioeconomic group.

It seems that the Standardised Patient volunteers had a different set of perceived values to the control group. They appeared to value less the enhancement and protective benefits of volunteering when compared to the control group. In the United States, Cary trialed the Volunteer Functions Inventory on 61 older volunteers (25 men and 36 women) whose mean age was 70. The study was done in a community hospital in Western Central Indiana. The volunteers worked 4.5 hours a week for 12 weeks. The mean score in this study (Cary et al 1998) for Enhancement function was 4.98 (SD 1.22) and for Protective function 3.92 (SD 1.66). These scores were

closer to those of our control group which were Enhancement (4.66 (SD 2.13) and Protection 4.08 (SD 2.19). Our SPs had scores of 3.2 (SD 2.03) for Enhancement and 2.59 (SD 1.98) for Protective. However in our study the number of hours worked per week was not measured.

Our SPs played their health roles in consultations with medical students who were in the early stage of clinical exposure. Most of the SPs were playing their own health story which was about their chronic health problems. As they reported that Enhancement Benefits and Protective Benefits were not as important to them compared with the control group, it may be that our SPs had adjusted well to the impact of their chronic illness and they did not need any enhancement or protective benefits from this volunteering experience. On the other hand the SPs were repeatedly presenting a story in the consultation which was very closely related to their real health problems. It could be argued that they did not expect that this experience would allow them to escape from some of their problems. Also it seemed that overall the SPs did not expect to use the consultation to work through some of their personal problems. It also may be that seeing one new student after another would not make them feel less lonely. As self esteem, feeling important and feeling better about themselves did not seem as important, the SP group may have been less emotionally vulnerable.

Most of the volunteers in both groups were retired. Zweigenhaft et al (1996) in their study of 98 volunteer workers at a community hospital in central North Carolina found that the older volunteers were rated as more effective than the younger volunteers. The older people endorsed items in the survey that were more related to social obligation rather than egoistic behaviour and this finding was similar to that of another study (Gidron 1978). The North Carolina study indicated that older volunteers were more dependable than younger volunteers and this was especially so with volunteers aged between 80 and 90. Also women were found in Zweigenhaft's study to be more dependable and more likely to have a positive impact than men. Our study did not measure dependability issues and this should be an area for future research.

In conclusion this study found that the SP group contained people of, currently or previously, a more professional, associate professional and trades background who seemed to place less importance on the Enhancement and Protection Benefits of volunteering. This group also contained more men than the control group. This may have been due to the recruitment strategy of advertising for their positions in the local press. Apart from this strategy this study does not cast any light on a specific stronger motivation to volunteer in the SP group compared with the control group except perhaps for possessing certain education qualifications. While the

control group was not representative of the hospital volunteers future research should concentrate on any further motivational differences between SP volunteers and other hospital volunteers.

4.10 Assessment of undergraduate CST

There seems to be various ways to assess CST.

To test communication skills along with knowledge and problem solving abilities the University of New Mexico (Kaufman et al 1989) has created an individual process assessment (IPA). It is similar to the modified essay question which is one way to assess content and process (Feletti 1980).

A modified essay question (MEQ) is a question which is preceded by an item of information and students use the data in order to make a clinical decision. There are two traps in constructing such questions. One is to test factual information only and another is to create a situation where the answer to one question determines the answer to the next. The student then gets penalised twice if the first question is wrong (some would argue that in real life that sometimes happens to the patient!).

Another form of student evaluation is used at Southern Illinois University (Sheline 1991). Here students must

pass a number of discrete role playing (and videotaped) problem-solving vignettes in order to qualify for graduation.

Wolf et al (1987) by analysing first year medical students in a controlled study at Michigan Medical School found that according to trigger statement responses and patient scenario responses large group lectures on medical interviewing and communication skills were ineffective. It was felt that acquiring such skills required small groups and a structured learning situation which included opportunities to practice the skills in a non threatening environment which encourages experiment and does not penalise for making mistakes. The use of simulated patients in this context was found to be very valuable.

The most effective measure of outcomes from CST appears to be the assessment of student behaviour in the patient interview. (Wolraich et al 1982, Shepherd et al 1984, Knox et al 1985, Evans 1990). Yelland (1998) has used SPs in the assessment of GP consulting skills in Queensland. They used a scale including comfort, ignoring the problem, poor explanation and feeling rushed, all lumped together. Evans et al (1993) feels that if students are to be able to display appropriate communication skills, three conditions must be fulfilled.

1. Students need to know and understand a minimum of the corpus of knowledge and theory underlying communication exchanges in general and consultation processes in particular.
2. They require a positive attitude towards using these skills in their interactions with patients.
3. They need to be trained in a repertoire of specific communication skills and techniques and be placed in the situation where these can be practised with patients.

Studies suggest that students find it easier to learn how to utilise and develop a wider variety of questions and questioning style; and how to foster clear communication and also how to begin and end a consultation. What seems more difficult for them is facilitation of the interview, empathic responding; exploration of psychosocial issues and maintenance of relevance. (Ivey 1983, Evans et al 1989, Evans 1990).

Evans (1993) feels that medical students in their preclinical years, when patient contact is limited or non-existent may not be able to integrate CST into their repertoire of interview behaviours in a maximally effective way.

Evans et al (1989) have also found that trained fourth year medical students in Melbourne can be trained to improve their interviewing behaviour in their history-

taking consultations with patients but despite this there are few corresponding changes in psychological test scores of non verbal sensitivity and empathy. An interviewing skills course for first year medical students showed an increase in these skills. By the time they reached fourth year the group did not maintain its scores on these skills and a significant decline in empathy skills was noted. If medical students are to graduate with their original empathy intact, a follow up course in fourth year is indicated (Craig 1992).

Increasingly, courses in communication skills are being incorporated into medical training. Sanson Fisher et al (1997) provides seven criteria by which to select clinical issues which are appropriate foci for communication skills courses. These are:

1. The issue must be one which is encountered frequently in clinical practice;
2. The issue must be associated with a high burden of illness;
3. There must be evidence that practitioners need to improve skills for dealing with the issue;
4. There must be an intervention, of which communication skills are an integral component, that is demonstratively effective for dealing with the clinical issue;

5. The intervention must represent a cost-effective means of dealing with the issue;
6. The intervention must be acceptable to doctors and be able to be incorporated into routine medical practice.
7. The intervention must be acceptable to patients.

In 1985 the Deans of all 126 United States Medical Schools were asked to provide information on human values courses in their curriculum. Most reported a first and second year (American Medical Academic Years) course sponsored by a clinical or humanities department or by an interdisciplinary team that included clinical faculty members. The most frequently mentioned method was reinforcement or addition of human values emphases during medical clerkships. The process considered to be most important by respondents in achieving this integration was a combination of interactions among faculty members, improvement of human values courses and the support of the Dean. However barriers to such integration were identified. In summary they were:

1. Many faculty members act as if medicine is a hard science and that whatever the humanities might offer is avocational and, therefore extraneous.
2. When institutional commitment to human values teaching lags, thinly staffed programs results. Such

minimally supported programs perpetuate the idea that human values teaching can be done "on the cheap".

3. A small core of faculty members committed to human values education cannot substitute for critical attention on the part of all who serve as role models or offset the example of faculty members who discourage students' exploration of patients' values and emotions.
4. Students' concentration in years one and two on pathophysiology without any training with patients produces medical student clerks who try to graft their knowledge of diseases onto people; when the graft is unsuccessful, the students tend to label the patients as boring or difficult.
5. Many premedical students concentrate on scientific education at the expense of a broad liberal arts preparation that would provide a stronger foundation for human values during medical school.

Most of the teachers of human values in the medical school were from philosophy, general practice or general medicine with a strong practical streak. They were devoted to their patients, good non medical readers, critical observers of their own education and aware of vacuum's in the students education (Bickel 1987).

The biomedical and psychosocial aspects of medicine still tend to be segregated in medical schools and lately the

psychosocial realm is often a casualty of misguided financial cutbacks (Markel et al 1990) or efficiency (Reiser 1988).

Family medicine instructors of communications skills in a medical school were found to be rated above psychiatry instructors significantly by medical students in areas like usefulness of role playing sessions, the credibility and realism of videotaping sessions and the recommendation that the course be continued.

A survey of communication skills training in medical schools in the United Kingdom (Hargie et al 1998) has shown a consistent use of video-recorded roleplays with accompanying video playbacks and group discussion. However CST has been shown to be highly varied from University to University and many University staff oppose its existence.

A survey of British medical schools communication skills training has found that most of the training is done in the Departments of General Practice and Psychiatry (Hargie et al 1998). In this survey it was found that those schools that offered more formal tutor training seemed to have a more professional approach overall in relation to detailed student assessments involving video and communication skills tutor. Many of the criticisms from earlier surveys were reported as still pertinent including the lack of standardisation of assessment procedures (Whitehouse 1991) and a general lack of

commitment to student assessment in communication skills training (Fredrikson and Bull 1992).

A review of communication skills training in the United Kingdom's schools of medicine was undertaken in 1998 to assess this form of training and involved a postal survey of 26 United Kingdom schools (Hargie et al 1998). An earlier review (Whitehouse 1991) found that Departments of Psychiatry and General Practice continued to play a major part in teaching CST. There was wide variation in educational objectives and in the curricular time available. In this academic year (1989/90) concern was expressed by Whitehouse (of the Department of General Practice, University of Manchester) that the methods of assessment were poor and so was the integration between departments. Few medical schools in a 1992 review (Frederikson et al 1992) were committed to formal instruction, assessment and evaluation of the subject within the medical school.

The 1998 survey by Hargie et al of the School of Behavioural and Communication Sciences at the University of Ulster, found again considerable variability in assessment. Also there was considerable variability in such areas as course content, timing, duration and assessment. Foremost among the difficulties encountered in implementing CST appeared to be lack of adequate physical resources and suitably trained staff. Future plans were often sketchy and inchoate.

Crisp (1986) feels that in Britain great emphasis is placed on the importance of clinical skills and this is reflected in the priority given to them in the final professional examination, and yet their communication aspects are rarely well defined within the curriculum or directly assessed. Crisp advocates the teaching and assessment of communication skills as a continuous process throughout undergraduate and postgraduate medical education for clinical practice.

While progress has occurred on both sides of the Atlantic with CST in medical schools, it is obvious that problems still exist. In 1991 Novack et al assessed the educational practices, problems and needs in the teaching of medical interviewing and interpersonal skills. Questionnaires were sent to curricular Deans and introductory course leaders in all United States medical schools. Of 130 programs, 114 Deans (88%) and 92 course directors (71%) responded. Since a survey in 1977 almost all medical schools now offered teaching in medical interviewing and interpersonal skills. More Faculty from a greater variety of disciplines were involved in this teaching. A considerable increase since the 1977 survey was seen in the observation and feedback of students' interviews with patients. Also a variety of effective teaching methods were used and these methods included simulated patients and role playing. The majority of

schools addressed students' personal growth through discussion or support groups.

However there were problems. Like British Medical Schools most schools lacked a Faculty development process. About half of the introductory courses on medical interviewing took place within the physical diagnosis courses, often without systematic observation, feedback and evaluation of student skills. Many US medical school programs did not explicitly incorporate certain educational principles into their course designs. Compared with the 1977 review there appeared to be little co-ordination or sequencing of teaching interpersonal skills throughout the curriculum in most medical schools (similar findings occurred in the British survey). Most US Deans identified significant barriers to improving teaching.

Another threat to CST is that Departments of General Practice will be asked not only to teach CST but lately to take on more medical teaching because turn arounds of hospital patients today mean students see less clinical medicine. In 1994 14 out of 28 British medical school departments of general practice were planning to teach community based clinical skills. The problems that emerged for general practice tutors in teaching these clinical skills included insufficient time and resources and poor self esteem (Robinson et al 1994). A crucial need was expressed for good central and peripheral

organisation. It is clear that medical schools with bad organisation will miss out in this future move in medical training. Eight schools were going to introduce problem based learning and cut the factual content of their curricula.

This curriculum change is occurring rapidly and care is needed to ensure that communication skills training doesn't get pushed aside by insensitive curriculum planners.

No evaluation of Gask's model of training has been reported for undergraduates except for a study of 22 final year medical students training in their general practice segment of the Sheffield University course (Usherwood 1993). While significant improvement was reported with more open questions, fewer closed physical questions and more psychosocial questions the study was uncontrolled. This may not be critical as one assumes the teaching model used was not used elsewhere in the final year. While students were paired to control for case specificity so that during the second interview each met the simulated patient who had first been interviewed by the other member of the pair, it meant that overall students were not being assessed on the same simulated patient at either pre or post testing. The teaching in this study consisted of 2 weeks in local general practices and two sessions of linked interview skills teaching. Usherwood reports that even at the end of the

course students still asked on average more closed questions than open questions and most questions were of the check list type. The Sheffield Department of General Practice has been co-operating with the Department of Surgery and Department of Medicine to introduce the teaching model into outpatients for students.

Reiser et al (1984) felt that students compartmentalize their thinking about the goals and techniques of interviewing and do patient-centred interviews on the psychiatric round then biomedical symptom-focussed interviews everywhere else. Engel (1982) felt that patient centredness is unlikely to be accepted while it is advocated only by psychiatrists and psychologists, because of their marginal status within the medical establishment.

Kagan (1979) observed that "students do not 'naturally' discuss with a patient their mutual relationship and the same occurs even when given direct instruction in the skill." Kagan also felt that students fear the time commitment and Putnam et al (1988) felt that interns "expressed great discomfort at allowing patients to talk about their illnesses in their own words because they were afraid patients would bring up emotionally charged issues which they could not handle."

Winefield (1992) feels that it may be an oversimplification to aim only to train doctors to speak differently (eg allow or encourage patients to assume

greater control of the conversation), if their basic skills at cultivating and using the therapeutic relationship remain under developed.

Evaluations of these specialised programs have shown that students given specialised training on communication theory and practice subsequently display significantly improved interpersonal skills in interviews with patients compared with their more traditionally trained counterparts.

Students who are trained show greater warmth and empathy (Alroy et al 1984, Evans et al 1989) and received higher satisfaction from their patients (Evans et al 1992 (a)).

Consumers of health care have been used to analyse simulated general practice consultations. In a New Zealand study consumer and medical examiners showed significant differences in their scoring behaviours. In 7.8% of interviews there was disagreement as to whether medical students should pass these consultations or not (Thomson 1993).

There well may be a danger in the superficial way of treating communication skills training. It is possible that some courses for medical students focus on 'surface skills' and reinforce this with examinations of role plays with a pass/fail outcome.

Skelton and his colleagues comment on this and argue that it makes more sense to focus on the (deep) attitudinal

base of students' work and let that form their skills in the belief that this will materially alter their attitudes. The latter position is counter-intuitive - 'A man', as Hamlet said, 'may smile and smile and be a villain': There seems no point in a communications course whose function is to train people to shake the patient's hand unless there is an understanding of when and why this matters (Skelton et al 1997).

4.11 Socrates and teaching in General Practice

The aim of subjecting the student to four videotaped consultations at the beginning of the undergraduate course at the General Practice Teaching Unit was to create awareness of a learning need (see Appendix: The Curriculum for Fourth Year Teaching at the General Practice Teaching Unit). Neighbour talks of a new Socratic paradigm in his book on general practice vocational training which is relevant to this approach and the questions I ask of the students after consulting.

Socrates' educational paradigm started from an agreed topic, inferred those concepts needing an agreed definition, and then embarked on a three stage process of elenchus (testing by question and answer), aporia (awareness of a learning need), and theatetus (allowing intrinsic wisdom to emerge).

The nub of the issue is perceived particularly acutely by the pupil (especially when behaviour is videotaped) who feels a compelling need to learn in order to preserve self confidence or self respect.

Neighbour mentions that Plato on several occasions mentions Socrates' Daimonion - the still small voice inside him which would warn him when he was talking his way into trouble. Neighbour (1996) feels that Socrates was using his interlocutor's minimal cues - facial expressions, body language, speech patterns - as a form of feedback. When he perceived signs of disagreement or a weakening of rapport he would immediately deal with these more pressing concerns before continuing. These principles of course apply to good consulting.

Neighbour (1996) feels that Socrates was convinced that only the collaborative format of here-and-now one-to-one cut-and-thrust dialect could lead a particular pupil to the particular insight which on that particular occasion he was ready for. Curiosity expressed at a distance is for peeping Toms; wisdom acquired at a distance is parrot-learning; for two people who are serious about self-enhancement, the encounter is everything.

The two familiar models of general practice teaching are traditional (the locus of educational opportunity resides with the teacher) and quest driven (problem based, self

directed with the locus of educational opportunity residing with the student). Neighbour feels in the Socratic encounter the locus of opportunity is in the relationship between the two. This model he calls apprenticeship the importance of learning in safe insecurity is seen during the apprenticeship.

Neighbour summarises this process of how the inner apprentice learns (Neighbour 1996) and this is how I believe teaching consulting skills with videotape feedback works. First he states that unfamiliar circumstances generate a need for mutative information - information capable of producing lasting and valuable change after fresh circumstances have revealed important competence threatening shortcomings. I have notice many students behaving this way after their first videotaped general practice consultation. This need results in a disquieting state of cognitive dissonance which compels one to resolve and generates a potential energy for learning. This is felt subjectively and is also indicated by behavioural minimal cues detectable by an attuned and perceptive teacher (eg closed body language from the student). 'Kairos' in Greek means the right time for action, the critical moment, an auspicious period when conditions and portents are at their most favourable. The learner's inner apprentice attempts to reduce cognitive dissonance either by discounting the mutative information, or (helped by awareness-raising

questioning, and under conditions of safe insecurity by restructuring the knowledge store, including its beliefs and values, ie learning). Personally I think some teachers don't provide the safe insecurity here and use humiliation or a pass fail judgement which can punish the student and sensitise them not to take future notice of mutative information, or to just do enough to pass and then forget everything.

Neighbour defines the awareness-raising questioning as a style of enquiry designed to elicit as fully and non judgementally as possible a person's immediately available state of knowledge, thoughts, perceptions, beliefs and values, without attempting to criticise or modify them. The purpose of a tutorial is to reach a point of Kairos.

Neighbour then states that repertoire-enhancing learning produces a sense of cognitive resonance which is a term of his own meaning the positive feeling we get after cognitive dissonance has been resolved and successful learning has taken place. A deeper version of this he describes as 'epiphany' - an unusually powerful feeling of cognitive resonance when a particularly far-reaching or deep-going piece of learning has taken place.

Cognitive resonance and in extreme cases, a powerful epiphany also have learner-specific minimal cues. The

legacy of cognitive resonance is an educational expansion space, hierarchically organised, into which the learner grows and develops as the trajectory of apprenticeship unfolds (Neighbour 1996).

Neighbour reflects on cognitive dissonance and comments that inner-directed teaching stands or falls on the ability to spot (in the student or trainee) the physical signs of cognitive dissonance. An ability to recognise cognitive dissonance as it arises in a student is perhaps the single most valuable skill an inner-oriented teacher can develop (Neighbour 1996). These include insecurity, nervousness, fidgeting, restlessness, self-consciousness, awkwardness, embarrassment, hesitancy, evasiveness, guardedness, defensiveness, aggression, hostility, brusqueness, irritation, vocal and/or physical tension, 'avoidance' behaviour - reduced eye contact, physical backing off, day dreaming, loss of concentration, surprise, curiosity, inappropriate humour or laughter, sudden increase or decrease in energy level, unexpected rush of emotion.

In my teaching especially with the first video debriefing of fourth year students all of these symptoms occur with particular frequency of a decrease in energy level, physical tension and insecurity.

Neighbour (1996) also examines value laden phrases not only in students or trainees but also in their teachers. He feels value laden phrases in the small group teaching environment are minimal cues to learning needs. An example is a trainer who says the "student or trainer needs to be spoon fed". He quotes Juvenal's well known paradox here: '*Quis custodiet ipsos custodes?*' Hence value-laden phrases are a trickier learning cue to deal with than the censoring by the student of what is said because of the cognitive dissonance they induce in the teacher. Hence the teacher needs to register his or her cognitive dissonance - for example the teacher may have evoked feelings of antagonism, bewilderment or strong sympathy - and allow it to prompt a re-examination of his own learning needs.

4.12 Conclusion

CST in medical schools has become a greater part of the curriculum but in some medical schools assessment of the students' skills may need improvement. CST will need to integrate with problem based learning more and one study in this chapter hints that integration can occur without diminishing the students' questioning behaviour in the consultation. More studies are needed however.

The role of the standardised patient seems very important in CST. Volunteer SPs may be needed in the future as less funding is available in some countries for medical

schools. More studies are needed to see why people volunteer for the SP role and indeed how to keep them volunteering.

The philosophy of learning underpins good video feedback for students and careful handling of cognitive-dissonance to achieve "Kairos" seems to be the hallmark of a good teacher.

CHAPTER 5**ATTITUDES OF MEDICAL STUDENTS ABOUT ASPECTS OF CST**

In teaching communication skills it is helpful to understand how medical students feel about communication in the consultation. Known attitudes about confidence in communication have been linked to beliefs linked to types of medical career choice. It is important to understand what medical students feel about being videotaped, consulting and how confident they are about how the communication skills training can help them potentially to improve patient care.

5.1 Career choice

It is unclear whether improvements in undergraduate medical students' communication skills extend to all students or just to certain groups and if so what the characteristics of those subgroups are. To make such courses more effective we need to know more about the factors which influence their effect and how individual students' receptiveness to training is mediated by pre-existing attitudes, abilities and other characteristics. What is known is that women students are more skilled and empathetic than men students (Marteau et al 1991). Women students and doctors differ from their male colleagues in both attitudes to patients and their communication skills, tending to hold more positive attitudes to giving patients information and showing more empathetic

behaviour in consultations (Heins et al 1979, Bean et al 1982, Wasserman et al 1984, Weisman et al 1985). What is not known is that influence of women students on men students during communication skills training.

Personality profiles of students at Medical School entry have been found to be accurate predictors for specialty choice in the case of paediatrics, surgery, obstetrics/gynaecology and psychiatry (Zedlow et al 1991), but no specific personality type was found for general practice.

A study of general practitioners twenty-five years after graduation found burnout correlated with the finding of low self esteem, feelings of inadequacy, dysphoria and excessive worry at entrance to medical school (McCranie et al 1988). This does not mean that all general practitioners had low esteem on Medical School entry however.

Career choice may be a factor in acquiring communication skills. Marteau et al (1991), found that students who perceive communication skills as less relevant to medicine and were confident but not more competent at communicating effectively were more likely to prefer a career in hospital medicine or surgery. There are several possible interpretations of these results (Marteau et al 1991).

First that students who are generally more confident choose the career option of hospital medicine. Second, that students select the career option that matches their value system: students who perceive communication skills as most relevant to medicine choose general practice; those who see it as less relevant choose hospital medicine, where such skills are traditionally less valued. If the latter explanation is correct, one way of breaking down the assumption that good communication skills are not relevant to hospital medicine would be for hospital doctors to be involved in communication skills training. In many medical schools communication skills are taught by general practitioners and psychologists, thereby re-inforcing a view that communication skills are critical to general practice but perhaps not to other branches of medicine. Marteau also found that students' judgements of their ability to communicate effectively were poor. Where confidence and skill were related, greater confidence was associated with poorer skill in verbal and non-verbal facilitation and the ability to pick up verbal and non-verbal leads from the patient. There are several possible explanations for this finding. First, students may perceive the ability to communicate effectively as a skill inherent in all those with good verbal skills, and hence fail to judge their own skills using criteria of the sort adopted by teachers of communication skills.

Alternatively, students may adopt similar criteria to those used by teachers, but lack sufficient feedback to be able to judge their skills accurately. In explaining the negative association between confidence and verbal and non-verbal facilitation and picking up verbal and non verbal leads from patients, further explanation is required. It is possible that students who are insensitive to patients' communications are similarly insensitive to their own abilities. The inability to judge communication skills accurately is likely to serve as a barrier to improving skills, as those with poorer skills will not have the motivation to participate or learn from teaching of these skills. It is possible that the benefits from teaching may be improved if students were given detailed, video feedback on their skills at the outset.

It may be worth asking students how confident they are at assessing their own communication skills accurately before and after training.

Several factors have been found to influence medical students career choices. They include sex, parental occupation and social background. Also personality attributes and attitudes, commitment to family practice by the medical school, curriculum and size of the program; pay prestige and promotion; working conditions

and intrinsic speciality differences (Egerton 1979, Beck et al 1977, Mitchell 1975).

Some longitudinal surveys have shown a 70% consistency rate in career choice for specialities (Glasser et al 1982). A difference has been demonstrated between men and women with internal medicine and surgery being more popular among men students and obstetrics and gynaecology and primary care among women students (McGrath et al 1977; Zimmy et al 1982, Mira et al 1991, Kruijthof et al 1992).

It has also been shown that significantly more women prefer to practise as part-timers (Jarallah et al 1994). When medical students are exposed to family practice residents and teachers or a special family practice curriculum they significantly choose family medicine at a higher rate. (Brearley et al 1982, Harris et al 1982).

Personal social values of medical students are important in career choice (Martini et al 1994). Medical school graduates entering residencies in the United States in the generalist specialities rated factors relating to helping others and social responsibility as influencing their career choice more than did students entering other specialties (Kassebaum, Szenas 1994).

Several studies have shown student's attitudes towards family practice. Those interested in family practice needed more affiliation, were less materialistic and were

among the least aggressive (Collins et al 1975). They preferred to treat holistically (Askew et al 1978) and wanted to help people as well as considering psychosocial aspects of the patients' problems. This latter attribute was more obvious than in students who selected non primary care specialities (Burkett et al 1982).

They want a personal relationship with patients, to treat all the family and provide cradle to the grave care (Stephens 1982). They prefer a career with few manual skills and to treat a wide range of illness. Some of the areas chosen by medical students as influencing a career choice in general practice also have been shown to provide professional satisfaction for general practitioners.

This includes the doctor-patient relationship and clinical competence. Communication skills are useless if the doctor-patient relationship is bad. A doctor who acts in an unfriendly manner, is distant, shows no warmth, concern or interest, is unapproachable and impersonable and who shows disagreement, formality and rejection will be interfering with effective patient communication and encourage patient non adherence to treatment (Becker et al 1980).

Plenty of remuneration has been shown as a variable in choosing career in an American study (Shulkin 1989) but not in a Saudi Arabian study (Jarallah et al 1994).

The type of curriculum at the medical school may influence the choice of career of medical students. Between 1979 and 1993 the University of New Mexico's school of medicine had two tracks for the first two years of medical school: a conventional track and the primary care curriculum (PCC), a community-oriented, problem-based track. In 1990 a survey was conducted of the 140 graduates from the first four classes (1983-1986) who had completed their postgraduate training. The PCC graduates were much more likely to work in areas that were geographically medically underserved and practice in publicly funded health care settings as well as care for non-paying patients. Also the PCC graduates more frequently identified patient problems and curiosity as providing motivation for their learning (Mennin et al 1996).

Students may be poor judges of their own communication skills. Gruppen et al (1997) found that a group of fourth year medical students gave themselves higher ratings than those of the standardised patients they were interviewing. This falls in line with another study which shows that student self assessment in interpreting ECGs or Xrays is more accurate than self-assessment in familiar clinical tasks (Fitzgerald et al 1995).

Marteau et al believe that more will be achieved when there is more interest, concern and active reinforcement

from University Departments other than those doing the teaching, especially those that are prestigious in the students' eyes.

Practicing empathy skills in small groups in which actual interviews were conducted seem effective in helping medical students acquire these skills. Large group lectures have been shown to be ineffective.

Barbee et al (1970) did a small follow up study on ten medical students and their interviewing skills. The period of most rapid improvement in interviewing skills occurred during initial training and little change occurred between the junior and senior years. Interview performance correlated better with future clinical performance than did the preclinical academic record.

In the pre clinical interviewing skills course at St George's Hospital, London (Kendrik 1993) students were asked to identify examples of specific interviewing behaviours in video taped general practice consultations, and to judge whether the behaviours were helpful or unhelpful in eliciting relevant information from the patient. Students who had been given experience in interviewing patients in small groups led by general practitioners identified significantly more helpful and unhelpful interviewing behaviour in the taped consultations than students who had not received the

small group teaching. It has been suggested that during the pre clinical years medical students are optimally receptive to teaching which aims to foster positive attitudes towards the value of communication and patient perspectives (De Groot 1987, Helfer 1970). De Groot argues that once a student has entered clinical training, he or she will be most concerned with appearing technically competent in the eyes of both patients and clinical tutors and that any exploration of patients' perspectives will threaten his or her ability to accomplish this. Thus students might be best able to gain understanding of patient perspectives in the pre clinical years whilst they are free of these competing pressures.

Even when students are in clinical settings with patients, as in an introduction to clinical medicine course and the clerkship year, inquiry skills are not encouraged (Barrows 1990). The students are usually trained to perform memorised standard question routines (review of systems, family history, past history etc) instead of practising the more difficult skill of problem-related inquiry (Rimoldi 1988).

Applying interview techniques by interns implies loss of control by the intern because exploration of a patient's problem needs following whereas leading implies dominance. Light (1979) describes medical students who

keep the patient ignorant so they can gain control at the expense of the patient's uncertainty. As students progress through the medical school they acquire more knowledge and experience and they feel more competent about managing illness compared with the patient. This makes them feel more powerful and the medical institutional system supports this (eg being allowed to wear a white coat). Hence psychosocial issues in consulting become subservient to the biomedical doctor centred model.

Other authors have suggested that students' views of the value of communication differ according to their orientation towards either the humanitarian or the technical scientific aspects of medicine. Marteau et al (1991) found that students who expressed a preference for a career in the surgical specialties also perceived communication skills as less relevant to medicine.

In eliciting information about communication skills informants' lies and evasions may result from either ulterior motives, usually directed at a person or group other than the researcher, or a desire to please the researcher (Whyte 1982). In desiring to please, an interviewee usually operates with a model of behaviour in mind (eg good communication is needed in medical consultations). Van Maanen (1979) notes that conscious deception may occur to cover the individual's "hidden

failings" if disclosed. This could possibly be knowing one is a poor communicator.

Medical students who were placed in a rural practice environment for 9 months in the third year of their course in Minnesota showed they had better communication skills than city students but no differences academically (Verby, 1987).

There are hardly any studies that have evaluated subject background and performance in actual practice. Students with a strong subject background in both science and humanities are far more likely to complete the Newcastle (NSW) medical degree than students who have subject strength in science alone. This also predicts better annual ratings in their internship. This may not be surprising since a large component of medical practice requires good communication skills.

There was, in the Newcastle experience, no difference in internship ratings between those who scored highly at interview or on psychometric testing and those with lower scores. Nor was there a difference with older students (Rolfe et al 1995).

First year medical students from Nebraska were significantly higher than a national sample of college students in the personality traits of succour, nurturing

and heterosexuality. They were lower than the national sample in the traits of order, exhibition, dominance and abasement (Martini et al 1994). Personality according to Thorson et al (1991), is not a good predictor of either attitudes towards old people or attitudes toward death and dying.

STUDY V

5.2 Student perceptions about communication skills and choosing a medical career in general practice

Little is known as to where students' perceptions of confidence in their own communication skills fits in with making a medical career choice. At the Modbury General Practice Teaching Unit the opportunity was taken to ask students what their choice of future career would be and what they thought of some values known to be linked to general practice.

Medical graduates who enter the general specialties, like general practice, general medicine and general surgery tend to rate factors relating to helping others and social responsibility as influencing their career choice more than students entering other specialties, eg orthopaedics, cardiac surgery (Kassebaum et al 1994). When family doctors look back at their personal values when they were students they feel that these were stronger influences than such things as the medical school curriculum in their eventual career choice

(Martini et al 1994). These personal social values may exist even before students enter medical school. A study of students just entering medical school who eventually became primary care doctors has shown them to have more interest in personal and social adjustment rather than an orientation towards academics (Schubot 1996).

Other features which seem to apply to those interested in family practice include a smaller interest in materialism (Bowman et al 1996, Kassler et al 1991, Fincher et al 1994), a need for more affiliation and a less aggressive personality (Askew et al 1978), a wish to deal with the psychosocial aspects of patients' problems (Burkett et al 1982) and a wish to practice family and continuing care (Stephens 1982). Also featured are less interest in prestige (Kassler et al 1991, Bland et al 1995), an interest in providing comprehensive care (Fincher et al 1994, Bland et al 1995), having non-physician parents (Bland et al 1995), wishing to help people rather than promotion into leadership positions (Kassenbaum et al 1995) and a low interest in technology (Osborn 1993).

Demographically in Australia women continue to be poorly represented in the medical specialities. Women medical students choose general practice during all stages of medical training for flexibility of training and working hours (Redman et al 1994).

Little is known as to where students' perceptions of confidence in their own communication skills fits in with making a medical career choice. Marteau et al (1991) found that students who perceive communication skills as less relevant to medicine and who were confident but not more competent at communication, were more likely to prefer a career in hospital medicine or surgery rather than general practice. This paradox needs more explanation and the opportunity was taken to ask students just entering their clinical years what their choice of future career would be and what they thought of some values known to be linked to particular medical careers.

Aim

The aim of this study is to find out how the variables confidence in communication skills and being told by a medical professional that the medical student's communication skills are good, relate to other perceived reasons for medical career choice.

Method

131 fourth year medical students at the University of Adelaide were given a questionnaire about their perceived importance of 20 variables that could be linked to making a career choice in medicine (most of those variables were described in the introduction of this study). The questionnaire was administered just before their general practice training from February to October 1995. The

data was analysed using SPSS for Windows Factor Analysis using principal components analysis (PCA) with varimax rotation and Kaiser normalisation. They were asked to indicate the degree of importance on a Likert scale, ranging from: Not at all important at 1 to Extremely Important at 5, of variables in response to the question: "At present, in choosing your own Medical Career (going into a specialty or general practice), how important do you feel the following factors are?" The variables are shown in Table 1.

Results

131 questionnaires were distributed to all the fourth year students and 130 were returned (99.2% response rate). The sample consisted of 53.1% males and 46.9% females. The mean age of the sample was 22.4 years and 43.1% were born in Australia while 30.8% were born in Malaysia and 26.1% in another country. Sixty per cent were undecided about whether to choose a specialty or general practice, 29.2% chose a specialty and 10.8% chose general practice.

Twenty seven of the 130 respondents (21%) indicated they were not confident about their communication skills.

Of those who stated they were going to specialise 16% indicated they were not confident about their communication skills. For those who were unsure about

wanting to specialise or go into general practice the corresponding value was 22% and for those wanting to go into general practice, 29%. There was however no statistically significant difference between the three groups (Chi square 0.7 df 4 NS).

An exploratory factor analysis (principal components analysis with varimax rotation; SPSS 8.0 for Windows) was used to explore the factor structure of the 20 items from the questionnaire about reasons for career choice among fourth-year medical students. Several models were examined, namely, 7-, 5-, 4-, and 3-factor, in an attempt to find a simple and relatively easy-to-interpret solution. Simple in this context refers to a model in which each or most variables have high loadings on one factor only and low loadings on the remaining factors. As Tabachnick and Fidell (1996) point out, the presence of complex variables, ie variables which load highly on more than one factor, makes "interpretation of factors more ambiguous" (p675). The frequently employed cut-off point of .30 for factor loadings was applied in this study.

The default criterion for factor extraction indicated the presence of seven factors. However, the 7-factor solution contained too many variables loading substantially on 2 or 3 factors, and was thus almost impossible to interpret. Moreover, an inspection of the

scree plot indicated the presence of 3-5 factors only. Both the 5-factor and 4-factor solutions also contained too many complex variables. The 3-factor solution still showed some degree of complexity for some of the variables, but the factors were easier to interpret than the solutions with four and more factors.

Table 2 presents the matrix of factor loadings for the 3-factor solution. As can be seen, the first factor, containing both communication items, could be interpreted as easy and rewarding work. The second factor, could be interpreted as people orientation and the third factor could be interpreted as fit with needs.

Table 1

VARIABLES THAT COULD BE LINKED TO MAKING A CAREER CHOICE IN MEDICINE	
1	Being able to work part time.
2	My age.
3	Preferring to work with patients of one sex or another.
4	My personality.
5	The amount of income I will get.
6	Confidence in communication skills.
7	Opportunity for promotion.
8	Helping people.
9	Working in hospital.
10	My sex.
11	Preferring to work with a specific age group (eg. children).
12	My parents' or partner's encouragement.
13	Being told by a medical professional that my communication skills are good.
14	Working in the community.
15	Using manual skills a lot.
16	Treating patients holistically.
17	Providing care to patients "From cradle to grave".
18	Availability of training places.
19	Working in close contact with peers.
20	Wanting a personal relationship with patients

Table 2

Rotated Component Matrix for the 3-Factor Solution

	Component		
	1	2	3
Factor I: Easy and rewarding work			
Opportunity for promotion	.69	.05	.11
The amount of income I will get	.69	-.21	.12
Being told by a Medical professional that my communication skills are good	.65	.30	.15
My parents' or partner's encouragement	.64	.12	.03
Confidence in communication skills	.60	.38	-.07
Availability of training places	.56	.02	.06
My personality	.43	.16	.02
Working in Hospital	.41	.30	-.05
Factor II: People orientation			
Providing care to patients "From cradle to grave"	.21	.70	.05
Treating patients holistically	.18	.68	-.19
Working in the community	-.09	.64	.15
Helping people	.09	.52	-.24
Working in close contact with peers	.39	.50	.16
Wanting a personal relationship with patients	-.12	.41	.39
Using manual skills a lot	.17	.40	.20
Factor III: Fit with needs			
Preferring to work with a specific age group (e.g., children)	.06	.10	.62
Preferring to work with patients of one sex or another	.31	-.12	.62
Being able to work part time	-.10	.05	.58
My sex	.06	.04	.56
My age	.31	-.14	.46

Discussion

Both the communication items 'confidence in communication skills' and 'being told by a medical professional that my communication skills are good' were present in the first

factor which consisted of mainly easy and rewarding work items. This factor contained no items which are known student beliefs for choosing general practice such as 'providing care to patients from cradle to grave', 'working in the community', 'treating patients holistically' and 'helping people'. The items in the first factor, 'the amount of income I will get', 'opportunity for promotion', at the time of the study 'availability of training places' and 'working in hospital' all suggest student beliefs towards specialising (Bowman et al 1996, Kassler et al 1991, Kassenbaum et al 1995).

These findings about confidence in communication skills are supported by another study which showed that students who were confident about their communication skills chose hospital medicine or surgery (Marteau et al 1991). Marteau also found that these students were less competent at communicating effectively, and these students felt that their communication skills were less relevant to medicine. In the present study these variables were not measured and future studies are needed in this area. There is also concern in the literature that students may be poor judges of their communication skills. Gruppen et al (1997) have found that fourth year medical students gave themselves more marks than standardised patients did for interviewing skills.

The item 'being told by a medical professional that my communication skills are good' was associated with the factor easy and rewarding work only. The absence of this in the people orientation items (general practice items), could possibly be related to students who chose general practice items having less awe of academic teachers (Schubot 1996) who are more likely to be hospital specialists (Bland 1995).

The main finding in this study seems to be that the items confidence in communication skills and being told by a medical professional that the student's communication skills are good covary with items about medicine being an easy and rewarding career, rather than with items about wishing to have close personal relationship with patients. It becomes crucial to do more research to see if perceived confidence is actually linked to competence as many would feel that competence in communication skills is a desirable attribute in a general practitioner. It is as though confidence in one's communication skills is seen as one reason for medicine being easy, rather than as a necessary attribute for developing relationships with patients.

5.3 Medical students and interviewees with a non English speaking background

Preliminary results from medical student interviews with Australians of non English speaking background show that

some interviewees did not understand the significance of confidentiality, interviewees prefer opening questions where the reasons for asking the question are stated previously, interviewees often only respond to the very last element of the interviewer's statement or response, interviewees prefer a slow pace of consultation and silences convey respect in English and Arabic languages. (However Sue (1990), feels it may serve as a regulator in some Asian languages to continue a point or in French, Spanish and Russian it may convey agreement). Interviewees appreciate encouragers like: "I see" so they feel less anxious that they are expressing themselves adequately and also are happier if non verbal and verbal minimal encouragers seem linked naturally.

Medical students felt reluctant to go into personal areas of the interview and many interviewees would have liked to express themselves in these areas (Todisco et al 1994). There is a danger of creating ethnic stereotypes but this can be minimised where the interview includes other demographic variables like age, gender religion etc (Pedersen 1991).

Farnill et al (1997) validated a rating scale of videotaped consultations with medical students and non English speaking interviewees who talked about life in general. The rating scale ranged from low 1 to high 5. Five aspects of communication were measured - structured

inquiry, facilitation of emotional expression (5 items), positivity of response and respect for the client (five items), simple vocabulary and sentence structure (two items), commencing and terminating the interview (two items). The total scale was 19 items (Department of Behavioural Sciences in Medicine, Blackburn Building, University of Sydney).

5.4 Changes in medical students during their course

Many beginning students start their medical education with a sense of commitment, enthusiasm, optimism, altruism and idealism, while graduate doctors are expected to be caring, humanistic, compassionate and dedicated to their patients (Muller 1984). The intervening professionalization process can lead to the very opposite characteristics to those intended: cynicism, dehumanisation, pessimism and deflation (Coombs et al 1979, Muller 1984, Kay 1990).

Wolf et al (1991) reported that higher perceived mistreatment (98% of his sample of medical students reported this and the sources of such mistreatment were in order residents/interns, nurses, clinical teachers and classmates) scores on a mistreatment index were positively related to a perceived increase in cynicism over the course of four years of medical education.

Without specific training, medical students' communication skills seem to decline during medical training. (Preven et al 1986, Sanson Fisher et al 1980, Alroy et al 1984, Helfer 1970, Mumford 1971).

Communication skills may rise and fall during medical students' training. A study of 292 graduates of the University of Connecticut School of Medicine who participated in five clinical skills teaching and assessment programmes during the four years of medical school was reported to show such swings in skills of communication. They were rated on by standardised patients. Results showed that students' development of skills differed, with closure items showing the greatest increase and social history items showing the greatest decline, with an overall initial increase and then a decline in interviewing skills over the four years. The authors Pfeiffer et al (1998) consider these results to be due to the de-emphasis of communication skills during the clinical years and the culture of medicine to which students are exposed during these years.

5.5 Characteristics of medical students

There are familial factors in going to medical school.

A high proportion of medical students (21.2%) are themselves children of medical fathers (McManus 1985). Roath et al (1977), studied new entrants to four medical

schools in Britain and found that the number of parents actually medically qualified was 6.16% in the Cardiff student sample, compared with 18.1% in the Dundee, 9.18% in the Sheffield and 4.55% in the Southampton medical student samples. At the University of Wales 13% of the first degree relatives of the medical student proband group had attended medical school compared with approximately 0.22% of the general population, giving a relative risk of 61 (Huckle et al 1991). Also here medical students are more likely than zoology students to have medically educated relatives.

McManus (1984), found that social class has little bearing on admission to medical school but having a medical parent increased the relative likelihood of acceptance to a medical school 1.73 times (McManus et al 1985). Another important factor was academic achievement and early application.

Medical students on the whole do not have significantly different IQ's from other University students. For example, Matarazzo et al (1972) found that in America the IQ of medical students was 125.5.

With regard to the relationship between student and patients previous study of Arts/Humanities is thought to give a path to greater understanding and insight into

human understanding. (Richards 1983, Roessler et al 1978).

In fact previous studies in the humanities underpin successful performance at medical school (Neame et al 1992, Lipton et al 1984). Students who studied humanities and science show higher intern performance compared with having studied science alone and are twice as likely to complete their medical degree. In a study from the University of Newcastle NSW the same study found that age, gender, admission interview results, written psychometric test scores, academic marks, and whether previous tertiary study had been undertaken prior to entering the medical school were not predictive of intern performance ratings (Rolfe et al 1995).

Students entering medicine solely on academic marks may possess high indices of achievement and endurance and low indices of play and impulsivity (Murden et al 1978, Rothman 1973).

Also identified in these studies was a tendency of students to inflexibility, having difficulty with adapting and with innovation and seeming to need a rigid and structured environment and avoidance of ambiguity.

In the clinical environment the successful student tends to be motivated, emotionally expressive, secure,

sensitive, independent, spontaneous and communicative with an orientation to power and status (Turner 1974).

Solkoff (1968) suggest a higher ranked clinical student is more sensitive. Gordon (1991, 1992) reviewed the research up to 1990 on the accuracy and validity of medical students' self-assessments and concluded that, in conventional medical education, students' self assessments in a variety of areas were of only low to moderate accuracy and validity.

5.6 Medical students and video feedback

Video feedback is an integral part of Communication Skills Training today. Several studies have shown that video based teaching on interviewing have been effective. David Pendleton (1990) has created well known rules of positive feedback which seem to have wide acceptance. Medical schools may need to encourage more of this reflective learning and use well trained facilitators. How medical students feel about videotaping is important. Videotape can record not only verbal communication but also non verbal. Video-based teaching on interviewing and psychological skills has been shown to be effective (Robbins et al 1979, Maguire et al 1986). Trainees for general practice taught in a group setting with video feedback have demonstrated significantly improved interviewing skills after training. The trainees who

were below average before training showed the greatest improvement (Gask et al 1988).

Video methods are now a recognised part of post graduate general practice training in many countries (Jackson et al 1983, Hewitt 1985, Roberts 1985).

To maximise the potential of videotaped feedback, it would appear that the following criteria should be observed.

1. Trainees' attention must be directed to the pertinent features of playback. The need for feedback to be focused in this way is widely recognised (Carroll et al 1980). It could be to this end that students prefer to have tutors present during video debriefing.
2. Video feedback should be provided within the context of a structured training sequence this and can support sensitisation and practice procedures (Wallace et al 1975, Speas 1979, Sanders 1982).
3. The extent of exposure to self-viewing seems to be important (Hung et al 1978) unless the recording lasts long enough for trainees to be exposed to sufficient instances of the targeted feature.

Lacey (1993) has described the use of video recordings of consultations in small groups. He cites the Pendleton rules or the rules of positive feedback which are designed to give information or observations to the doctor involved to enable him or her to change or improve consultations but in such a way that the doctor is protected from the potentially damaging effects of personal criticism. Lacey adds two further "rules". First the general practitioner (or trainee/student) whose videotaped consultation is being analysed must always be present in the group, and second, the group leader or teacher cannot lead the group using his or her own consultation videos as this tends to cause chaos to group process.

The Pendleton Rules are:

1. Briefly clarify matters of fact: one may want to ask the doctor whose consultation has been shown for further information about the patient - details of past history, occupation, medication etc.
2. Doctor in question goes first: the doctor is then invited to comment on his/her own consultation, on what he/she intended to achieve or whether it was successful, and on the other ways it might have been handled. This allows the group to view the consultation from the GP's perspective and gives him/her some control over subsequent discussion. The GP's own level of insight will also allow an

experienced group to judge how far discussion can be carried without the risk of hurt or threat to the GP whose consultation tape is being analysed.

3. Good points first: telling the GP what he/she did well is a useful way for discussion to start; it helps to put the GP at ease and reinforce positive aspects of his/her consultation style. A certain amount of praise and support is also an important part of the therapeutic function inherent in small group work.

4. Recommendations not criticisms: if a certain aspect of the consultation has not been well handled or a task not achieved, simply pointing this out to the GP concerned is often not helpful. The GP may recognise only too well the shortcomings in his/her consultation. Recommendations from the group are needed on how the consultation might have been handled better. On the other hand the GP may disagree with the group's observations or generate a new set of suggestions to improve the consultation in question. Such useful interaction, which is so much part of the dynamics of small group work, is more likely if the group's comments on the consultation are given in the form of a recommendation for change.

Criticism of the doctor's performance will often simply lead to an unproductive spiral of attacking and defending.

Although video feedback using standardised patients has been shown to produce most changes in learners' communication skills, it also creates distinct challenges for the teacher as experiential teaching is, potentially unsafe, intrinsically unstructured and by nature is random and opportunistic (Silverman et al 1996).

While Pendleton Rules are designed to give positive video feedback they have been criticised by Silverman et al (1996). While Pendleton insists on giving the good points first this means that points can't be discussed as they are thought of. While on the surface the rules are non evaluative, often in the mind of the student they are - hence 'what would you do differently next time' could be seen as 'now tell us what you did that was wrong'. Insisting on good points first may block the student from raising at an early stage what particular area is seen as difficult. The group can spend too much time on what is 'good' with little time left for constructive help with the actual difficulties of the consultation.

Silverman et al have modified Pendleton's rules and called their approach the agenda-led outcome based analysis.

This starts with the doctor's agenda. Then the learner and the group need to ask: 'Where do I want to go to?' and 'How might I get there?' Also the doctor is encouraged to self reflect and problem solve before the group makes suggestions. It is a problem solving method,

involving both the doctor and the group. Using descriptive feedback is like holding up a mirror for the group: 'Here's what I see happened - what do you think?'

Balanced feedback is provided as in Pendleton's Rules but the facilitator must consider the climate of the group. Sometimes good points first works, sometimes it pays to leave this to later. It is also the group's responsibility to provide a supportive environment. They feel that role playing rehearsal is important and that the videotape is a gift of raw material for the group. The teacher can opportunistically introduce teaching exercises and research evidence. It also enables learners to develop an evolving and structured understanding of their communication curriculum (Silverman et al 1996).

Silverman et al (1997) have with twenty years of Canadian experience of video debriefing created a mnemonic that allows for an agenda led outcome based analysis of the taped consultation. They have described this as the set-go method of descriptive feedback. Here group members base their feedback on what I [s]aw and this feedback is descriptive, specific and non judgmental. The facilitator is to prompt, if necessary with either or both of 2, what [e]lse did you see and or what happened next in descriptive terms. The next area is to ask the student what did you [t]hink John? Here there is reflection back to the doctor on the video who is then

given an opportunity to acknowledge and problem solve. The facilitator then is to get the whole group to problem solve.

1. Can we clarify what [g]oal we would like to achieve (outcome-based approach)
2. Any [o]ffers of how we would get there, suggestions, alternatives to be rehearsed if possible.

Another set of guidelines for effective videotape reviews have been created by Steinert from Montreal (1993)

Prior to the videotape review she:

1. Considers the many uses of videotape reviews in giving feedback on clinical performance and carefully determines her own objectives in using this teaching method.
2. Works to overcome commonly encountered problems.
3. Ensures 'informed consent'.
4. Chooses the best format for teaching and prepares the student for the videotape review.

During the videotape review:

5. She helps the student to develop a game plan.
6. Creates a supportive environment and discusses the student's reactions to being on tape.
7. Determines how the session will proceed.

8. Requests a brief description of what will be seen on the videotape.
9. Reviews selected parts of the tape.
10. Follows principles of effective feedback.
11. Focuses the discussion.
12. Summarises and evaluates the review.

Video feedback is really a form of reflection and self-assessment if it is done properly. There have been major barriers to learners in medical schools being reflective and self assessing (according to Westberg et al 1994). Medicine they feel is dominated by unreflective doing. In the fiercely competitive environment of many teaching programs, many learners correctly perceive that it is unsafe to reveal their fears and deficiencies. Learners often retain this cautious posture even after moving to programs where it is unnecessary.

If this barrier can be overcome, video feedback can be used as an effective teaching and research tool. Learners can view their performance, review feedback on their own behaviour, knowledge and displayed attitudes and develop plans to change behaviour that can be followed up on subsequent tapings. Interviewing skills can be documented and preserved (Beckman et al 1994). The use of video recording to guide feedback offers many advantages over the provision of feedback from

observation of the life interaction alone (Hargie and Morrow 1986; Beckman and Frankel 1994; Westberg and Jason 1994).

1. Learners who can observe or listen to themselves understand their own strengths and weaknesses much more readily than if they rely on reflection alone: our own perceptions of our behaviour are not always accurate.
2. Recordings encourage a learner-centred approach with the learner being more centrally and actively involved in the analysis of the interview. Seeing oneself on video helps objective self assessment.
3. The record prevents disagreement about what actually happened in the consultation.
4. Rewinding the tape to a specific point can help gain a deeper understanding of what went on.
5. Recordings help feedback to focus on description rather than evaluation, an essential aspect of constructive feedback.
6. Recordings allow areas to be reviewed on several occasions and let the learner revisit feedback and learning at a later date.

Video recording has advantages over audio recording - it is possible to focus feedback and self assessment on a much broader range of non verbal as well as verbal. It

is also easier to concentrate on a videotape for longer periods than an audiotape. When giving feedback it should be descriptive (Kurtz et al 1998). Descriptive feedback should be non-judgemental, specific, directed towards behaviour rather than personality, well intentioned, sharing and checked with the recipient.

An example given by Kurtz et al is: if a patient looks down, fiddles with her fingers, slows down her speech and looks weepy, and the interviewer then asks her how her family is getting on to which she responds that she is fine, regains her equanimity and never returns to the way she looked so uncomfortable, you could give feedback in two different ways:

"I think you really missed a big cue when she obviously had something important to say and you chickened out of asking her".

This Kurtz et al considered judgmental. General feedback that assumes a motive for the learner's actions is really an implied comment on his personality.

'At 3 minutes 23 seconds, there was an interesting point when she starts to look down, fiddles with her fingers, slows down her speech and looks weepy. You then asked her about her family and she didn't ever seem to get back to what was upsetting her. What do you think, John?'

'Yes, I didn't know quite how to get her to open up'. Kurtz et al state that this is descriptive feedback that is non judgmental and very specific. It also very effectively leads the discussion into what outcome you are trying to achieve. This feedback concentrates initially on what, when, where and how, not why.

The term 'video allergy' has been coined (Campion 1992) to describe the ongoing effect of a student's unpleasant exposure to videotaping. The source of the anxiety may not only be the videotaping but the poor quality of the video debriefing. A study was undertaken at the General Practice Teaching Unit to assess undergraduate attitudes to videotaping of their consultations. A further study asks the students about how difficult it was to make information giving statements, ask about social history, ask patients about their feelings and how videotaping influenced them. The final study in this chapter looks at the students' confidence about how their communication skills training can potentially improve patient care.

STUDY VI

5.7 Undergraduate attitudes to videotaping of their consultations in a general practice setting

The use of videotaping with feedback is now an established part of general practice teaching before and

after graduation. This method of teaching has proven to be very effective (Gask et al 1991, Maguire et al 1986) but for some students and trainees the process creates much anxiety. The term "video allergy" has been coined to describe this phenomenon and it has been postulated that medical students who have become "sensitised" by an unpleasant exposure to the method may develop a decreased ability to gain from the technique ever again (Campion 1992).

This anxiety was noted in a South Australian group of first year postgraduate general practice trainees prompting their trainers to establish a video acclimatisation session (Farmer 1992). Farmer feels that the trainees' concentration on such issues as mannerisms, non verbal communication and personal appearance often preclude attention to the consultation itself. This view is supported by self - confrontation theory which suggests that people may be so disturbed by hearing and seeing themselves that the educational value of self - observation is reduced (Fuller and Manning 1973).

Another source of anxiety may be the method of video debriefing. Pendleton rules of feedback which include briefly clarifying matters of fact, the doctor in question goes first, good points first and recommendations not criticisms (Pendleton et al 1994), may not always be observed at the undergraduate (Campion

1992) and postgraduate levels of general practice education (Field 1995). It may be that the use of videotape in undergraduate teaching is creating problems for future teaching and this means that the attitudes of these students about this is extremely important. This study looks at such attitudes in an undergraduate general practice consulting skills training program in South Australia.

Aim

The first aim of this study is to assess the attitudes before and after a course on general practice consulting to videotaping by a group of Fourth Year medical students. A second aim is to investigate any possible effect on these student attitudes of student sex, age, nationality and prior exposure to videotaping. A third aim is to investigate the attitudes of a larger group as to whether they found the videotape method threatening and whether they found it useful.

Method

A questionnaire was given to 106 Fourth Year medical students before and after a consulting skills course in a general practice setting. This was undertaken in 1992 at the Modbury General Practice Teaching Unit in South Australia. Using a 5 point Likert scale with possible responses of Agree strongly = 5, Agree = 4, Neither agree or disagree = 3, Disagree = 2, and Disagree strongly = 1

they were asked to record their attitudes to videotaping consultations using 8 statements (Table 1). The scores for each student before and after exposure to videotaping in the communication skills training were recorded. At the beginning of training a 15 minute introduction on how people feel when being videotaped was given. During this introduction it was emphasised that seeing one's body image and behaviour on videotape can create discomfort. The sites of the video cameras were pointed out and the confidentiality of the subsequent videotapes emphasised.

Then 20 hours of communication skills training followed. This training was done in small groups with tutorial sessions and also by videotaping all consultations. The duration of videotaping was identical for each student and occurred in a general practice consulting room with standardised patients. Each student saw the same standardised patients. Video debriefing was carried out using the "Pendleton Rules".

As well as this, the views of (a second group of) 792 Fourth Year medical students who had done exactly the same course from 1992 to 1999 were sought concerning the videotape method of learning. They were asked to respond to the statement "I found the videotape method threatening" and "I found the videotape method useful" by indicating not at all; a little; a fair amount or a lot.

Results

106 out of 120 students (88%) completed both questionnaires as 14 students either failed to turn up on time or became ill before the end of the course. Of the 106, 57 (54%) of the students were born in Australia, 23 (22%) in Malaysia and 26 (25%) elsewhere. Sixty five (58%) were 21 years or younger and 60 (57%) were male while 46 (43%) were female. Thirty eight (36%) had previously been videotaped in their psychiatry term.

There were significant changes in the responses to the 8 statements after the exposure to videotaping in the course. The students felt more positively about every statement from before to after the CST. Thus the mean score for each of the 8 questions fell significantly by the end of the training (Table 1).

Table 1

STUDENT ATTITUDES TO VIDEOTAPING CONSULTATIONS				
		Before	After	t value df (105)
I feel uncomfortable with seeing myself on video	Mean SD	3.87 0.07	2.75 0.97	9.9 *
I feel uncomfortable with receiving feedback on my tapes	Mean SD	2.25 0.79	1.75 0.61	6.3 *
I do not feel in control when being videotaped	Mean SD	3.12 0.94	2.53 0.83	5.6 *
I feel videotaping cannot help me improve my rapport building skills	Mean SD	2.21 0.73	1.5 0.69	7.7 *
I do not feel videotaping helps me understand myself better	Mean SD	2.47 0.73	1.62 0.59	10.9 *
I do not feel videotaping can improve my understanding of patients' body language	Mean SD	2.04 0.65	1.38 0.49	9.3 *
I do not feel videotaping can improve my understanding of my own body language	Mean SD	1.97 0.71	1.42 0.51	8.1*
I dislike being videotaped with my colleagues present	Mean SD	3.35 1.07	2.51 0.94	8.01*
* p < 0.001				

There were some sex differences in responses. Seventy one percent (33) of females reported that they felt uncomfortable with seeing themselves on video at the beginning of the course compared with 52% of males (31) which was a significant sex difference (Chi square 4.4 df 1 p < 0.05). This fell to 26% of females (12) and 30% of

males (18) at the end of the course which was not a significant sex difference. Forty seven percent of females (22) reported that they disliked being videotaped with their colleagues present at the beginning of the course. This percentage was significantly more than that of the male students (38%) (Chi square 5.15 df 1 $p < 0.05$). While these percentages dropped at the end of the course (22% of females and 8% of males), the significant sex difference remained (Chi square 4.14 df 1 $p < 0.05$).

Thirty nine percent of those aged 21 and younger years reported at the beginning of the course that they felt uncomfortable with receiving feedback and this was a significantly higher than for those aged 22 and over (17%) (Chi square 4.47 df 1 $p < 0.05$).

While there was no significant difference in the percentages of students reporting "I feel uncomfortable with seeing myself on video" whether they were or were not previously videotaped in psychiatry (55% versus 59%), there was a significant difference in these percentages after the course (45% previously videotaped in psychiatry versus 20% not) (Chi square 6.7 df 1 $p < 0.01$). The one student who reported a strong dislike to "seeing myself on video" had been previously videotaped in psychiatry. There was a significant difference in the percentages of students reporting that "videotaping cannot help my rapport building skills" in the group previously

videotaped in psychiatry or not (24% versus 44%) (Chi square 10.1 df 1 $p < 0.01$) at the beginning of the course but there was no significant difference at the end (0% versus 6%). Five percent of those who had previous videotaping in psychiatry reported at the beginning of training that they felt that "videotaping can improve my understanding of patients' body language" compared with 28% of those without such a previous experience and this was a significant difference (Chi square 5.7 df 1 $p < 0.02$).

There were some differences in reported attitudes between students born in Malaysia and students born elsewhere. While there was no difference between these 2 groups at the beginning of the course for the statement: "I do not feel in control when being videotaped" (52% compared with 50%), there was at the end of the course a significant difference with 39% of the Malaysian born agreeing compared with 9.6% of those born elsewhere (Chi square 11.59 df 1 $p < 0.001$). There was no difference between the 2 groups at the beginning for the statement: "I dislike being videotaped with colleagues present" (43% compared with 42%), but at the end of the course 40% of the Malaysian born stated this compared with 6% of those born elsewhere (Chi square 15.1 df 1 $p < 0.001$). Forty nine of the students were born overseas and 39% of the Malaysian born (9) reported lack of control when being videotaped at the end of the course compared with 4% (1)

of those born overseas outside Australia (Chi square 8.99 df 1 $p < 0.01$).

Seven hundred and ninety two students between 1992 and 1999 reported if they found the videotape method threatening. Fifty nine percent responded that it was "a little" and 3% "a lot". When asked if they found the videotape method useful 59% responded "a lot" and 1% "not at all".

Discussion

There was no control group in this study but apart from the group of students that had previously been videotaped in psychiatry, the group had no prior exposure to videotaping in the medical curriculum.

There was significant student change to more reported comfort with seeing themselves on video, receiving feedback from their tapes, feeling in control when being videotaped, improving their skills in rapport building, improving their understanding of patients and also their own body language and liking being videotaped with their colleagues present. This suggests that our attempts to challenge the students while at the same time offering support was decreasing the negative feelings they may have had towards aspects of the videotaping and subsequent feedback.

The teaching method used in this study was the one described by Gask et al (1991), where the trainer and students watched the videotape through before returning to view it a second time at specific points in the tape. A discussion was held on what the patient told the doctor, what the doctor "saw" (which could be non verbal behaviour or paralanguage) and how the doctor felt, with positive comments first as according to Pendleton et al (1984). The student was asked what could have been done or said differently at that point in the interview. When the tapes were to be debriefed the student held the infra red remote control and was instructed to fast forward the tape through any parts of the consultation they did not want us to effectively experience. From 1992 to 1999 not one of the 792 students has fast forwarded any more than a quarter of their consultation and most watch all their tapes. We consistently noticed that student discomfort with videotaping (Campion's "video shock") seemed to ease considerably after the first debriefing of tapes (Campion 1992).

The videotape method for 3% of students over the 7 years of observation was reported as threatening "a lot". On the positive side, 59% found the videotape method useful "a lot", so it seems that gain can be made with a little pain overall. Overall the residual group of students who stated they were uncomfortable at the end of our course was 29%. This percentage was roughly similar to those of

other studies of videotaped students in general practice settings but comparison is difficult due to the different duration of exposure to the videotape in these studies (Davis et al 1980, Del Mar et al 1992).

Why women students reported more discomfort with seeing themselves on videotape at the beginning of the course is not clear. They also reported a greater dislike of being videotaped with their colleagues present which was significantly different from male students both at the beginning and the end of the course. Studies of women medical students have shown them to show more empathy to patients and to give them more information (Marteau et al 1991, Bean et al 1982). Both of these attributes are visible on a videotape as is non verbal behaviour interpretation which is more important to women (Mayo 1981). It hence may not be surprising at the reported discomfort in this study as the areas of behaviour that are valuable to them are on display for others to see. Other studies have shown women general practice trainees to have better improvement in communication skills with training (Farmer 1996). However studies of women general practitioner communication skills show variable results with positive (Waller 1998, Heins et al 1979, Wasserman et al 1984, Weisman et al 1985, Hall 1994) and negative findings (Cartwright et al 1981, Meulman et al 1992).

One certainty of all experiential learning and especially communication skills work is that strong feelings will feature from time to time. As communication is so closely allied to self concept and self esteem asking students to take the risk of trying out new or alternative education approaches adds another layer of fear - fear of the unknown, of risk taking, of making mistakes or failing (Kurtz et al 1998). This could possibly explain why our younger students reported more discomfort about receiving feedback from their videotapes at the beginning of the course.

More research needs to be done on the ethnic background of students and how they feel about videotaping of their consultations. The Malaysian born students reported more lack of control when being videotaped compared with other overseas students at the end of the course. Whether this is because of a language or cultural difference requires more research. It is interesting that every Malaysian born student reported at the end of the course that videotaping had made them understand themselves better and that they still had a significant dislike for being videotaped with colleagues present.

Those students who had been previously exposed to videotaping in psychiatry reported significantly more discomfort with seeing themselves on videotape at the end of the course compared with those who had not. In

addition this group's perception of not feeling in control when being videotaped did not change significantly compared with the other students at the end of the course. While we do not know that stating feeling comfortable equates with "video allergy", the results may suggest that possibly once one is "video allergic" it is very difficult to be "desensitised". This supports Farmer's work on postgraduate trainees for general practice in the same city which found a subgroup of trainees reporting anxiety arising from undergraduate training where they were videotaped during their psychiatry term (Farmer 1992). While our students who were previously videotaped in psychiatry stated more that videotaping could improve their understanding of patient's body language and help their rapport building skills when they started our course, compared with the non exposed students, there was no significant difference in this at the end. This may suggest the degree of difficulty for subsequent teachers to desensitise "video allergic" students.

In conclusion it seems that medical undergraduates in this course reported negative attitudes towards videotaping but these had decreased by the end of the course. Attitudes varied according to sex, age, country of birth and previous exposure to videotaping in psychiatry. More research is needed on the attitudes of women and younger students to videotaping as well as the

effect of ethnic background and successful ways of dealing with sensitised students need to be researched.

STUDY VII

5.8 Medical Students' stated beliefs about consulting behaviour in a general practice setting

Patients who receive adequate information and psychosocial counselling in consultations have been shown in studies to have a better health outcome. A better control of diabetes and hypertension has been linked to more information seeking by the patient in the consultation (Kaplan et al 1988) and receiving adequate information from the doctor seems to diminish the stress felt by patients with serious illness (Fallowfield et al 1986, Fallowfield et al 1990). The amount of information given to patients by doctors has been linked to patient satisfaction (Korsch et al 1972, Comstock et al 1982).

Counselling by doctors for psychosocial topics has also been shown to increase the satisfaction of patients attending the doctor with chronic disease (Bertakis et al 1991), and understanding the patient's concerns, even when they cannot be resolved can reduce anxiety significantly (MacLeod 1991). Patient satisfaction with the consultation is a very important part of compliance with agreed management tasks (Korsch et al 1968, Becker et al 1984, Dimatteo 1979 and Stone 1979). It follows

that adequate information giving, and finding out about a patient's social history and psychological needs are desirable tasks in a consultation. Indeed exploring the patient's beliefs and ideas elicited earlier on in the interview needs to be incorporated into the doctor's explanation in order to increase the patient's understanding and commitment (Tuckett et al 1985).

There is a shortage of knowledge about what medical students say they feel about these tasks and this study of fourth year students in a general practice setting attempts to find out more about this.

Videotaping medical students' consultations and giving feedback has had a lasting positive effect on subsequent consulting skills (Maguire et al 1986) and this group of students were also asked about aspects of their videotaping.

Aim

The aim of this study is to find out how a group of fourth year medical students responded to statements relating to their consulting behaviour and aspects of their videotaping in a general practice setting before and after a course on general practice consulting skills.

Method

The students were asked to nominate on a Likert scale of 5 to 1 (strongly agree, agree, neither agree nor disagree, disagree, disagree strongly), their preference in response to the following three statements:

1. I find it hard to make information giving statements during the consultation.
2. I find it difficult to ask patients about their social history.
3. I find it hard to ask patients questions about their feelings.
4. Videotaping does not help me understand how I feel during the consultation.
5. Videotaping does not help me understand how patients feel during the consultation.
6. At this point in the medical course I would not like to eventually be a specialist.
7. I do not feel the preclinical curriculum should include arts subjects.

The students were asked to respond to these statements before and after an intensive 20 hour course on general practice consulting skills. This course involved each student consulting 12 standardised patients with chronic illness and then receiving video and written feedback. This was conducted at the University of Adelaide's

General Practice Teaching Unit in 1993. The results were analysed using a paired 't' test.

The answers were also analysed by gender and whether they felt arts should be included in their preclinical curriculum.

Results

One hundred and twenty-six 4th year medical students were given the questionnaire immediately before and again after the course and 119 completed both questionnaires. There were 55 male students (46%) and 64 female students. Fifty eight students (49%) were aged less than 22 years of age and 52 (44%) were born in Australia.

The answers to the 7 questions are shown in Table 1.

Table 1

ATTITUDES ABOUT CONSULTING, VIDEOTAPING, CAREER AND CURRICULUM			
Statement	Mean Score		t value (df = 118)
	Pre	Post	
1. I find it hard to make information giving statements during the consultation	3.0	2.3	6.3 ***
2. I find it difficult to ask patients about their social history	2.6	2.1	4.5 ***
3. I find it hard to ask patients questions about their feelings	3.0	2.5	4.6 ***
4. Videotaping does not help me understand how I feel during the consultation	2.7	1.8	9.6 ***
5. Videotaping does not help me understand how patients feel during the consultation	2.5	1.7	10.1 ***
6. At this point in the medical course I would not like to eventually be a specialist	2.7	3.1	-4.5 ***
7. I do not feel the pre clinical curriculum should include arts subjects	3.1	2.9	2.5 *
p < 0.001 *** p < 0.05 *			

Before the CST 68% of male students and 70% of female students reported: 'I find it hard to make information giving statements during the consultation', which was not a significant difference. There was a significant difference between male and female students after the

course however; 22% males and 41% of females (Chi square 4.87 df 1 $p < 0.05$).

After the CST, 53% of those who indicated at that point that they would like to be a general practitioner (21 out of 119) reported: 'I find it hard to make information giving statements during the consultation' compared with 29% of others (undecided and specialising) which was a significant difference (Chi square 4.08 df 1 $p < 0.05$).

Discussion

There was a significant stated change in attitude for all the statements from before to after the course. This related to stated feelings about giving information, asking about social history and asking patients about their feelings. There was no control group in this study so the results should be interpreted cautiously. However there was no other course in the year involving consulting skills or video feedback. Another reason for caution is that what students say they feel may be coloured by a strategic desire to please their teacher and yet another is that subjective views do not always equate with objective measures of students' consulting performance. They were told at the beginning that marks would be given for trying to improve their consulting skills so an element of assessment driven behaviour may exist.

There was a difference about the stated feelings about the ease of making information giving statements at the end of the course by sex. Seventy-eight percent of male students stated they felt easy about this compared with 59% of female students. Studies have found that women students are more skilled in communicating warmth, competence and empathy than males in their initial clinical year and tend to hold more positive attitudes to giving information (Marteau et al 1991, Bean et al 1982). However this study implies that there is not as much ease in women students at giving information compared with men students. This may reflect more confidence in the male students rather than competence at giving information as a study of medical students in the United States has shown that, in observed consultations using standardised patients, male medical students were regarded as equal to females in their thoroughness of explanation (Colliver et al 1993). Also a study of physicians in the United States in primary care has shown that compared to male physicians, female physicians give more information and their patients do as well (Roter et al 1991).

Significantly fewer students who nominated general practice as a career at the completion of the CST segment stated feeling easy about making information giving statements during the consultation. If this is a reflection of their true feeling this seems a paradox as one expects general practitioner aspirants would possibly

be confident about possessing such a skill. However Marteau feels that students who are more confident about their own communication skills are more likely to prefer a career in hospital medicine. Marteau also feels that students' judgement of their ability to communicate effectively is poor (Marteau et al 1991).

The significant differences in student stated beliefs about aspects of consulting in this study highlight the need for these differences to be examined objectively. Student behaviour must be observed to assess any differences between stated belief and performance especially in information giving.

STUDY VIII

5.9 Do students entering their clinical years feel confident about how their communication skills training can potentially improve patient care?

Fourth year medical students at the University of Adelaide have considerable exposure to the clinical world. In the pre clinical years they have had considerable training in communication skills.

There are known consultation behaviours that positively influence outcomes for patients. For example as mentioned in previous chapters there is objective evidence that being taught to encourage patients to ask questions, allowing emotional exchange and giving the

patient more control can not only decrease patients' glycated haemoglobin but also decrease their diastolic blood pressure (Kaplan et al 1989). Patients of trained physicians have reported a reduction in emotional stress for as long as 6 months (Roter et al 1995).

Kaplan et al (1989) have shown that communication measures in the consultation significantly affect the patients' health, functional status and physiological measures. Greenfield et al (1988) showed that diabetic patients who were randomised to physicians trained in communication skills had better functional status and lower glycosylated haemoglobin scores than control subjects.

Overall between 1983 and 1993 there were 16 studies out of 21 that showed positive health outcomes from effective physician-patient communication (Stewart 1995). These were either randomised trials or analytical studies of physician patient communication in which patient health was an outcome variable. The quality of communication both in the history-taking segment of the visit and during discussion of the management plan was found in these studies to influence patient health outcomes. The outcomes affected were, in descending order of frequency, emotional health, symptom resolution, function, physiological measures (ie blood pressure and blood sugar level) and pain control.

In 1999 the number of studies which indicated the generally positive effect of key dimensions of communication on actual health outcomes had risen to 22 (Stewart et al 1999). An earlier study (Stewart 1995) concluded that the components of effective communication identified by these studies can be used as the basis both for curriculum development in medical education and for patient education programs.

In the previous chapter, the fourth year students of a previous year reported in an uncontrolled study that they found it easier to make information giving statements during the consultation when they had completed their CST course. They also stated that they found it easier after training to ask patients about their social history and to ask questions about the patients' feelings.

Because of these perceived improvements it was decided to ask a fresh year of fourth year medical students about how their CST (before and after the fourth year course) had influenced their confidence in achieving the patient outcomes described above.

Aim

The aim of this study is to find out how a group of fourth year medical students responded to statements before and after training. The statements referred to

how confident their communication skills training made them feel about decreasing a diabetic patient's glycated haemoglobin as well as other patient outcomes which in studies have been linked to interviewing skills. A smaller group of the fourth year medical students had their statements compared with a control group.

Method

One hundred and eighteen fourth year students who attended the General Practice Teaching Unit in 1999 were asked to nominate on a Likert Scale of 1 to 5 (disagree strongly, disagree, neither agree or disagree, agree, agree strongly) their agreement with the following 8 statements:

1. My CST does make me confident that I could, with my communication skills, decrease diabetic patients' glycated haemoglobin.
2. My CST does make me confident that I could, with my communication skills, decrease hypertensive patients' diastolic blood pressure.
3. My CST does make me confident that I could, with my communication skills, improve patients' emotional health.

4. My CST does make me confident that I could, with my communication skills, improve patients' symptom resolution.
5. My CST does make me confident that I could with my communication skills improve patients' functional status.
6. My CST does make me confident that I could, with my communication skills improve patients' pain control.

Students also rated their agreement with the statement:

7. I find tutor feedback of my videotapes helpful in my CST.

Results

One hundred and ten students out of 118 completed the 7 statements before and after the training. Of the 110, 60% (66) were male and 40% (44) female. Forty seven percent (52) were aged 21 and under and 53% (58) 22 and over. For 41% (45) their country of birth was Australia.

The resultant mean scores for the 7 statements are shown in Table 1. Related samples 't' tests showed increased confidence in every item.

Table 1

CST and confidence with skills in achieving certain patient outcomes and students' perception of training - 110 students			
	Fourth Year Training: mean agreement		t value (df = 109)
	Before	After	
My CST does make me confident that I could with my communication skills:			
1. Decrease diabetic patients' glycated haemoglobin	3.2	3.6	-3.78 ***
2. Decrease hypertensive patients' diastolic blood pressure	3.3	3.9	-5.7 ***
3. Improve patients' emotional health	3.5	3.9	-3.7 ***
4. Improve patients' symptom resolution	3.2	3.6	-4.43 ***
5. Improve patients' functional status	3.3	3.6	-2.95 ***
6. Improve patients' pain control	3.2	3.7	-4.0 ***
Student perceptions of fourth year training:			
I find tutor feedback of my videotapes helpful in my CST	3.6	4.2	-5.3***
p < 0.001 ***			

Sixteen medical students undertaking CST were matched by sex, age and whether born in Australia or not to 16 medical students in the same year (control group) who were doing their attachment in clinical medicine at the same hospital. The pre and post measurements were conducted a week apart for both groups. The results for the CST and control groups are shown in Table 2.

Table 2

CST and medical students' reported confidence with skills in achieving certain patient outcomes					
Fourth Year Training: mean agreement rating					
My CST does make me confident that I could with my communication skills:		Before	After	t value (df = 15)	
1. Decrease diabetic patients' glycated haemoglobin	Ctrl	3.4	3.4	0	
	Exp	3.2	3.6	1.96	
2. Decrease hypertensive patients' diastolic blood pressure	Ctrl	3.6	3.2	1.86	
	Exp	3.0	3.9	4.86	***
3. Improve patients' emotional health	Ctrl	3.4	3.7	1.46	
	Exp	3.2	3.7	2.52	*
4. Improve patients' symptom resolution	Ctrl	2.9	3.4	2.33	*
	Exp	3.1	3.8	3.31	**
5. Improve patients' functional status	Ctrl	2.8	3.3	1.73	
	Exp	3.1	3.7	3.48	**
6. Improve patients' pain control	Ctrl	3.2	3.4	0.90	
	Exp	3.3	3.7	1.57	

* p < 0.05
** p < 0.01
*** p < 0.001

Discussion

The expressed confidence of the 110 students in the ability of their communication skills training to potentially improve patient care increased in all of the forms of care outcome presented in the questionnaire. The literature has shown that these types of outcome are possible as a result of good communication in the consultation. They were decreasing diabetics patients' glycated haemoglobin, hypertensive patients' diastolic blood pressure and improving patients' emotional health, symptom resolution, functional status and pain control.

The group of 110 students had no control group for comparison however. Therefore a smaller group (experimental) was matched with a control group in the same hospital at the same time. The control group showed no significant difference in confidence about their CST being able to influence the above patient outcomes except for improving patients' symptom resolution. This may have been a reflection of their exposure to the medical wards of the hospital.

The experimental group of 16 students showed increased perceived confidence in the ability of their CST to influence 4 of the 6 hypothesised patient outcomes. These were decreasing hypertensive patients' diastolic blood pressure and improving patients' emotional health, symptom resolution and functional status. While it is

encouraging that students in the experimental group reported more confidence in their ability to achieve such outcomes, it does not mean that they would necessarily be competent in achieving such outcomes. Gruppen (1997) considers that students may be poor judges of their communication skills and reports that fourth year medical students have in a study given themselves higher ratings than those of the standardised patients they were rating.

Why did the perceived confidence increase in the students overall and in the smaller experimental group? The teaching did include Kaplan's work on diabetic and hypertensive patients. The experimental group did not significantly believe they were more confident in decreasing diabetic patients' glycated haemoglobin. However they did believe they could decrease diastolic blood pressure. They were possibly influenced in this direction because we encouraged them to take the standardised patients' blood pressure if they thought it appropriate and also they saw a humorous videotape on how not to consult with a patient who has elevated blood pressure. The students had 12 consultations each with standardised patients who actually suffered from chronic illness, and it may be possible that this exposure made them feel more confident about improving emotional health, symptom resolution and functional status with their consulting skills. However this is speculation.

More research is needed to see how students with their communication skills can actually positively affect patient outcomes. The biomedical indicator of glycated haemoglobin in diabetic patients would be an easily measured outcome but student exposure would need to be organised carefully and ethically to such patients and a randomised controlled trial undertaken with students randomised to those taught CST and those not. It may not be desirable to increase student confidence unless it is well founded.

5.10 Conclusion

Care needs to be taken if the increased confidence in students' communication ability does not match their actual behaviour. While it is important that after CST the students at the General Practice Teaching Unit stated that they felt less threatened by video feedback, the changes in student attitude in the last 2 studies create a need to do more research to see if there is any congruence between students' beliefs and their actual consulting behaviour.

CHAPTER 6

NON VERBAL COMMUNICATION OF STUDENTS AND STANDARDISED PATIENTS

Non verbal communication, especially eye contact and open and closed knee position is easily assessed by studying videotapes of consultations. This allows studies to be done on SP' non verbal communication and their perceptions of the consultation as well as SP feedback on students' non verbal behaviour. Two studies compare students' belief on aspects of the consultation and the students' consultation behaviour.

6.1 Non verbal communication

James Mckenzie wrote (see Appendix) in 1919:

"A thing that strikes anyone, who gives attention to the matter, is the curious knowledge which some physicians and general practitioners acquire after many years' practice. It enables them in an unconscious manner to estimate the patient's state with remarkable precision. The knowledge is undefinable, and they are unable to express the reasons in language sufficiently clear for the uninitiated to understand. The real source of this knowledge is the familiarity, derived from experience, of the patient when stricken with an insidious disease, a subtle alteration in the expression of the face, or a slight wasting, or a faint contraction of some of the muscles of

expression, a faint change in colour, coupled, it may be, with an alteration in the patient's temper, ideas or voice. Knowing the patient before these changes occurred, the attention is caused by the alteration."

(Mackenzie 1919)

A preliminary study of general practitioners' consultations by Byrne et al (1980) suggests that eye contact and posture are particularly significant when coupled with open questions or silences or when they occur at points in the consultation when the patient has reached a crucial part in disclosure.

Furthermore a study of 71 physicians (Dimatteo et al 1980) and 462 ambulatory and hospitalised patients showed that non verbal skills of the physicians while not correlating to patients' ratings of technical care, did show that those physicians who were more sensitive to body movement and posture cues to emotion received higher ratings from their patients on the art of care than did less sensitive physicians. The higher ratings also applied to physicians who were successful at expressing emotion through their non verbal communications. The test used was the profile of non verbal sensitivity (the Pons test) which was a 45 minute 16mm film test of an individual's ability to decode the emotion communicated by another through facial expressions, body movements and voice tone.

In a further study (Dimatteo et al 1986) a short Pons test of fifteen minutes was used to test the ability of 28 family physicians to decode the emotion communicated by a person through facial expressions and body movements and also a ten minute audiotape test to measure the ability to decode voice tone.

Patient satisfaction and interpersonal success with patients has been linked with the non verbal behaviour of doctors.

In a small study of physicians, the ability to express the emotions of happiness, sadness and anger non verbally to a standardised patient using the face and shoulders has been linked to patient satisfaction (Dimatteo et al 1986).

Dimatteo et al (1979) showed that physicians scoring well on a standardised test of non verbal decoding (the Pons film) did significantly well interpersonally with patients in the clinical setting.

In a study of admittedly one patient Davis et al (1990) have noted that as the patient shifted from superficial discussion to active exploration of internal reactions, her body positions became more accessible, open and oriented towards the therapist.

In examining patient non verbal behaviour body position, face and shoulder position was described by Davis et al (1994). They defined in non verbal coding a position where a still arrangement of the torso and limbs was held for four seconds. They also commented on knee width (closed = tightly closed, neutral = between closed and open, open = knees wider than hip alignment).

Family Practice patients in Seattle have demonstrated a significant difference in satisfaction with the doctor when the patient's face was orientated toward that of the physician. More of this orientation was associated with lower satisfaction. Hand relaxation was also associated with lower satisfaction (Larsen et al 1981). These findings however are the reverse of those of Mehrabian's (1968).

While good scores on the short Pons and the audiotape were linked to patient satisfaction the authors feel a new measure of non verbal skill specific to the medical setting might better predict medical outcomes.

Buller and Street (1988) in their study of forty one physician-patient interactions in an Arizona family practice found several behaviours relating to non verbal communication. The physicians generally reciprocated patient's adjustments in response latency (response

latency is the period of time between the partner's termination of a speaking turn and the speaker's assumption of a speaking turn), pauses during speaking turns, body orientation (the various angles exhibited by an interactand toward or away from his or her partner during each minute of interaction) and interruptions and compensated patient's modifications (in turn duration and gestural rates). Also it was noted that the physician interaction non verbally with patients aged more than thirty was less domineering and in a more responsive fashion compared with those under thirty years. This was noted with comparable turn durations, (turn duration being the amount of time an interactant held the floor during a speaking turn), more vocal back channels (responses that are listeners' vocalisations - uh huh, I see, "really") and more non verbal behaviour reciprocity.

It was also noted in this study that physicians used less task touch with anxious patients (task touch was defined as the physician's touching the patient as part of the medical examination) and to a greater degree compensated the worried, patients' non verbal responses. The patients' sex, education and visit (first versus repeat) had little impact on the structure of physician-patient non verbal exchanges.

Evans in his Thesis (Evans 1990) states that non verbal behaviour is typically segmented into kinesis (facial and

body movements), proxemics (personal space and territoriality); gaze, haptics (touching); physical appearance; chronemics (use of time) and olfaction. He also states that the term is also used to cover the principal divisions of vocal communication like voice quality, intensity, rate and timing, pitch dialects and laughing, crying etc. Gender differences in primary care consultations have shown that female doctors smiled and nodded more (Hall et al 1994).

Affective communication occurs more through non verbal channels than verbal ones (Mendez et al 1986). Recognition of the importance of non verbal communication in the doctor-patient interaction is crucial. Firstly the patient is sensitive to non verbal behaviour of the doctor because illness often provides emotional uncertainty and so the patient turns to the doctor for cues about how and what they ought to feel. Secondly, most patients are searching for factual information about their illness and often the lack of verbal information enforces them to rely on the non verbal expression of doctors. Thirdly the patient may play the role of the "good patient". Hence they hesitate to ask questions and they rely on the "unsaid" clues about illness. Fourthly patients feel a position of weakness in the consultation and are more likely to attend to non verbal cues. Fifthly a medical illness might interfere with normal communication and this limits the patient's ability to

question the doctor and increases the importance of non verbal cues (Friedman 1979). Kinesic cues (body movement and facial expression) are believed to carry a greater portion of the meaning of interaction than all other non verbal codes and even verbal ones (Dimatteo et al 1979).

Physicians who sit leaning forward, face the patient directly with open arm and leg posture and engage in moderate eye contact are viewed more positively than those who lean away, do not face the patient directly, maintain closed arm and leg posture and engage in little or prolonged eye contact (Harrigen et al 1983 and 1985).

The legs are the best source of leakage of true emotions when one is attempting to conceal them, as legs receive least external and internal feedback as people often sit too close for inspection of feet/legs by the observer. Minimal internal feedback occurs due to little ego awareness of leg behaviour, as people can afford to be less vigilant about the action of the legs since they receive so little attention from the external world (Ekman et al 1974).

Birdwhistell (1970) in his description of body positions has described a knee cross as the standard upper or middle status British cross (Y4K). This is defined as: 'A knee cross immediately behind knee, lower limb parallel and touching'.

It has been felt there is a strong unconscious nature to rapport and it has been defined as two people being mutually responsive to each others signals. Neighbour feels it is (Neighbour 1994):

- showing that you understand what the other person is communicating;
- not the same as liking someone;
- part of what a doctor owes a patient;
- a process, not a state: something you actively do, like tuning a frequency dial, not something you passively hope might happen;
- the route to the connecting checkpoint;
- often established at an unconscious level;
- reading the physical signs of someone's mental state;
- something you nevertheless consciously practise, by developing greater sensory awareness of the minimal cues by which people signal their thoughts and feelings.

Movement of counsellors seems to be relevant to patients' judgements of empathy, psychiatric nurses in actual therapeutic sessions who were judged as highly empathic exhibited significantly less leg movement (swinging crossed leg, shifting position) than nurses who were judged as less empathic (Hardin et al 1983).

When the non verbal behaviour of doctors and patients is compared it has been found that doctors exceed patients on social touching, verbal facilitators such as "uh-huh", "mmmm", and "really", pauses during their own speech, and illustrative gestures, but used fewer adaptors (self and object-touching) than patients. The timing in the consultation of non verbal behaviour also differs between doctors and patients; doctors are likely to groom themselves as they begin a verbal interchange, whereas patients show more hand to self touching when responding to doctors (Street and Buller 1987, 1988, Harrigan 1985).

6.2 Some personal variables in communicating

Doctors may not communicate well if they are themselves stressed. There seems to be a tradition in medicine to deliver service to patients even when one is tired, (eg. night work), hungry, ill or distraught emotionally. No doubt that is inculcated in the medical school to help cope with disaster and emergency. This does not reflect on the quality of service given and the same applies to learning and teaching. Neighbour draws on Maslow's hierarchy which include firstly physiological needs then safety, belongingness, esteem and self-actualisation needs (Neighbour 1996).

Hargie and Marshall (1986) have created a model of dyadic interaction in interpersonal communication.

The central processes in this model are the goals of the individuals involved and their motivation to pursue them. In the long term goal of obtaining an accurate medical history there are short term goals like establishing rapport. It is harder to achieve the long term goal if the subgoals are not achieved. Then there is a range of mediating factors including cognitions, emotions values and beliefs. Cognitions can be defined as 'all the processes by which the sensory input is transformed, reduced, elaborated stored recovered and used' (Neisser 1967). The skilled professional will have developed a wide range of cognitive schemas to facilitate problem-solving and decision making during interpersonal interaction, together with the ability to make rapid, accurate judgements about people and situations. Emotions and values and beliefs also impinge on the consultation. Religious beliefs and dealing with a request for abortion is a case in point. Also in this model important factors are the responses of both parties; the feedback available during interpersonal encounters; and the ability of the individuals to perceive important cues from others, while being aware of their own behaviour. Situational factors and personal factors are also relevant.

Age:

In some contexts older practitioners may be viewed as being more experienced and competent than younger

colleagues. However some studies suggest that younger mothers prefer younger health visitors (Foxman et al 1982, Simms and Smith 1984).

The age of the patient and recall of information has been investigated in several studies. The commonest finding has been that there is no significant relationship between age and recall (Joyce et al 1969, Anderson et al 1979, Cassileth et al 1980, Ley and Spelman 1967).

Gender:

With non verbal communication, females tend to smile more, require less interpersonal space, are touched more, use more head nods and engage in more eye contact than males. In addition, women are more skilled at interpreting the non verbal behaviour of others (Mayo et al 1981). Gahagan (1984) suggests that males interpret touch in terms of dominance, rather than affiliative signals. Women patients believe that women doctors have a better understanding of their problems and that they take more time, are more caring, more sympathetic and easier to talk to (Waller 1988). However, one major study (Cartwright et al 1981) found no evidence that women general practitioners were more likely than men to communicate better.

When women medical students were assessed by standardised patients, one study suggests that these students have a higher opinion of their interpersonal skills in medical

care than their standardised patients when doing communication tasks (Gruppen et al 1997). Ratings of filtered speech by Hall et al (1994) show a number of effects of gender. The most striking of which reveals an excess of unfriendliness, interest, anxiety and boredom in the speech of female physicians addressing male patients and an excess of boredom and dominance in the voices of the male patients in those interactions.

Male and female general practitioners in a British study (Skelton et al 1999) use a speech style while consulting with patients that is not gender specific. The authors found an atmosphere of empathy in these general practice consultations which is created partly by clusters of co-operative language. Women's language, they feel showed a degree of psychological androgyny (Elyan et al 1978) ie women have the ability to approximate male speech styles when necessary - in a male dominated workplace, perhaps. Skelton et al feel that although women may have to adapt to the conventions of medical life, it is men who are required to adapt their usual communication style in the consultation. This in turn suggests that men - who have to acquire characteristics of speech that are thought of as representative of female talk - have further to travel than women to achieve competence as professional communicators.

Dress:

While clothes protect from cold or injury they can also signify group membership, gender, status, occupation personal identify and personality (Dickson et al 1988). A doctor in the community has to dress in such a way as to appear competent and efficient without being unapproachable.

Physical appearance:

Physique can influence how people are perceived and responded to. Endomorphs are defined as having a relative preponderance of soft roundness throughout the body, with large digestive viscera and fat accumulations, and with large trunk and thighs and tapering extremities. They tend to be viewed as warm-hearted, agreeable, good natured, sympathetic and dependent on others. Ectomorphs have a type of body with visceral and body structures are relatively slightly developed, the body being linear and delicate. They are seen as quiet tidy and tense. Mesomorphs have a preponderance of muscle bone and connective tissue, usually with heavy hard physique of rectangular outline (Dorland 1989). They are seen as adventurous, forceful, self reliant and healthy (Argyle 1975).

Taller men tend to achieve more in occupational status and social opportunities such as dating. Individuals rated as physically attractive are seen as more popular, friendly and interesting to talk to. They tend to

receive more eye contact, smiles, closer bodily proximity and body accessibility (openness of arms and legs). However, attractiveness also includes dress, cleanliness personality and competence (Kleinke 1986, Altman 1977, Rosenblatt 1977).

Doctors' anxieties:

Phillip Myerscough has written that doctors' anxieties about their own inadequacies and fear of failure, about patients' emotional reactions and their own unresolved personal problems all impact on communication and affect the quality of the doctor-patient relationship (Myerscough 1990).

Patients who are more well-dressed and neat receive more gaze and body position attention from doctors (Hooper et al 1982). Hadjistavropoulos et al (1990) found that photos of more attractive patients were given less negative affective experiences by physicians. Nordholm (1980) found that health professionals endorsed the same "physical attractiveness stereotype" about patients attributing better overall qualities and lower pain to more attractive individuals.

Knee position:

Open and closed knee position is easy to observe in the consultation and the following study attempts to assess this in consultations between students and standardised

patients. As mentioned previously, the legs are a very good non verbal source of emotion leakage.

STUDY IX

6.3 Standardised Patients' body language and their perceptions of the consultation with fourth year medical students during training for general practice

Kinesic cues, that is body movement and facial expression are believed to carry a greater proportion of the meaning of interaction in the consultation than all other non verbal codes and even verbal ones (Dimatteo et al 1979).

Most studies of non verbal behaviour in the consultation have been on doctors. Among other kinesic variables, open leg posture in a study of family medicine trainees has shown an association with better patient-doctor rapport (Harrigen 1985).

A study of one patient in a counselling interview led Davis et al (1990) to note that as the patient shifted from superficial discussion to active exploration of internal reactions, her body positions became more accessible, open and oriented towards the therapist.

Ekman et al (1974) felt that the legs are the best source of leakage of true emotions when one is attempting to conceal them, as legs receive least external and internal feedback as people often sit too close for inspection of

feet/legs by the observer looking down. Minimal internal feedback occurs due to little awareness of leg behaviour, as people can afford to be less vigilant about the action of the legs since they receive so little attention from the external world.

The author taught communication skills to fourth year medical students at the Modbury General Practice Teaching Unit in South Australia. As videotape feedback of consultations of students with Standardised Patients (SPs) was frequently used, the non verbal behaviour of SPs was easily observed. However the camera was not able to pick up facial movements well so the common forms of non verbal behaviour seen were upper and lower limb movements and sitting position in the chair.

Some SPs crossed their legs at the knee and this pilot study attempts to link such behaviour to student perceptions of the consultation and the scores of two questionnaires which were filled out by SPs at the end of the consultation (Howie et al 1992, Kaplan et al 1995).

Aim

The aim of this study is to identify if there is an association between medical students' perception of how well they communicated with their standardised patient and the same standardised patients' perception of

enablement and participating decision making style of the student.

Another aim was to find if there was an association between the knee positions of standardised patients and enablement and perceived participation decision making style of the student.

Method

Standardised patients (SP's) were used for this study. A standardised patient is a performer trained to represent a real patient case for use in teaching and evaluation.

In 1997, 154 fourth year medical students attended the General Practice Teaching Unit and 126 students rotated through four SP consultations at the end of 15 hours of communication skills training. The SPs had been previously trained to reproduce the skeleton of a medical history accurately at each consultation. The history was based on their real chronic condition. Each student was provided with some clinical notes and apart from taking blood pressure no other physical examination was required. Both the students and the SPs were blind to the fact that non verbal behaviour was being studied. Every consultation was videotaped and timed to ten minutes with a mechanical timer.

At the end of each consultation the student recorded on a Likert scale of 5 to 1, - from *definitely yes* to *definitely no*, their response to the question: "Do you think you communicated well with this patient?" A high score meant perceived good communication.

Also at the end of each consultation, when SPs left the consulting room they were asked to answer "in role" a six item measurement of "enablement". This measurement was described by Howie et al (1997) to define the patient's feelings of confidence, ability and coping after a consultation. A mean enablement score was created from the points for the questions.

The SPs were asked: "As a result of your visit to the doctor today, do you feel you are:

Able to cope with life?

Able to understand your illness?

Able to cope with your illness?

Able to keep yourself healthy?

Confident about your health?

Able to help yourself?"

The options given for the first four questions to select were: *much better* (2 points), *better* (1 point), *same or less* (0 points). The options given for the SPs to select

for the last two questions were: *much more* (2 points), *more* (1 point) and *same or less* (0 points).

Kaplan et al (1995) have defined and measured a physician participatory decision making style (PDM). They defined it as the 'propensity of physicians to involve patients in treatment decisions by providing treatment options, a sense of control over treatment decisions and a sense of responsibility for care'. The first question was: "If there were a choice between treatments would this doctor ask you to help make the decision?" This involved responding on a Likert scale of 5 to 1 where 5 was *definitely yes* and 1 *definitely no*. The second question was: "How often does this doctor make an effort to give you some control over your treatment?" This involved responding on a Likert scale of 5 to 1 where 5 was *very often* and 1 *never*. The third question was: "How often does this doctor ask you to take some of the responsibility for your treatment?" This involved responding on a Likert scale of 5 to 1 where 5 was *very often* and 1 *not at all*. The total scores for the three questions per standardised patient consultation were calculated and a mean PDM score created. The responses were made by the SPs "in role".

Every videotape was observed by the author. Twelve percent of the tapes were used for inter-rater reliability and were observed by another rater as well

who was trained in recording knee positions. The positions of the SP's knee were recorded from the videotape in the following categories: 'knees not crossed at all' and 'knees crossed at some point in the consultation' or 'all the time'.

Results

The entire fourth year class of medical students attended the General Practice Teaching Unit during 1997. Because some students or SPs were ill or scheduling problems arose, 28 students did not have their consultations assessed. This left 126 (78.9%) who had four consultations assessed which was a total of 424 consultations. Because of this sixty three males were included in the research and 13 excluded while 42 females were included and 15 excluded. There was no significant difference between these two groups (Chi square 1.52, df 1, $p > 0.1$) the mean year of birth was 1974.3 (95% confidence ± 4.5) for those included in the research and 1971.4 (95% confidence ± 3.3) for those not included.

In 50% of the 424 consultations, the SP's knees were uncrossed. There was complete inter-rater agreement about knee positions for 12% of the consultations.

The mean student self perceived communication score was 3.5 (SD 0.79). The mean SP enablement score was 5.21 (SD 3.65) and the mean SP participatory decision making score

was 10.57 (SD 2.74). The correlations between the mean student perceived communication score and the SP enablement score as well as the mean SP participatory decision making score are shown in Table 1. The Pearson correlation between the mean SP enablement score and the mean SP participatory decision making score was 0.68 ($p < 0.01$).

Table 1

Correlation between students' perceived communication scores, SP scores of enablement and participatory decision making		
Mean student perceived	Mean SP enablement score	Pearson correlation
2.5	5.21	- 0.14
Mean student perceived communication	Mean SP participatory decision making	
2.5	10.57	- 0.12
Mean SP enablement score	Mean SP participatory decision making score	
10.57	5.21	0.68*

* $p < 0.01$ (2 tailed)

The means of the students' perceived communication score, the SP enablement score and the SP participatory decision making score are shown in Table 2.

Table 2

Students' perceived communication scores, SP scores of enablement and participatory decision making and SP knee position			
	Consultations where SP knees were crossed	Not crossed	t value
Number of consultations	213	211	
Mean student perceived communication score	2.63	2.37	- 3.47 *
Mean SP enablement score	3.98	6.45	7.39 *
Mean SP participatory decision making score	9.62	11.5	7.56 *

* $p < 0.001$

Discussion

While the SP and the student were blind to the assessment of non verbal communication and care must be taken in interpreting the results of the standardised patient's non verbal behaviour. There are no studies which show that SPs have similar non verbal behaviour to real patients. However there is evidence that SPs can assess the communication skills of general practice trainees who subsequently consult with real patients accurately (Pieters et al 1994).

An attempt was made to control for case variability (Van Der Vleuten et al 1990) by giving the students four

consultations each and rotating the students so each saw the same SPs. However the literature only presents a study of students' communication skills and case variability, not self perceived communication skills or perceptions of standardised patients.

The length of the consultation was controlled at 10 minutes because that length of time is common in Australian general practice and length of consultation in the United Kingdom had been associated with the concept of 'enablement'. Howie (1997) found that after controlling for case mix better 'enablement' in Scottish general practices correlated with longer consultations (10 minutes or over). The measure of perceived student communication, enablement and PDM have never been compared with SP non verbal communication before.

There was no association between the student perceived score and both the SP enablement and PDM score. The students had been taught in the sessions prior to this on the value of empowering patients and sharing management in patients with chronic illness. Most of this teaching had been done with video feedback of students' consultations with other SPs. This seems to indicate that the students were unable to link their perception of how well they communicated with their SP's perceptions of enablement and patient decision making ability despite the training.

Three broad types of communication skills have been defined which have been deemed necessary to include in communication skills training (Silverman et al 1998). They are content skills (what doctors communicate), process skills (how they do it) and perceptual skills (what they are thinking and feeling). All of these skills are inextricably linked. One cannot be addressed without the others.

Perceptual skills as previously mentioned are what they are thinking and feeling - the students' internal decision making, clinical reasoning and problem solving; their awareness of feelings and thoughts about the patients and other issues that may be concerning them; awareness of their own self concept and confidence, of their own biases, attitudes and distractions. It seems that the CST the students received did not fully address the perceptual skill of the student in judging their ability to influence standardised patients.

Why did this happen? Is the course too short to improve the students' perceptual skills? Is this "typical" medical student behaviour which cannot be changed? (Gordon 1991, Marteau et al 1991, Gruppen et al 1997). Should we allow even more time for reflective learning?

Incidentally, there was a large correlation between the enablement score and the PDM score in these consultations which gives them good concurrent validity. Howie's enablement score was constructed with careful psychometric work on construct validity and instrument reliability but requires comparison with other measures of patient satisfaction (Toon 1997). In this small study of 424 consultations there was a substantial correlation between enablement and Kaplan's participatory management score. However these were not real general practice consultations. Kaplan's PDM score has been high in patients in the United States who had doctors who gave the more time, had low volume practices and were trained in primary care or communications. These doctors felt they had more professional autonomy than doctors whose patients gave them lower scores (Kaplan et al 1996).

In just over half of the consultations the SPs crossed their knees. We know that two of the SPs had osteoarthritis of the hips and we were aware of some SP's reproducing similar knee positions in many consultations. However each student had an equal chance of exposure to each SP.

What does knee crossing by people mean? Bull (1987) feels that disagreement postures seem to be a vigilant and defensive body closing response to threat and that in disagreement, subjects are more likely to fold their arms

and cross their legs tightly above the knee. This may account for the lower enablement and participatory decision making scores of the SPs when their knees were crossed. More studies are needed to see which direction came first, how many times crossing occurred and when in the consultation they occurred.

These findings are from the videotaped observations of the knee positions of standardised patients. The interrater reliability of these observations was excellent making this an easy way to observe non verbal behaviour in the consultation. However these consultations were not with real patients even though the SPs were playing a story created on their real health problems and the results cannot be extrapolated to the reality of general practice. Studies of knee position and patient scores of enablement etc in real patients are required to be able to inform students who are being trained in communication skills in the future as to whether these findings are part of non verbal behaviour in patients in real consultations.

It is disappointing that the student's perception of how well they consulted was not linked to positive perceptions of SP enablement or participation decision making.

As previously mentioned eye contact is easily assessed by looking at videotaped consultations. In the following two studies the duration of student eye contact with the standardised patients at the beginning of the consultation is assessed. In the first study 768 consultations were assessed with various SPs and in the second 105 consultations with the same SP.

STUDY X

6.4 The views of Standardised Patients about fourth year medical student consultations related to how long it took for the student to look away from them to the medical record at the beginning of the consultation

Counsellors and physicians who use more eye contact in their consultations have been regarded by patients as more empathetic and this has led to greater patient satisfaction.

In studies of empathy in consultations by counsellors, eye contact and other variables have been shown to be linked to higher counsellor empathetic quality ratings by the patient (Haase et al 1972, Seay et al 1979, Tepper et al 1978 and Tipton et al 1978). It has been suggested that the non verbal cues of the counsellor (eye contact, gestures, forward lean, smiles) are more important in a consultation than verbal cues (like psychological jargon, interpretations, self disclosure and reflections) (Robbins et al 1985).

When a physician spends less time reading the patient's notes and shows greater non verbal interest as well as leans forward, is physically closer and nods more, patients report greater satisfaction. Eye contact, in particular, has been shown to be positively related to ratings of counsellor respect and genuineness (Kelly et al 1980). It can be a behaviour in a psychotherapy setting that is part of immediacy - a positive involved relationship between interactants (Anderson 1985).

Also doctors who maintain a moderate level of eye contact with their patients and who directly face their patients have been regarded as more empathic, interested and warm (Harrigan et al 1985). Doctors who are skilled in non verbal communication are more popular and have more satisfied patients who keep their appointments (Dimatteo et al 1980, Dimatteo et al 1986, Larsen et al 1981).

As well eye contact can help the doctor pick up common psychopathological states like anxiety and depression. Many primary care consultations involve treatment of psychosocial problems. It is a fact that general practitioners are often the first contact for patients suffering from difficulties needing psychotherapy. Hence awareness of non verbal behaviour associated with psychopathology is essential.

In patients with depression eye contact is less both when the patient is listening and speaking (Hinchcliffe et al 1970, Rutter 1973). As the depression lifts an improvement occurs most notably in eye contact, smiling, general movement and speech rate (Ellgring 1986, Hinchcliffe et al 1975). Also it is possible that decreased eye contact from the patient may be a non verbal behaviour for anxious patients (Jurich et al 1974).

Apart from eye contact being important in the diagnosis of depression and anxiety there is evidence that patients during the greeting phase of the consultation are more likely to show hand to body self touching if they have a "hidden agenda" (Shreve et al 1988). This is not only for rapport enhancing (Tickle-Degnen et al 1989) but also for more accurate diagnosis of "hidden agendas".

Research by Heath (1984) suggests that patients withhold speech until they have secured the gaze of the doctor. By influencing the doctor to turn from the medical records to the potential speaker, the doctor can demonstrate his or her preparedness to attend, to receive the activity of the speaker.

Heath's studies also found that the patient could encourage the doctor to realign his gaze, simply by withholding talk; for example by not immediately replying

to a question or pausing within the course of an utterance. By doing this, the patient can encourage the doctor, to shift his attention, to display receptiveness.

Body movement is also used to encourage the doctor to realign the doctor's gaze. Various forms of physical movement by the patient are used on different occasions to achieve gaze by the doctor. Heath found that the movements which serve to attract the gaze of a "co-participant" stand out from other forms of non verbal behaviour in various ways. Often they alter the spatial arrangement of the interactants. The movements have been shown often to alter the spatial arrangements of the participants by moving body parts closer to the field of vision of the recipient.

Another way to attract another's gaze is to alter the rhythmical structure of the interaction. Condon et al (1967) have shown how people develop co-ordinated rhythms of movement that remain stable for periods within social interaction. To attract gaze the person alters the pace of the surrounding movement and this becomes dis-coordinated from the preceding flow. A movement which services to elicit the gaze of a co-participant is the servant of the activity with which it occurs.

So when the doctor looks at the medical record or the computer screen the patient will often withhold speech or

produce changes to the structure of the utterance. There may be an increase in gestures by the patient. Also there is some evidence in Heath's work that information told to the doctor while he is reading the medical record is frequently missed. It was suggested that doctors postpone using the records until at least the completion of talk about a certain matter by the patient.

There are gender differences in gaze. Men break eye contact more often than women (Bente et al 1998, Ellyson et al 1981, Hall and Halberstadt 1986). In contrast to male interactants, female interactants show prolonged gaze during the partner's speech, while males tend to look away from their partner, even when she is speaking. Also a man's gaze precedes a woman's body movement more than vice versa. Women are also more likely to interrupt their body movement when male partners look away. Gaze takes a special place in non verbal communication. In Western society gaze is regarded as a positive value when two people communicate: listeners are expected to look at the speaker, and speakers occasionally look at the listener to check whether information is being understood.

Verhaak (1988) has shown in a large observational study (n=1524) that general practitioners show more patient directed gaze when discussing psychosocial topics compared to somatic topics.

In a study of 103 videotaped general practitioner consultations the proportion of gaze was the strongest discriminating factor between consultations with high versus low psychosocial quality assessments (ie stronger than verbal forms of affective behaviour), and between consultations with high and low satisfaction on the part of patients (Bensing 1991).

The same author has shown a positive relationship between gaze and consultation length (Bensing et al 1995). The total amount of gaze was related positively to all categories of general practitioner verbal behaviour measure. There were higher correlations for general practitioner empathic behaviour and general practitioner instrumental behaviour on psychosocial topics than for general practitioner social behaviour, medical concern and general practitioner instrumental behaviour on somatic topics. The relative gaze (proportion) was found to positively correlate with general practitioners' verbal empathy and medical concern but not with their social behaviour.

Gaze was positively related to the amount of talking the patient does both in absolute terms, as well as relative to the general practitioners' speaking time. It was also shown that in consultations with high gaze, more health problems were presented by the patient. The higher

number of health problems were completely attributed to the greater number of psychological and social problems. The health problems were recorded using the International Classification of Primary Care (ICPC) (Lamberts and Wood 1987). The higher number of health problems were found in chapters L (psychological) and Z (social) of the ICPC.

Also gaze was more prominent when the general practitioner knew previously that the patient had a psychosocial problem, and led to more patient satisfaction in a study of rapport expressed through non verbal behaviour (Harrigan et al 1985).

However too much gaze can produce negative results in patients. Family medicine residents who were from the University of Cincinnati in 1980 were videotaped in interviews with a new and a return-visit patient. Two coders recorded non verbal behaviour performed by the residents for two, one minute segments of each interview. Amongst categories of movement - proxemic behaviours of distance, orientation and trunk lean, and head, hand/arm and leg/foot movement facial expression - there was also measure of direction of gaze.

Each of the 36 video segments were rated by a group of psychiatric nurses using bipolar adjective scales assessing dimensions of rapport. Significant differences in non verbal behaviour were noted between high and low

rapport doctors. Doctors were rated more positively when they sat directly facing the patient, with uncrossed legs, and arms in symmetrical side by side positions. High rapport doctors also engaged in moderate but less extensive eye contact with the patient, than low rapport doctors (Harrigan et al 1985). The doctors who engaged in more eye contact with the patient were judged as less empathetic. This result contradicts the work of Mehrabian (1972) which found that mutual gaze indicated a high level of immediacy.

In Harrigan's study the high rapport doctors engaged in less eye contact with their patients but more varied gaze patterns. These doctors were more likely to look at the patient when the patient was gazing away while talking. They also had more contact with the patient's chart and this resulted in a greater amount of gaze toward the chart. Harrigan postulates that doctors who use the chart to some extent are regarded as more diligent, conscientious and occupied in the task at hand.

Patients tend to present only their physical symptoms in general practice and the uncovering of psychosocial problems is not a straight forward matter. This needs special effort and special techniques (Bensing et al 1994). Bensing et al (1995) recommend from their study of general practitioner gaze that training in communication skills should be extended to include non

verbal techniques, gaze in particular. Previous research shows that this can be done to some effect (Bensing et al 1985, Gask et al 1987). With this in mind we set out to look at the impact, if any, of our students' introductory behaviour in consultations.

This study examines the views of Standardised Patients (SPs) about Fourth Year Medical Student consultations related to the introductory behaviour of the student. It sets out to find if SPs believe the student is a good communicator and if this is linked to the duration of the students' introductory behaviour. It also tries to find if this duration of student introductory behaviour influences the SP perception that they would go to this student as a doctor in real life.

Method

Throughout 1999 a group of 117 fourth year medical students attended a communication skills course at the General Practice Teaching Unit in South Australia where they consulted standardised patients. The introductory behaviour in these consultations was measured by stop watch for the students at the beginning and the end of the course by studying videotapes of the consultations. The observer watching the videotapes activated the stopwatch when the SP sat down in the chair in the consulting room at the beginning of the consultation. It was stopped after the student had settled into his or her

chair and stopped moving and the student had subsequently broken eye contact with the standardised patient (SP). This was called introductory behaviour and was measured in seconds.

Each consultation lasted 10 minutes (determined by a kitchen timer on the consulting desk). Each student had 8 consultations, 4 at the beginning of the course and 4 at the end. All students rotated through consultations with the standardised patients who were trained and checked to reproduce the same clinical story each time. The clinical stories were taken from the patient's real medical history. The course lasted five mornings.

Another observer who was trained, recorded the time of student introductory behaviour for some consultations to ascertain inter-rater reliability.

After the consultation the SPs were handed 2 written questions in the waiting room. The questions were "from this consultation did you find this doctor a good communicator?" and "from this consultation would you be happy to consult with this doctor in a real life situation?"

Results

There were 96 students out of a total of 117 who consulted with SPs 8 times (4 times at the beginning of

the course and 4 times at the end). Of the 96, 54 (57%) students were male and 42 female (43%). Forty nine students (52%) were aged 22 years and over and 47 (48%) 21 years and under. There was no significant difference in the groups by sex in the 96 students compared with the 117 (Chi square 0.2 df 1 $p > 0.1$). Nor was there a significant difference in the groups by age in the 96 students compared with the 117 (Chi square .01 df $p > 0.1$).

The 96 students conducted 768 consultations with the SPs, 384 at the beginning of the course (Monday) and 384 at the end (Friday). In every group of 4 students each student consulted 4 times at the beginning and 4 times at the end. Each SP saw every student but there was a different set of SP's at the end of the course. Forty six percent of the SP consultations were with female SPs at the beginning of the course compared with 67% at the end (Chi square 35 df 1 $p < 0.01$).

Inter-rater reliability was assessed by comparing the observations of 94 (12%) of the total 768 consultations with those of another trained rater. The weighted Kappa for inter-rater agreement for the duration in seconds of the introductory behaviour of students in the consultation was 0.99.

There was no significant difference in mean introductory behaviour of the student in seconds before and after the course. The means were 61 (SD 77) and 71 (SD 106) respectively (paired t test, $t = -1.5$, $p > .12$).

There were 53 SP responses which were negative about the student being a good communicator and 331 positive responses in the 384 Monday consultations. The mean introductory behaviour in seconds was 70.7 (SD 96.3) for negative response and 59.4 (74) for positive response. This was not a significant difference (t test for unrelated samples 0.8, $p > 0.1$).

There were 23 SP responses which were negative about the student being a good communicator and 361 positive responses in the 384 Friday consultations. The mean introductory behaviour in seconds was 42.6 (SD 45.3) for the negative response and 72.8 (SD 109) for the positive response. This was a significant difference (t test for unrelated samples -2.7 $p < 0.01$).

There were 82 SP responses which were negative about going to that student as a doctor and 302 positive responses in the 384 Monday consultations. The mean introductory behaviour in seconds was 70.3 (SD 82.6) for negative response and 58.5 (SD 75.9) for positive response. This was not a significant difference (t test for unrelated samples 1.17 $p > 0.1$).

There were 46 SP responses which were negative about going to that student as a doctor and 338 positive responses in the 384 Friday consultations. The mean introductory behaviour in seconds was 38.4 (SD 36.7) for negative response and 75.4 (SD 111.9) for the positive result. This was a significant difference (t test for unrelated samples $-4.5 p < 0.001$).

For all the 768 consultations the mean number of seconds for introductory behaviour by male students was 59 seconds (SD 81) and for female students 75 seconds (SD 106). This was a significant difference (t test $-2.2 p < 0.03$).

At the beginning of the course 331 (86%) of the 384 consultations were rated positively by the SPs in response to the question: "From this consultation did you find this doctor a good communicator?" This number rose to 361 (94%) of the 384 consultations at the end of the course (McNemar's test Chi square 5.6 df 1 $p < 0.02$).

Also at the beginning of the course 302 (79%) of the 384 consultations were rated positively by the standardised patients in response to the question: "From this consultation would you be happy to consult with this doctor in a real life situation?" This number rose to

338 (88%) at the end of the course (McNemar's test Chi square 14.5 df 1 $p < 0.001$).

Discussion

There was no significant link between introductory behaviour and the positive feedback of the standardised patients relating to the student as a good communicator at the beginning of the course, but there was at the end. Also while there was no significant link between introductory behaviour and the positive SP feedback about being happy to consult with this student in real life at the beginning of the course, there was a link at the end. Whether this was due to improved consulting skills by the end of the course is not clear. However in the literature, a study of Dutch general practitioners has found that a greater proportion of gaze in the consultation by the practitioner is linked to positive empathy and medical concern (Bensing et al 1995). However, the results are very difficult to interpret as there were no consistent directions in the duration of introductory behaviour and SP views. This may possibly be due to the mixture of behaviours which occurred during the introductory behaviour period. A gender difference in the SPs at the end of the course may have been a factor but this assumes that female SPs are kinder than males with giving students feedback. More study is needed in the area of SP feedback and gender.

There was overall a difference in gender for student introductory behaviour. Female students maintained initial gaze longer and other studies on gaze have similar findings for overall gaze (Bente et al 1998, Ellyson et al 1981, Hall et al 1986).

There was no control group with which to compare changes in SP feedback. As mentioned the SP feedback was more positive about student communication and the idea of being happy to go to that student as a doctor in real life by the end of the course. It would be worthwhile using a control group which was given the same standardised patients but no CST to see if there was a link between introductory behaviour and measures of SP satisfaction.

The training in this course did emphasise non verbal communication and video feedback helped students understand this. If there was to be inclusion in a future curriculum of introductory behaviour including eye contact as a form of non verbal communication, it is difficult to know what the ideal duration of this should be.

The literature emphasises the importance of eye contact in the consultation. This study concentrated on student introductory behaviour initially in the consultation at a time when it could be argued that building rapport with

the patient (SP) is very important. The training did not appear to increase this form of behaviour and only one link was found with it and positive feelings of the SP which was at the end of training. More studies are needed in real consultations and measures of duration of student or doctor gaze should be undertaken right through the consultation, not just at the beginning. Studies of student and SP gender need to be done to see if this influences duration of introductory behaviour based on various gender dyads of student and standardised patients.

STUDY XI

6.5 Is there a correlation between introductory behaviour in the consultation, subsequent use of open ended questions by the student and the standardised patient's sense of "enablement" and satisfaction?

In the general practice consultation the patient usually sits near the doctor's desk. On that desk are the patient's details about medical history or attendances which are in the written records or a desk computer. The doctor may look at these notes or the computer not only before the consultation, but during it and there is evidence that when this happens during the consultation patients withhold speech, change the structure of their utterance or increase gestures. Information given to the doctor while the doctor's gaze is diverted is frequently missed (Heath 1984).

Doctors who maintain a moderate level of eye contact with their patients and who directly face their patients have been considered more empathetic, interested and warm and such doctors seem to be given more psychosocial problems by their patients (Harrigan et al 1985). Relative gaze has been found to positively correlate with general practitioners' verbal empathy and medical concern (Bensing et al 1995). Also research by Heath (1984) suggests that patients can withhold speech until they have secured the gaze of the doctor. By influencing the doctor to turn from the medical records to the potential speaker, the doctor may be allowed to demonstrate his or her preparedness to attend, to receive the activity of the speaker.

The clinical interview skills of general practitioners can be linked to their psychodiagnostic ability in consultations. Active listening (which among other things includes eye contact) and the ability to ask questions with psychological content have been shown to be associated with the ability to identify patients' emotional problems (Giron et al 1998).

One measure of outcome of a consultation with a general practitioner is "enablement". A measure of "enablement" has been described by Howie et al (1997) to define patients' feelings of confidence, ability and coping

after a consultation. At the consultation level, enablement correlates best with the duration of consultations and how well the patient knows the doctor. These correlates apply at a general practitioner level as well - more enabling doctors work in smaller practices than less enabling doctors (Howie et al 1999).

It is not known if there is any correlation between standardised patient enablement measures at the end of the consultation and the eye contact of the student (who has been asked to behave like a general practitioner). Nor is it known if the number of open psychological questions asked by the student or the perception by an SP about the student's communication skills or the perception of the SP that she would go to that student if he or she were a doctor are correlated with enablement.

Asking open ended questions about feelings is an important part of the general practice consultation. If the doctor uses closed ended questions there seems to be a lessening of patient satisfaction, increased absenteeism from work and increased functional limitation (Hall et al 1998, Kaplan et al 1989). During history taking patients who are allowed to give the doctor information in their own words rather than by answering the doctor's closed questions have good patient satisfaction and compliance and good measurable health outcomes such as systolic and diastolic blood pressure

lowering (Cecil et al 1997, Orth et al 1987). There is no information concerning correlation between eye contact at the beginning of the consultation by the person in the role of the doctor and subsequent asking of open ended questions by that doctor. Nor is there any known correlation with such eye contact and whether a standardised patient would go to that student if he or she were a doctor in reality. This study attempts to do this with one standardised patient who was interviewed by 105 medical students.

Method

Through 1999 a group of 105 out of 118 Fourth Year medical students (89%) who had neared completion of a communication skills training course at the Modbury General Practice Teaching Unit in South Australia interviewed the same standardised patient (SP). Each student interviewed the SP on their own. The SP reproduced the same story for each consultation and this was frequently checked throughout the year to ensure that it remained the same. Each consultation lasted 10 minutes and this was ensured by having a timer on the consulting room desk. At the end of each consultation the SP filled out an enablement questionnaire (Howie et al 1997) which was subsequently scored. The questions asked in this questionnaire were as follows: As a result of your visit to the doctor today, do you feel you are:

Able to cope with life?

Able to understand your illness?

Able to cope with your illness?

Able to keep yourself healthy?

These statements were given 2 marks for Much better, 1 for Better and 0 for Same or Less. Also statements that were asked about asked were:

Confident about your health?

Able to help yourself?

These statements were given 2 marks for Much more, 1 mark for More and 0 marks for Same or Less. All the marks were added together to create an enablement score for that consultation. All these consultations were videotaped and the SP was blind as to the purpose of the research to be conducted on the videotapes. Also the SP was asked: "Would you go to this doctor if this was a real situation?"

The introductory behaviour of the student with the SP at the beginning of the consultation was later measured by an observer with a stop watch who observed the videotapes of the consultations. The observer watching the videotapes activated the stop watch when the SP sat down in the chair in the consulting room at the beginning of the consultation. It was stopped after the student had

settled into his or her chair and stopped moving and the student had subsequently broken eye contact with the SP. This was called introductory behaviour and was measured in seconds.

The observer also recorded all of the open ended psychological questions asked by the student during the 10 minute consultation. Both the introductory timing and the observation of open ended psychological questioning were observed for 13 consultations by another trained rater for inter-rater reliability.

Results

There were 105 students who consulted the SP. Fifty eight percent were male (61) and 42 percent female (44). The mean introductory behaviour for the 105 consultations was 27.08 seconds (SD 37.81) and the mean number of open psychological questions 0.30 (SD 0.57). The mean enablement score was 4.43 (SD 3.59). The mean introductory behaviour in seconds for males was 21.95 (SD 12.3) and females 34.2 (SD 56.2) seconds ($t = -1.4$ p 0.16). The mean number of open psychological questions asked by males was 0.23 (SD 0.56) and females 0.39 (SD 0.58) ($t = -1.39$ p 0.17).

Twelve percent (13) of the 105 videotaped consultations were assessed for inter-rater reliability. There was perfect agreement between the raters for the number of

open ended psychological questions asked by the students in these consultations. The weighted kappa statistic for inter-rater agreement about the number of seconds of the students' introductory behaviour in these consultations was 0.99.

The correlations between introductory behaviour and open ended psychological questions, enablement, SP perceived communication ability of the student and whether the SP would go to this student as a doctor are shown in Table 1. Similar correlations are shown in this table for open ended questions and the above and enablement and the above. There was a substantial correlation between enablement and the SP perception that the student communicated well ($p < 0.01$) and between enablement and the perception that the SP would go to this student if he or she were a doctor ($p < 0.01$).

When the student's sex was taken into consideration there was still a correlation between enablement and communication (Pearson 0.37 $p < 0.01$) and enablement and going to that student as a doctor (Pearson 0.47 $p < 0.01$) for males. For females (Pearson 0.29 $p = 0.058$) between enablement and perceived communication and (Pearson 0.058 $p < 0.01$) for going to that student as a doctor.

Table 1

CORRELATIONS		Pearson	<i>p</i>	
Introductory behaviour	with Enablement	0.14	0.15	NS
	with "Thought this doctor communicated well"	0.09	0.34	NS
	with "Would go to this person as a doctor"	0.11	0.27	NS
	with "Open ended psychological questions"	0.11	0.25	NS
Open ended psychological questions	with "Enablement"	0.12	0.24	NS
	with "Thought this doctor communicated well"	0.10	0.31	NS
	with " Would go to this person as a doctor"	0.06	0.53	NS
Enablement	with "Thought this doctor communicated well"	0.34	0.01	*
	with "Would go to this person as a doctor"	0.51	0.01	*
* significant				

Discussion

This study used only one standardised patient, which was a major limitation to extrapolating the results because of absence of case variability. The feelings expressed by the SP were simply those of one person. The performance of the SP was checked over the 12 months and she did not deviate from her story.

The consultation she portrayed was very close to her own health. It starts as she is coming back to the doctor (student). The student was asked beforehand to behave as a locum doctor would. On the desk were results of tests which in the story had been ordered by her doctor previously. The SP asks the student about the tests and has questions about her hot flushes. She was diagnosed (in both the story and in reality with breast cancer 9 years previously) and asks if she can use hormone replacement therapy.

There was a significant correlation between the perception by the SP that the student communicated well in the consultation and the concept of "enablement". This also occurred with the perception by the SP that she would go to this student if he or she was a doctor. Howie's enablement score is a new primary professional care outcome measure that has been extensively trialed in the United Kingdom, especially in Scotland. While it has been shown to be related to satisfaction measures the Medical Interview Satisfaction Scale (MISS) and the Consultation Satisfaction Questionnaire (CSQ), it is different from general satisfaction (Howie et al 1998). In a study of SP perception of medical student consultations (Moorhead 2000) a correlation has been found between enablement and participatory decision making scores. The participatory decision making score (Kaplan et al 1996) has been reported as higher in

patients whose doctors gave them more time, had low volume practices and were trained in primary care or communication skills. Enablement has been shown in individual consultations to be most closely correlated with duration of the consultation and knowing the doctor well. A British study of general practitioners has shown that individual doctors had a wide range of mean enablement scores (1.1 - 5.3) (Howie et al 1999).

The mean enablement score from the SP for the students in this study was 4.43. In this study the duration of the consultation was fixed at 10 minutes and the student had never met the SP before. There clearly are other elements to enablement that are not directly related to time or familiarity with the "doctor" for this standardised patient. In this study enablement was not correlated with introductory behaviour by the student nor the asking of open psychological questions. We wondered if the female SP would favour female students but analysis found no difference between the sexes for the correlations between enablement and thinking the doctor communicated well and enablement and whether the SP would go to that person as a doctor.

In conclusion this initial study is limited by the use of only one standardised patient. For this SP isolating certain measures in the consultation and correlating them produced few significant correlations. This seems to

indicate that the SP's perceptions in the consultations were more complex than I thought they would be. Future studies using more SPs or real patients should concentrate on any factor that is measurable in the consultation that correlates with enablement as this is easily measured in general practice.

At the conclusion of Chapter 5, it was stated that care needs to be taken if the students' perceived confidence in their ability to communicate does not match their actual consulting behaviour. In this chapter (Chapter 6) one study has shown that the students' perception of how well they consulted was not linked to the positive feedback of their standardised patients (using enablement and patient decision making scores). The following study examines the hypothesis that fourth year medical students' stated beliefs about psychological orientation to wards consulting are related to the number of psychological questions that they asked in their consultations and also their standardised patients' feelings of enablement from the consultation.

STUDY XII**6.6 Perceptions of fourth year medical students about psychological aspects of consulting compared with their actual behaviour and standardised patients' feedback**

With the increase in the Western world of the number of people suffering from chronic illness there has been a need to train medical students in the mutual participation model of consulting (Sasz and Hollender 1965). In a meta analysis of the history taking part of the consultation the majority of studies have shown positive patient outcomes with relation to the doctor asking questions particularly about the patients' complaints, concerns, understanding of the problem, expectations, impact and feelings; the doctors showing support and empathy; the patients being involved by expressing themselves completely; and the patients perceiving that a full discussion of the problem had taken place (Stewart et al 1995). The effective aspects in the management phase of the consultation (finding common ground) were patients asking more questions and being successful at getting the information they needed; information programs/packages for patients; doctor use of information with support; physician willingness to share decision making with the patients and agreement between patient and physician about the nature of the problem and need for follow up.

There may be some barriers to training students in this model because of confusion in the values of medical schools about the roles of the doctor as a problem solver and a care giver Moorhead et al (1991). Indeed Hoppe et al (1990) have shown the difficulty interns have translating Stewart's findings into their consultations. The interns studied showed high scores on attitudes and knowledge regarding counselling compared with inadequate performances. The university teaching hospital in some medical schools is the main teaching environment for undergraduates, and the role models seen by students of the doctor patient relationship may be more towards the active passive rather than mutual participation.

A relationship has been noted between the perceptions of general practitioners about patient centredness, responsibility for patient management and certain outcomes of consulting. Howie et al (1992) in a study of 21000 consultations found that 3 dimensions of an Australian questionnaire (Cockburn et al 1987), responsibility for decisions (patients considered more responsible), psychological orientation (of the doctor) and appropriateness of consultations were variously associated with longer consultations, lower prescribing rates and a greater recognition of psychological issues as relevant to a consultation. There are few studies that look at student beliefs and their subsequent behaviour in general practice consultations. This study

measures student beliefs with subsequent consulting behaviour and the perceptions of enablement by their standardised patients.

Aim

The aim of this study is to test the hypothesis that fourth year medical students' stated beliefs about psychological orientation are related to the number of psychological questions open and closed that they asked in these consultations and also their standardised patients' feelings of enablement from the consultation.

Method

A questionnaire was administered to 128 fourth year medical students before they commenced their General Practice Teaching Unit attachment.

The questions used were from the section of Cockburn's questionnaire on the psychological orientation of the doctor.

The section on the psychological orientation of the doctor consisted of three questions and these were:

1. Patients are more likely to follow my advice concerning their physical complaints than advice concerning their social or emotional problems.

2. I usually don't attempt to help patients with psychological problems because they are the result of life situations over which I have no control.

3. I think that it is my job to treat physical disease and to leave tasks such as counselling to other professions.

The students were asked to respond to these statements according to a Likert scale of 7 categories which ranged from 1 = Agree strongly to 7 = Disagree strongly.

Each student then consulted with four standardised patients who had been trained to play a role identical or extremely close to their own health problems which were almost all related to chronic illness. Each consultation was timed to ten minutes with a timer and the students rotated through the same standardised patients (although each week there were different students and standardised patients). The consultations were videotaped and open and closed psychological questions classified by raters who were blind to the students' perception of psychological orientation. The questions were taken from a questionnaire created by Gask et al (1988). Gask's example of an open psychological question was: "How are you feeling?" and of a closed psychological question: "Are you depressed?" Interater reliability was assessed

on an eighth of the consultations by another trained rater.

At the end of each consultation the standardised patient (who was also blind to the students' perceptions and who had never met the student before) filled out the enablement form from which a score was calculated. The enablement form used for the standardised patients had been assessed in a general practice fund holding setting in Scotland (Howie et al 1995). In the enablement questionnaire the following questions were asked:

1. As a result of your visit to the doctor today, do you feel you are:

Able to cope with life?

Able to understand your illness?

Able to cope with your illness?

Able to keep yourself healthy?

The answers were: *Much better, Better, Same or Less* and were scored 3,2 and 1.

2. As a result of your visit to the doctor today, do you feel you are:

Confident about your health?

Able to help yourself?

The answers were: *Much More, More and Same or Less*
3,2 and 1.

Results

Out of the 128 students 109 completed the questionnaire and consulted with 4 standardised patients (436 consultations). There were 69 (63%) male and 40 (37%) female students the average age was 22.9 years. There was no correlation between the psychological orientation score of the student and the total number of open psychological questions asked in 4 consultations (Table 1). There was also no correlation between the student's score and the number of closed psychological questions asked in 4 consultations. There was no correlation between the psychological score of the student and the standardised patients' enablement score. The weighted Kappa for inter-rater reliability for open psychological questions was 0.81 and for closed psychological questions 0.95.

Table 1

Correlation between students' psychological orientation, psychological questioning and SP enablement		
Mean student psychological orientation score	Mean open psychological questions	Pearson
14.9	1.8	0.03
Mean student psychological orientation score	Mean student closed psychological questions	
14.9	4.1	0.08
Mean student psychological orientation score	Mean SP enablement score	
14.9	15.2	- 0.12

There was no correlation between the SPs' total enablement score and the number of open ended psychological questions asked by the student (Table 2) and there was no correlation between the SPs' total enablement score and the number of closed psychological questions asked by the student.

Table 2

Correlation between students' psychological questioning and SP enablement score		
Mean SP enablement score	Mean student open psychological questions	Pearson
15.1	1.8	0.05
Mean SP enablement score	Mean student closed psychological questions	
15.1	4.1	- 0.08

Discussion

The psychological orientation score of the student did not seem to be correlated with the enablement of the standardised patient. This may mean that there are other factors in the consultation that affect enablement. It could also mean that students' perception of their psychological orientation as a doctor in the consultation does not translate into the standardised patients' enablement score because the students' beliefs are not linked to appropriate consulting behaviour. Also there was no correlation between the standardised patients' total enablement score and the number of open psychological questions asked by the student. There was no positive correlation between the students' psychological correlation score and the asking of open psychological questions by them in the consultation nor was there a negative correlation between the standardised patients' enablement score and closed psychological questions asked by the student in the consultation.

It seems that Cockburn's questions on psychological orientation of the doctor in consulting in this study do not predict how the student will ask open ended and closed ended psychological questions. It seems that again students perceptions of some aspects of consulting do not translate into the way they question SPs and has no correlation with SP enablement.

In the previous chapter we have shown that increasing video and SP feedback can increase the number of open ended psychological questions the student asks in the consultation. If Cockburn's questionnaire had identified a poor orientation to the psychological aspects to the consultation it may be that more video and SP feedback for these students could improve this as well as improve consulting behaviour. However this did not occur.

Open ended questions asked by doctors have been shown to make patients happier with the information gathering phase of the interview (Stiles et al 1979). They have also been shown to detect psychiatric disorders more accurately (Goldberg et al 1983). Cancer patients disclose more of their worries when doctors use open rather than leading questions (Maguire et al 1996) and parents of children in a psychiatric clinic give doctors more sensitive information when open questions are used (Rutter 1981).

Relying on students' perceptions about their psychological orientation to consulting in a general practice setting seems dangerous as it seems this does not correlate with asking psychological questions nor does it correlate with 'enabling' their SPs.

6.7 Conclusion

Some forms of non verbal behaviour seem easy to visualise. It seems that half of the SPs crossed their knees in the consultations in one study. When the SP's knees were crossed their enablement and participatory decision making scores were lower. When the students' initial eye contact was longer the SP feedback at the end of the Communication Skill Training was more positive (considering the student to be a good communicator and happy to consult with this student in real life). However when this study was repeated on one SP this did not occur.

The students' perception of how well they consulted with the SP and also the students' perceptions about their psychological orientation towards consulting did not link to the SP feedback (enablement score). More research is needed to help medical students improve their self assessment abilities. Gordon (1991), feels that the ability to self assess one's learning needs is fundamental to self directed, life long learning as well as continued competence in the ever evolving health professions. In a meta analysis of student self assessment studies, he found a generalised student over confidence about knowledge. Also it was found that although health professions' trainees do acquire professional behaviours, it appeared not to be the case

that they become more accurate in applying to themselves the evaluative criteria and standards of their supervisors. There was evidence that trainees judged others by their performances and themselves by their perceived capacities.

This thesis shows that more research is needed to help students make better judgements of their own consulting ability.

CHAPTER 7**SUMMARY OF RESULTS AND DISCUSSION AND A PERSONAL VIEW ON THE
FUTURE OF UNDERGRADUATE GENERAL PRACTICE TEACHING**

This final chapter contains firstly a summary of results of the studies in the thesis followed by a discussion of the strengths and weaknesses of the findings and recommendations areas that need future research. This is followed by a personal reflection on the future of general practice undergraduate teaching and how (if possible) interpersonal consulting skills will fit into this.

7.1 Summary of results

This thesis represented a series of perspectives of communication skills training in a general practice setting. These perspectives included studying patients, medical students and standardised patients. Themes included the importance of Communication Skills Training (CST) in general practice, reasons for teaching CST, improving CST outcomes, medical students' beliefs and non verbal communication.

In the first chapter of the thesis the literature was described concerning the modern medical school and CST. Also described was the change in educational outlook in Western medical schools as a background for CST. At Modbury General Practice Teaching Unit in South Australia until 2000 we were fortunate to be sent 1236 medical

students who were entering their clinical years. This Unit was created as the result of new Medical Faculty thinking at the University of Adelaide about the curriculum. Despite generous support from the South Australian Government, it was closed 10 years later because of a lack of Medical Faculty funds.

Over this time we had the opportunity to try to help the students to integrate the clinical biomedical approach to patients with good consulting skills. We gave each group of students 20 hours of CST during which time they consulted 12 standardised patients each. Video feedback was frequently given to the students as well as SP feedback. The students consistently rated this type of learning very highly and they reported very high regard for the experience with SPs. We felt this high regard was due to careful training of the SPs and using them to present in the consultation with their real chronic health problems as well as using their own Xrays and test reports. This environment created not only learning opportunities which helped students' actual consulting behaviour but research into videotaped consultations between student and standardised patients.

In the second chapter the question was asked: "Why teach communication skills?" In a general practice setting it was felt that the consultation was the doctor's most important and intimate professional activity. Good

communication skills are needed for this. In a 40 year career, it has been estimated that the average practitioner consults with patients 120,000 to 160,000 times. Also patients in consultations who expressed their feelings have been shown in general practice to be more satisfied and compliant with management of their condition. With only up to 50% of patients complying with a management regime or a healthy lifestyle change, it seems important that patients feel comfortable in discussing their feelings and emotions with their usual general practitioner.

As a result the first thesis study was a personal interview of a sample of 3004 South Australians. There were asked, "When you see your usual general practitioner, how comfortable would you be in discussing your feelings and emotions?" It was found that almost all of the respondents stated that they had a usual general practitioner and there was a non linear trend for perceived comfort to increase with age group.

The group that needed further study was from 15 - 29. Twenty-five percent of the respondents in this group expressed discomfort in discussing feelings and emotions with their usual general practitioner. These findings were disturbing as the risk of suicide in this age group in both South Australia and also nationally was very high.

This study was part of an Omnibus Survey conducted by the South Australian Health Commission. The sampling frame was based on Australian Census data. Of the households sampled, 89% could be contacted. But not all those interviewed chose to answer the survey question and the 3004 people who did reply were not a representative sample of the South Australian population

At a result of these findings, we endeavoured to find volunteer patients who had experienced major depression and were in that age group. Apart from a young mother who had experienced post natal depression, we were unsuccessful.

In the third chapter the literature about how doctors' communication skills can influence patient outcomes was described. Included in this were studies demonstrating that CST could improve medical students' communication skills. However, many of these studies lacked a control group. Consequently in the next study in the thesis fourth year medical students were studied in two groups by randomisation. In one they received more videotape feedback. The pre and post measures were the number of probing the problem questions, cue behaviour and information giving during the consultations with the SPs.

There was only one statistically significant difference in student behaviour between the two groups. Before the training the control group asked significantly more open psychological questions than the experimental group. After training, the trend was reversed, ie. the experimental group asked more open ended psychological questions than the control group.

This study suggested that medical students need to receive more video feedback to help them ask more open ended psychological questions than is needed for improving non directive questioning and open social questioning. It can be argued that asking open ended psychological questions is an important part of effective general practice consulting. The literature shows that teaching doctors to ask open ended psychological questions can contribute to reducing ambulatory patients' distress. Maguire has demonstrated the positive long term impact of medical student video feedback, however in this study this did not apply to open ended psychological questions.

It would be useful to follow up the two groups in the thesis study in order to see if the effect of video feedback (more open ended psychological questions) in the students in the experimental group persisted over the years. A good time to measure this could be after graduation, perhaps when as doctors they were doing their

internship. If the behaviour persisted, this could be used to determine how much video feedback should be provided for medical undergraduates. If the open ended psychological questioning persisted, then the next step would be to look at patient outcomes. Using SPs would be an easy way to do this as the structure of the interview basically would be the same for each interview. Using real patients would be more valid but case variability could be a problem.

It is easy to think that videotaping on its own produced the increased open ended psychological questions in the experimental group. However while this group had two more episodes of video feedback, it also had three episodes of verbal feedback from the SP and one analysis in writing of a consultation. There is a human element in feedback here - more so in the experimental compared with the control group.

The undergraduate curriculum in western medical schools has been influenced heavily by Problem Based Learning (PBL). It has been claimed that medical students who learn with this method demonstrate greater psychosocial knowledge, better relational skills and more humanistic attitudes.

With this in mind, a study in this thesis was made on the students to find out if introducing PBL to a segment on

communicating skills training made any difference either to the students' feedback on the qualities of their tutor or the number of open ended psychological questions they asked of their SP. The results indicated that the good tutor feedback remained the same and that the students' consultations were no less biomedically focused (in the sense of fewer open ended psychological questions asked before and after the PBL segment). More comprehensive analysis of student behaviour is needed.

In times of economic difficulty in tertiary education in Australia, Deans of medical schools should be sensitive to the use of volunteer standardised patients in the curriculum. This is why a study was done in the thesis to see what motivated the SPs to volunteer at the Modbury General Practice Teaching Unit. A whole year of fourth year medical students was taught CST on volunteer SPs at this unit each year for nine years at no cost to the University except for the tutorials and feedback. SPs have a structured presentation that enables students to compare their consultations with each other and this is a very helpful learning tool.

The control group consisted of other volunteers working in the same hospital. There was a different set of perceived values in the volunteer standardised patients compared with the controls with less value placed by them on the "enhancement" and "protective" benefits of

volunteering. The SP volunteers contained more males, professionals, associated professionals and tradespeople. This may have been due to our recruitment method which included placing advertisements in the local press. A limitation of the study was that the control group of volunteers was not representative of the Modbury Hospital volunteers.

Several studies in this thesis examined Student Factors in Communication Skills Training. One study looked at the variables of the students' perceived "confidence in communication skills" and "being told that my communication skills are good" and a set of variables thought to be linked to the students' career choice (general practice or the specialities). The variables "confidence in communication skills" and "being told my communication skills are good" were found to be included in one or three factors that were created by factor analysis. This factor was "easy and rewarding work". It is worrying that these variables were not found in the factor "people orientation". This seemed to indicate that confidence in one's communication skills was seen by the medical students in this study prior to their fourth year as one reason for medicine being easy, rather than as a necessary attribute for developing relationships with patients. Further research is needed to see if the CST in the fourth year course made any difference to this. Will video feedback change this belief? Can the

deeper attitudes of medical students be changed? Cohort studies are needed to find this out. The literature on student selection for medical school is still in its infancy. How can medical schools confidently select students who will be caring communicating doctors?

There were further studies on medical student beliefs about aspects of CST before and after training at the Unit. These represented changes in attitude, not necessarily behaviour. In the next study students reported, at the end of CST that they felt it was easier to ask patients about their feelings and about their social history. Is this because such things were not as relevant to them when they previously took a history from a patient in hospital with its biomedical focus and systems review protocol? They also reported that video feedback helped them understand how the patient felt during the consultation and also how they felt themselves. Female students at the end of CST reported that it was harder to make information giving statements more than male students. Future research should examine these student beliefs and compare them with their competence in communicating with either standardised patients or patients. One of the thesis studies on SP body language has addressed this and is described later.

Because videotape was a tool in the student feedback process, the next study investigated how the students

felt about being videotaped. The literature reported how anxious people felt when they were videotaped. The thesis study found that after the CST the students stated that they felt more comfort with seeing themselves on video, receiving feedback from their tapes and they said that they felt more in control when being videotaped. They also felt that their skills in videotaping had improved as well as their understanding of patients' and also their own body language. They also liked more being videotaped with their colleagues present. The groups who felt more uncomfortable than others were female students and younger students. The two previous studies need to be interpreted with caution however as there were no control groups.

The next study on student attitudes did include, in part of the study, a control group. The aim was to find out if students felt confident about being able, with their communication skills, to potentially improve patient care. In the larger uncontrolled group of students there were attitudinal increases in confidence about being able with their communication skills to decrease diabetic patients' glycated haemoglobin, decrease hypertensive patients' diastolic blood pressure, improve patients' emotional health, improve patients' symptom resolution, improve patient's functional status and improve patients' pain control. The smaller group of students showed reported attitudinal increases in confidence about being

able, with their communication skills to decrease hypertensive patients' diastolic blood pressure, emotional health, symptom resolution and functional status compared with a control group of students in the same year who were at the same hospital doing their medical ward attachment. The control group had only an attitudinal increase in confidence about patient symptom resolution. This study was about attitudes only, not student competence in these areas.

The next study (in Chapter 6) attempted to compare students' own perceptions of psychological aspects of consulting with their actual performance in consultation as measured by the number of open and closed psychological questions that they asked. It was found that there was no link between the students' psychological perspective of consulting and their psychological questioning behaviour in the consultation. Nor was it linked to positive SP feedback about that consultation using "enablement" as a measure. It seems that many students had a false sense of their psychological orientation of themselves in the consultation. In his landmark book *The Doctor, His Patient and the Illness*, Michael Balint wrote, "A further reason for the failure of the traditional courses is that they have not taken into consideration the fact that the acquisition of psychotherapeutic skill does not consist only of learning something new: it invariably entails a

limited, though considerable change in the doctor's personality." This was written in 1952 but it seems medical schools have still a way to go to achieve his goals.

Non verbal behaviour in the students' consultations were reported in Chapter 6. Non verbal behaviour was chosen to study as videotapes record eye contact and knee position well. There were two studies of eye contact. The first measured introductory behaviour (after the student settled into the chair) at the beginning of the consultation, until the point where they looked away from the SP in order to read the SP's medical notes on the desk. At the end of the communications skills training there was a link between the duration of this introductory behaviour and the SPs' perception that the student was a good communicator and they would go to this student if he or she was a real doctor. This increased if the duration of introductory behaviour increased. It was also found that female students had a greater duration of introductory behaviour compared with male students.

This study was repeated with only one SP who was interviewed by the whole group of 106 students. Unlike the previous study which used many different SPs there was no link between duration of introductory behaviour and the SP's perception that she felt that the student

communicated well or she would go to that student as a doctor. There was no link between duration of introductory behaviour and the number of open psychological questions asked by the students. In this study the SP reported a positive correlation between "regarding this student as a good communicator" and "going to this student as a doctor" with feeling more "enabled".

In the study of SP knee position, the SP's enablement and participatory decision making scores were lower in consultations where the SPs crossed their knees. This may have indicated a body posture reflecting defensiveness during the consultation. There was a negative correlation between the student perception of how well they consulted and the enablement score as well as the participatory decision making score. More research is needed on the non verbal behaviour of both students and SPs.

Overall the studies show that it is possible to change medical students' consulting behaviour with respect to asking open ended questions in the consultation. This can be done with more video feedback. More research is needed to see if this positive behaviour lasts. Another finding is how inaccurate students' view are of their ability to communicate well in the consultation. This

inaccuracy seems present despite a considerable amount of CST in their curriculum.

7.2 Discussion

If we need to improve communication skills in doctors (and the literature seems to say we do) then we need to train medical students to change their consulting behaviour. There are several problems though. First is the medical student him/herself. One study in the thesis suggests that confidence in communication skills in a group of medical students is not linked to career values that relate to working with people. Have we got the selection process right for medical students? Once selected, does a medical faculty believe in training their students in working successfully with patients or does the curriculum have a mind/body split with the biomedical reductionist paradigm dominating? The attitudes of medical students towards CST must be addressed if positive change to communication is to occur. They must be taught in a supportive environment with people who genuinely want to help them change their behaviour. On the other hand, they must be challenged and most students in the studies in this thesis responded that they felt uncomfortable being videotaped but they found it helpful. In the studies in this thesis after CST they felt more positive about aspects of videotaping and more comfortable with it and they felt the process had improved their skills. They also felt more confident

about using their communication skills to improve patients' blood pressure functional status and emotional health. All of these perceptions must be interpreted with caution however as all but the last study were lacking control groups and it is not known if student attitudes correlate with their communication skills in reality.

The studies have shown how poor the medical students were in assessing their own communication skills and psychological orientation when it came to the feedback of SPs with whom they consulted. Their confidence in communication skills did not match with the SP enablement or participatory decision making score. It seems there is no point in increasing medical students' confidence in their communication skills when this does not correlate with competence in this area. It could be argued that using standardised patient feedback is not a valid way to interpret the students' confidence and psychological orientation but a Dutch study reports that SP feedback can be linked to feedback from real general practice patients. Learning can be experiential - leading to deeper discussion/understanding; or experiential - leading to action/change in behaviour. Both have their place but the biggest aim of CST should be to change the students' behaviour. The method of changing this is getting students to undertake an interview while others observe. Students engage in feedback about the

interview, rehearse alternative approaches or specific skills and perhaps try again in part or in full. Here performance becomes a significant part of the course content. This is not just knowing about effective communication but being able to communicate effectively. It is important to find out how the students feel but this is to help them and their tutor to make behavioural change. One study in this thesis showed student behavioural change in one area of questioning (open psychological) with the CST and more research is needed to see how long such change lasts.

The second problem is money. It is cheaper to give a lecture to 100 students than to encourage behavioural change in communication which requires small groups, well trained facilitators and much feedback and reflection. Using SPs is valuable but in the future they may not get paid. It may be cheaper to simply raise the students' awareness of communication skills rather than create behavioural change. However this may be a short sighted approach. While problem based learning has small groups it's behavioural change ambitions are about learning not using knowledge and communication skills to help patients undergo positive health change.

And therein lies the third problem. Does the training of medical students in communication skills cause positive change in patients? There is not enough research to

answer this question. For trained doctors there is evidence that good communication skills can positively affect glycated Hb and diastolic blood pressure - things that are biomedically measurable. In the future such measures of chronic illness management may be the way to assess CST. The problem is to work out how much of the improvement in patient outcome was due to the students' behaviour and how much to other variables. There is a need for much more research in this area. A likely venue for the research could be hospital diabetic outpatients but patients would need to be ethically and carefully selected.

The fourth problem is how long does positive change in a student's communication skills last? Maguire has measured five years for interviewing skills (not including open ended psychosocial questions) and Gask (who used general practice trainers for general practice with feedback involving trainer utterances) 18 months. Gask managed with her training (which in this thesis has been discussed) to keep the trainees' learnt psychosocial questioning behaviour. In this thesis we seemed to increase open ended psychological questioning in medical students with greater video feedback with Gask's form of training but how long this lasts was not known. Part of every medical schools' assessment should be following the behavioural change in cohorts of their students. Indeed those who accredit medical schools should insist on such

forms of evaluation. The literature is consistently stating a lack of uniform assessment of communication skills training in both British and United States medical schools and it would not be surprising if Australian medical schools had the same problem.

The fifth problem is that much of the teaching and assessment in this thesis was done on standardised patients not real patients. The greatest weakness in many of the studies in the thesis is that the observations were made on standardised patients. Attempts were made to minimise the weakness by training them to reproduce what really happened to them and using SPs with chronic illnesses.

In the study where the group of students who had more video and SP feedback asked more open ended questions, neither the student nor the SP was aware that the questions were categorised. This still however does not eliminate the weakness as the students did not interview real patients. Real patients usually present to the doctor, have the consultation and leave. Asking a group of students to each interview the same patient again and again does not get around the problem. Nor does allowing the student to interview a patient each help because of case variability. This is what makes an SP so attractive in assessment. In the SP's used for the studies in this

thesis the adherence to their story was repeatedly checked so that no drift away from it occurred.

A possible way to diminish case variability in real patients would be to screen them with self administered questionnaires prior to the consultations with the student. Goldberg did this by using the general health questionnaire on patients with psychiatric problems. Other possible self administered questionnaires could include the Nottingham Health Profile or SF36. All this would require considerable extra effort in a clinical setting however and there may be many other variables in the consultation.

Another way would be to research the validity of standardised patients more. A Dutch general practice study compared general practice trainees' performance with SPs and selected practice patients. The predictive rate of an inadequate rating in communication skills was high.

Such research is important and more needs to be done as SPs who are well trained may be effective assessors. In countries where for whatever reason SP's cannot be paid there is a place for volunteers. The study in this thesis suggests these volunteers are different from other volunteers and obviously more research needs to be done here. The experience in George Washington University of

using senior medical students as SPs is interesting as these SP students benefited in their own communication skills from the experience of assessing younger students. This is a way of allowing CST to extend right through the curriculum. It does however take considerable time and effort to create standardised patients. There is a danger that in some medical schools the SPs training may be mediocre and methods of assessing medical students' communication skills may lack uniformity with other medical schools and also be invalid. Those who give medical schools accreditation should assess the quality of training and maintenance of the schools' SPs.

In assessment of students more research is needed on the validity of SP's judgements at the end of the consultation about 'enablement' and 'participatory decision making'. Patients suffering from common chronic illnesses like hypertension, asthma, diabetes could be used especially if they had similar self administered health profiles. Again however consultations are complex and sometimes difficult to categorise.

Finally there seems to be a problem of not enough research into the non verbal aspects of general practice consulting. Over the past 10 years over 15,000 videotaped consultations of fourth year medical students and their SPs were observed. As a result of this, three studies were done on the non verbal behaviour of

standardised patients and the students. The duration of student introductory behaviour did not correlate with SP enablement. In one study and in the other the positive correlation occurred at the end of communication skills training and not at the beginning. What this all means is not clear and this could be a fruitful area for research. The study on open and closed knee positions found SPs who had closed knee positions at one point or all of the consultation, reported less enablement. Research measuring knee position at different times in the consultation could be another future area for research.

In conclusion, CST needs to concentrate on ways to cause positive consulting behaviour in medical students. This thesis demonstrates that more video feedback and SP feedback can achieve this and more research is needed to see how long this learning lasts. It is a fact that the acquisition of communication skills is tantamount to the discovery of a number of hard and unpleasant facts about one's own limitations so students must have teachers who can sensitively challenge them. In the final section of this thesis, the author's empirical findings are placed within a broader context of likely future changes in the tasks of general practice. The economic, social and demographic features of the twenty-first century will place increasing demands on the communication skills of general practitioners.

7.3 What will we teach medical students - McWhinney or McWorld?

In the Western world general practitioners will perform most of the patient consultations except perhaps in the United States where there is still an undersupply of generalist doctors. A general practitioner or family physician is "the physician who is primarily responsible for providing comprehensive health care to every individual seeking medical care, and arranging for other health personnel to provide services when necessary. The family physician functions as a generalist who accepts everyone seeking care, whereas other health providers limit access to their services on the basis of age, sex, and/or diagnosis" (WONCA 1991).

If the medical undergraduate curriculum is to include general practice in the 21st century, it may be useful to help students understand what is unique about it. Four unique features of general practice have been described (McWhinney 1996).

Firstly, it is the only medical discipline to define itself in terms of relationships, especially the doctor-patient relationship. Secondly, general practitioners tend to think in terms of individual patients rather than generalised abstractions and thirdly, general practice is

based on an organismic rather than a mechanistic metaphor of biology. Finally, general practice is the only major field that transcends the dualistic division between mind and body.

Where does this McWhinney definition fit in the new McWorld? Are McWhinney's definitions of what is unique to general practice relevant in a world that seems to embrace Postmodernism? One definition of Postmodernism is that it is a style of thought which is suspicious of classical notions of truth, reason, identity and objectivity, of single frameworks, grand narratives or ultimate grounds of explanation (Eagleton 1997). Is the doctor-patient relationship one of these classical notions? One can understand Postmodern suspicion of the doctor-patient relationship if it does not accommodate patient autonomy but by definition Postmodernism offers no replacement.

It has been argued that Postmodernism in practice scoops up something of the material logic of Advanced Capitalism and turns this aggressively against its spiritual foundations (Eagleton 1997). The doctor-patient relationship may be a remnant of the old order which society has not decided to give up yet along with the polling booth and the law court. However, society may need to examine medical schools to see if they regard patient autonomy as important because the future medical

school may be driven purely by Postmodern Capitalist principles. There is already evidence of damage to the teaching of the psychosocial aspects of medicine from financial cutbacks (Reisser 1988, Markel et al 1990).

The doctor-patient relationship and the curriculum

The relationship has some parallels with the provider-consumer relationship in the area of consumer satisfaction (Sofaer et al 1993). However a general practitioner in a Welsh mining village 30 years ago wrote about the "Inverse care law". By this he meant that the availability of good medical care tends to vary inversely with the need for it in the population served (Tudor Hart 1971). It seems that Family Medicine will be challenged even more in this millennium by the increasing divide between rich and poor in all countries and general practitioners will be asked to help people to constructively cope with these changes (Cox 1995, Westin 1995). As there is evidence that current society places the general practitioner-patient relationship higher than levels of satisfaction with technical or accessibility issues (Humphreys 1997, Stevens et al 1999), personal doctoring will be part of the future. Therefore personal doctoring should be maintained in future general practice undergraduate training.

In areas where there are not enough general practitioners, a doctor may see many patients each day

with resultant short consultation times. The cost to society may be a decrease in the quality of the doctor-patient relationship. This may translate into less patient participation in the consultation (Kaplan et al 1995), patients feeling less enabled about their health (Howie et al 1991) and patients being offered less preventive and psychosocial medicine (Rowland et al 1986). This approach contradicts all the McWhinney features - the doctor-patient relationship, the patient as an individual, clinical complexity and the transcendence of the mind/body split. Short term cost saving by a quick cheap consultation may occur at the expense of long term gains like less end organ damage from preventive strategies that require time spent by the doctor counselling about chronic illness management. Such counselling would include giving the patient time to raise issues and concerns about their illness, its impact on their lives and their personal management strategies (Martin et al 1999, Brown et al 1997). We already know that patients suffering from diabetes have better glycated haemoglobin levels if they have more control in the consultation (Kaplan et al 1989).

There is the possibility that the patients of the future will be very stressed due to the rapidity of social change. Helping patients deal with stress requires a good doctor-patient relationship. Such a relationship may be important for patients who present with somatising

symptoms of underlying mental health problems like depression which is predicted to become the major chronic illness of the future. About 9% of patients present to their general practitioner with vague and non specific problems to be managed (the so called undifferentiated illness) and in some of these patients management of somatisation may be needed which requires both time and skill (Bridges-Webb et al 1986, Frith et al 1992). As community mental health care teams attempt to deal with major psychiatric disorders, much of what other people suffer from may increasingly become work for the general practitioner (Tylee 1997). In addition, the young adult age group which is at greatest risk from suicide, may require greater relationship skills from their general practitioner (Moorhead 1999).

Other future needs for a good doctor-patient relationship may be for patient compliance with preventive health strategies and chronic illness management. For sheer survival in an increasingly litigious world, good relationship and communication skills may be needed by every general practitioner.

If we assume that the doctor-patient relationship should be in the general practice curriculum, how should it be taught? Video feedback has been found useful in creating lasting improvement in some aspects of medical students' communication behaviour during their training in

psychiatry (Maguire et al 1986). Change in consulting behaviour of medical students has been seen in a general practice setting (Evans et al 1992, Usherwood 1993, Moorhead et al 1999) using a method successfully used in general practice trainees (Gask et al 1988). More research is needed to see if this lasts. There are already teaching methods available to learn how to reattribute physical symptoms back to the underlying psychosocial cause in a general practice setting with somatising patients (Gask et al 1989).

Also there may be a greater need for the use of Standardised Patients in the future curriculum. While Standardised Patients can be used in as simple a form as role-playing a patient's history, the most powerful form involves the total portrayal of the patient in a complete encounter (Abrahamson 1996). There may be a need for medical schools to have many well trained SPs for teaching, feedback and examining. Their role in giving marks for student consulting behaviour may become as important as those of the academic general practitioner when students are examined. Medical schools that cannot afford to pay for SPs will need to rely on volunteers. Other schools may co-operate and share a pool of SPs (Farmer 1999).

Managed care and the curriculum

The general practitioner may be asked to continue to be a gatekeeper as well as an advocate for his or her patients in the future. This ambiguous role will therefore need to be included in the curriculum. Already in medical schools in the USA utilisation review and effective gatekeeping are part of the curriculum (Ramsbottom-Lucieret et al 1999) and in Britain students are being taught how to audit in general practice (Morrison et al 1997).

There may already be elements of general practice that are cost effective. Expectant management means waiting by the general practitioner for a patient outcome to occur rather than ordering many expensive tests. This may require experience and careful thinking by the doctor and a trusting relationship which is based on previous knowledge of the patient. Such an approach has been shown to save costs in consulting with children, the elderly, those suffering from chronic illness and those who present with psychosocial problems (Hjortdahl et al 1991). Here McWhinney and McWorld may be congruent. There is already evidence that continuity of care can be taught in general practice to medical students by allowing them exposure via their preceptors to a few families each week for a least a year (Hadac et al 1979).

There could be a price to pay when postmodernists devalue trust. Trust is an essential element of the doctor-patient relationship. It may be that patients are leaving some Health Maintenance Organisations in the USA because they feel a lack of it. Also in some HMOs there may be a lack of trust between managers and doctors. Where HMO managers direct utilisation management at the macroscopic level and grant doctors autonomy to blend McWhinney with McWorld less tension exists (Clancy et al 1995), but where the doctor is excessively financially manipulated enemies are created (Kerr et al 1999). There is some evidence that doctors who have more professional autonomy tend to encourage their patients to participate more in the consultation (Kaplan et al 1996).

Medical students may need to know more about management skills and methods. They may need in future to be more exposed to the real world and to think about health organisations both government and private and how they operate. They will also need to learn to cope with the conflicts that can sometimes occur between gatekeeping and advocating. Personal development and stress management may need to be emphasised more, and more research will be needed on the selection process for entry into medical schools. Something will need to be incorporated in the curriculum with undergraduates to prevent suicide in future general practitioners especially with the female students. It is possible that

we need more students who can cope with conflict and change and are willing to give to society as well as receive (Groves 1978).

Demography and the curriculum

By the year 2030, the estimated dependency ratio (aged persons per person of working age) if averaged for the OECD countries will be 0.37. Most of these people will not be in nursing homes (Cocks 1999) but will be ambulant and using their general practitioner more than younger adults (Bridges-Webb et al 1992). Most of these people will experience one or more chronic illnesses. The cost on average of managing the health care for people with chronic illness already is three times the cost of the care delivered to others (Christiansen et al 1998). It is estimated that this cost will increase dramatically in the future.

It is likely that there will be a greater need to include the Alma Ata principles of Primary Health Care into the future curriculum because of a possible greater need to incorporate social networks of the patient into management as funding for community agencies continues to decline. Counselling, especially grief counselling for loss of loved ones through relationship breakdown and also for loss of function from the more prevalent chronic illnesses may be needed, and effective management of an increasing number of patient addictions may be required. The student may need to learn how to become a negotiator with a patient as well as the third party funder while remaining an advocate for the patient - which sometimes may be an impossible task. How to survive in ambiguous

general practice situations may be a critical skill to be taught.

In chronic illness management, information technology to aid in monitoring will be used more but with careful privacy safeguards. As future lack of funds will close hospital outpatient clinics, the curriculum should perhaps include how to share care in the community between specialist and general practitioner. There will not be any generosity from McWorld to help in this new approach - it may be that both specialist and general practitioner will need to sort out how much remuneration be paid to them from a diminishing source of funds (Hopkins et al 1996). The student will need to be a good communicator if he or she chooses general practice as the practitioner will need to relate to specialist and allied health professionals as well as the patient and the patient's social supportive networks.

As a result, medical students will need to learn even more how to work in a health team. To learn this they will need to be task oriented, to know what their own profession can offer to the task and learn in an environment free of professional power play. The chronic illness patient's home may replace the tutorial room for a learning environment and etiquette will be an important part of the curriculum.

Genome research may create diagnoses where probability of phenotypic expression will be based on individually known genotypic tendencies of patients. Also this research will alter the general practitioners' approach to therapeutics (Cleariham 1998). We will need medical graduates who can communicate well to explain scientific jargon to individual patients as well as the probabilities of specific genes affecting them in the future. As it is likely that there will not be enough genetic counsellors to go around, the general practitioner will be the person asked many of these questions.

The preceptor

The general practice preceptor may be strongly wooed by medical school in the future. Medical schools will have less money and because of their dependence on the teaching hospital, fewer patients as investigations will be largely performed outside the hospital and patients' stay will be as short as possible. Much of the health care in the future will be in the community (Oswald 1991). By making their academic general practitioners redundant medical schools will save money by using preceptors who may be cheaper to pay or may be paid for by someone else. The medical schools will also get free teaching space in the form of consulting rooms and free patient reception. The school will get some general practitioners who may be natural teachers as many

teaching skills are similar to patient-centred consultation skills (Stephens et al 1999).

However, problems may emerge. Close observation of the student-patient relationship may be replaced by sporadic teaching from a preceptor who has a service responsibility to his or her patients (Usatine et al 1995). While patients are happy with students consulting them prior to the preceptor seeing them (Bentham et al 1999), no third party is giving feedback on the student's consulting behaviour unless the busy preceptor finds time for it. Medical schools that place value on consulting skills may employ staff highly skilled in video feedback to visit the practice or view videotapes, while others may not bother. The future assessments of students in Departments of General Practice may become more formative than they are now (Elliott 1999). This implies that academics and practitioners may need more training in this type of assessment. If this does not happen, summative measures will remain.

Another problem may be a lack of good preceptors. What a good preceptor is will need definition. Care will be needed to nurture and reward these teachers (Foley et al 1996) as they may become an endangered species due to over exploiting by aggressive medical schools. However the preceptors will have the upper hand in the future. If they chose to, they could outvote the academics in the

medical faculty. Effective medical schools will have good relationships with their preceptors and reward them with clinical faculty appointments that are more than a pretence. They will also give them Continuing Medical Education discounts, book discounts and most importantly workshops for improving clinical teaching (Fulkerson et al 1997). The workshops of the future may be more frequent and constant evaluation of community teaching may be done (Green et al 1998).

In such an environment the preceptor may become a long-term mentor to the student. Exposure of all medical students to preceptors at an early stage in their medical training may become commonplace (Matson et al 1999). If such mentors practice in a fashion that is described as unique to general practice by McWhinney (ie patient-centred) they may be teaching this to their students by example.

However as well as this, there may also be a need for intense video feedback of students' communication skills as there is evidence that students' confidence in this does not match their performance (Marteau 1991) nor is it linked to values of caring for people (Moorhead 2000).

Also it may be an oversimplification in communication skills training to train doctors to speak differently when their basic skills at cultivating and using the

therapeutic relationship remain underdeveloped (Winefield 1992). Similarly there seems no point in a communications course whose function is to train people to shake the patient's hand unless there is an understanding of when and why this matters (Skelton et al 1997). These superficial courses are attractive in the new McWorld as they can be taught cheaply. A further reason for the failure of the traditional courses is that they have not taken into consideration the fact that the acquisition of psychotherapeutic skill does not consist only of learning something new: it invariably also entails a limited, though considerable change in the doctor's (or student's) personality (Balint 1952). This change can create anxiety as limitations of a student's behaviour are exposed, but this cognitive dissonance can be turned gently into behavioural change by a well trained and trusted teacher to arrive at what Neighbour calls "epiphany". This he defines as an unusually powerful feeling of cognitive resonance when a particularly far reaching or deep-going piece of learning has taken place (Neighbour 1996). This highlights the need for teachers and preceptors in the curriculum who are well trained at giving feedback.

7.4 Conclusion

We should include the principles of uniqueness of General Practice in the future curriculum if we believe that it produces good health outcomes and patients would like it.

There is current evidence meeting both of these criteria and there are aspects of postmodern economic rationalism that support this and others that do not. It may be that the curriculum for the future will be firmly set in the community and more requests will be made to general practitioners to help teach undergraduates. Consulting skills are crucial if McWhinney's principles of uniqueness are to be honoured. At present the best way to produce lasting positive consulting skills in medical students seems to be by using video feedback. This requires skilled teachers and protected time but both of these may be a casualty of future economic rationalism.

The future curriculum may include a lot more of this method of communication skills training but this will only happen if old style consulting skills are valued not only by patients but more importantly by those who currently hold the responsibility of training medical undergraduates and post graduates.

**The Experiences of Students and their Teachers in a
General Practice Preceptorship Scheme**

Robert Moorhead

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This article is the result of assessing 140 paired student and preceptor reports from the University of NSW Preceptorship Scheme. Its aim is to present, in an organised and readable form, the feelings of students and preceptors about their experiences in this scheme.

Until recently, it was difficult for a medical student to find out about what went on in a general practice. If he was fortunate to have had a relative who was a general practitioner he may have gained some insight by 'sitting in' on surgery consultations, or doing home visits with him. More often than not, the only experience a student had was based on his or her attendance to the family's doctor as a patient over the years. He may also have read Cronin's 'The Citadel', or observed the televised activities of Tannochbrae, but the Dr Finalay myth is not in tune with both the science and humanity of today's community medicine.

To cope with this problem, most Australian universities now attach their medical students to general practitioners for training. This is an attempt to provide students with some introduction to the wider problems of sickness in the

community that occur outside hospitals. One such scheme is the University of NSW Preceptorship Scheme. As part of the Community Medicine course, medical students in their fifth year are attached to general practitioners in and around Sydney.

Before commencing the attachment, most students are given lectures about aspects of community medicine at the University. They then meet their general practitioner at his surgery and each student sits in with his own doctor during consultations and in most cases, physical examinations. The general practitioner in this scheme is termed a preceptor. This word derives from the Latin *praeceptor* which means 'teacher'. Today, the term is given to a practising physician who takes an undergraduate medical student as a resident student and gives him personal training in the practice of medicine. In the scheme, students attend the sick in their homes and in institutions, such as nursing and geriatric homes, with their preceptor. The attachment lasts a week and at the end of it students and their preceptors are asked to write a report about their experiences. This article is about these reports.

Questions asked and comments made

The students were asked the following questions: "What is your opinion of the scheme? Please be frank. What interested you most? Least? What did you find most difficult? Least?"

This was a reasonably unrestricted questionnaire and most students wrote two pages of comments. I personally read 140 student reports and their matched preceptor reports, and I was struck by the similarity of certain ideas recurring in report after report.

Eight-five percent of students stated that the scheme was a success. (The remaining 12 percent made no comment as to success or failure). One student wrote ... "I found my attachment to a general practitioner a very worthwhile experience. It complements the teaching hospital experience because it deals with different aspects of patient care. In addition, it helps a student determine at first hand his own view of general practice and thus helps counteract the view gained in a teaching hospital that one settles for general practice only if one cannot specialise."

Many students (two thirds in fact) mentioned the psychological and social side of general practice and appreciated the role a general practitioner plays as a counsellor to his patients. This point was illustrated by the comment of one student ... "The scheme made me realise the extent of counselling which occurs in general practice and the skills required to give adequate social and emotional help to individuals and families." Another student wrote ... "What interested me most was the way Dr — handled his patients. It was different from the way hospitalised doctors treated hospitalised patients. Dr — not only knew his patient's names but also their

occupations, interests and hobbies. He was both their doctor and friend. His technique interested me and I endeavoured to pick up points in the way he handled patients so that I could employ them in future." Another student admitted; "I have a better idea now than previously of how to tell people that they do not have a serious illness, or that their child is not at death's door, without making them feel like fools for coming along, something I have often witnessed in casualty departments. I also picked up valuable experience in how to recognise and inquire after and deal with hidden family or psychological problems beneath the facade of a 'headache' or a 'check up'.

All the students had been introduced to hospital wards before their experience in general practice, and 60 per cent of their reports mentioned the marked difference in the two styles of health delivery. The most apt comment was ... "In brief, I met personalities rather than cases." Another student commented that, "the thing that impressed me most was the ability of the general practitioner to take a personal and long term interest in the patient, in contrast to specialist work in the hospitals where it is much more impersonal." Another lamented, "I think it is a shame that for most of us (from non-medical families) the first contact with clinical medicine is in the highly specialised teaching hospitals and not general practice." The following idea was also stated; "I had subconsciously developed the idea that all important medical work was centred on hospitals and the specialists

associated with them. There is a tendency in hospital to concentrate on the presenting problem, and there is only a vague notion of how the patient's total situation is affecting his problem. In the hospital, the student seldom has a chance to study the effect of a disease on the patient as an individual, as a member of a family unit and of society."

The doctor/patient relationship

Half of the student reports (51 percent) mentioned the importance of the doctor/patient relationship in general practice. This was emphasised well in one student's comment ... "There is a very personal and intimate relationship between patient and doctor. This had taken years to develop. The doctor developed a 'sense' about his patients which helped immensely in his treatment of them. He was aware of family problems, the causes of Dad's ulcer, etc. He was treating people as a whole and not as a surgical or medical problem."

Forty percent of the student reports included a statement mentioning the value of the personal and family history in general practice. The following statements seem relevant to this idea: "I think I am beginning to realise how much experience and a personal knowledge of the patient can be a valuable clue in the diagnosis of an illness" ... "The general practitioner's room is the ideal place to gain an idea of the effect of illness on a person's life, how it affects his family, his life's work and play. I saw a truly beautiful example of the loving relationship between two old people that

dramatically changed a great deal of my bias against geriatric medicine - wish I could explain it in words but I can't.

The wide spectrum of morbidity seen in general practice was noted in 39 percent of student reports, and 36 percent of reports stated that the attachment was too short and that the students would like to 'follow up' patients over a longer period of time. Only two students stated that their attachment was too long.

When it came to assessing how students found their relationship with their preceptor, 32 percent felt they had had a good relationship with their preceptorship and six percent felt they had a poor relationship. The remaining students did not make any statement about this aspect.

Further benefits

One third of the reports said the student had learnt about practice management ... how to run a practice in a business sense, how to employ staff, keep records and accounts etc. In a quarter of the reports, students admitted that they felt embarrassed, or like an intruder in the presence of both doctor and patient. About the same number of students said they enjoyed accompanying their preceptor on home visits.

There was a host of ideas expressed in 10 to 20 percent of student reports. In this group students stated ...

- that the scheme had abolished previous misgivings they had held about general practice
- that they would like to visit a general practice in the country or in a different socio-economic setting
- that they would like to participate more in the diagnosis and treatment of patients during their attachment
- that they found the distance required in travelling to the allotted general practice too far
- that they felt that it was a rather dull experience watching their preceptor writing out repeat prescriptions
- that they noted how frequently common complaints occurred in the overall number of doctor/patient contacts
- that their preceptor seemed to be able to handle most problems that arose during consulting
- that they felt their preceptor was a good diagnostician
- that they learnt how a general practitioner uses community services to treat his patients, such as domiciliary, geriatric and nursing facilities.

There were some interesting side benefits from the scheme. It transpired that one student sought help for some psychological troubles from his preceptor and another had his deafness confirmed and diagnosed by his preceptor. It would seem that the scheme had become a student health screening service as well. If I were asked what was the most interesting student comment, I would answer by quoting the following statement ...

"I am firmly convinced that most of the medical course up

until third or fourth year is an unnecessary load. I find I remember little and need the facts learned even less. Any circumferential facts of a disease process can best be learned when studying the disease in question. So consequently, if students were exposed immediately to disease and their associated anatomy, biochemistry, pathology, diagnosis and management etc., a better, more knowledgeable doctor, in my opinion, would result."

I also found the following student's statement most impressive and beautiful. "I would have liked to spend a lot more time there in that room, where people come with their myriad symptoms, behind which their lives hide, and through which the doctor is given access to their person. Now that seems a sacred dialogue to me in a way I had never before thought possible. It is as if, in some strange silent way, there is an agreement made of trust, which goes way beyond occupational roles - somehow the doctor is allowed into the world of secrets from which most of us are kept away except in the deepest of our relationships. It is not that every soul is bared there but at different times, people feel free to let themselves out and speak their hopes and fears."

The preceptors' comments

In contrast to the student questionnaire, the preceptors' comments were structured around eight questions:

- i State briefly your opinion of the student allotted to you, as a person.
- ii Does sex of student make any difference to you or to your patient?
- iii Was student's attitude to preceptor one of respect/deference/off-handedness?
- iv What was the attitude of patients to students?
- v Did the student's presence embarrass professional relationship?
- vi Please give marks out of five (5) for:

Punctuality

Interest, attentiveness, keenness

Participation in discussion regarding the patient

Responsiveness to GP tutoring

Awareness of the need for selectivity in history taking, examination and investigation
- vii Do you think this student will make a good doctor?
- viii Any further comment on student, scheme or this questionnaire?

The answers to these questions may be summarised as follows:

An overwhelming 95 percent of preceptors had mainly good opinions of the student as a person. When it came to the question of the sex of the student, 82 percent of preceptors

stated that it made no difference to them or the practice, and 13 percent felt it did make a difference. Respect shown by the student for the preceptor was mentioned in 95 percent of preceptor reports. Sixty percent of preceptors said their students were fully accepted by all patients, but 30 percent felt that a few patients were bothered by the presence of the student. Half of this number stated that the presence of a student embarrassed the professional relationship between doctor and patient. Eight-two percent felt that their student would be a good doctor, 10 percent did not answer the question and one percent said the student would not.

Overall, preceptors felt that students were not aware of the need of selectivity in history taking, examination and investigation. 'responsiveness to general practice tutoring' was a category that fared a little better in the eyes of the preceptors and 'punctuality', 'interest, attentiveness, keenness', participation in discussion regarding the patient' were given high scores. Over 50 percent of preceptors stated that the presence of a student slowed their practice.

Discussion

When one considers the scheme as a whole, it would seem to have found favour with the students. They have stated how they found general practice to be different from hospital medicine and have come to realise the value of the doctor/patient relationship and personalised medicine.

If a student graduates without a glimpse of general practice it seems that he "develops a tunnel vision of medicine - seeing it as oriented around the hospital ward structure. He is unaware that the patients he sees are referred to the structure by a continuing care doctor, and discharged from the structure to the same. He is made aware mainly of academic specialised medicine, simply because all his lecturers are specialists, all his tutors are specialists and all his examiners are specialists."⁶

The existence of schemes such as this one should give more balance to every medical student's education, but one wonders, along with some students, about the short duration of this scheme. One answer which did not emerge in this survey was whether this attachment had influenced students to decide on general practice as their career. This is something which remains unknown, and obviously would be worthwhile pursuing at intervals after the preceptorship is over.

It is interesting to look at the experiences of other preceptorship schemes overseas. In the Minnesota Rural Physician Associateship Programme, third year medical students spent 12 months with a primary care physician located in a rural Minnesota community. The evaluation involving 23 students concluded . . . "Students have become more confident and skilled in extracting data, especially in behavioural areas. The expectation that three to six months was the minimum period in which to develop understanding and ease of

healthcare delivery was supported by student opinion. . . . Preceptor evaluations further suggest that major contributions of the program include development and refinement of procedural skills, improved knowledge of common illness, and understanding and maturity in areas of interpersonal relations."⁷

In the University of Florida College of Medicine Community Health Clerkship, all medical students are required to enter a five-week clerkship. In 1970-71 the faculty of the department evaluated the experience of 60 students and 33 preceptors. Of the departmental goals examined, students reported that their greatest learning centred around the effects of patient's attitudes and expectations on specific dimensions of health care. (For example, definition of illness, accessibility for treatment, expectation concerning the physician/patient relationship, desired results from treatment and preferred methods of payment.) Students reported significant learning concerning the influence of social factors on patient care attitudes. Such learning experiences were apparent where the patient population was seen to be different in socio-cultural background from the student himself.

Students were most sensitive to family, economic and educational factors affecting patient values. They reported less understanding of the significance of patients' occupations, religion and race upon health and care. Both preceptors and students gave high ratings to the acquisition

of clinical and patient management skills during the programmes. Students stated that they experienced most satisfaction in these settings where they were given greatest responsibility for patient care.¹

In an Australian pilot study, twenty Melbourne and Monash University students were attached to general practitioners as part of their fourth year training. In four reports published, three mentioned the contrast that exists between hospital medicine and the more personal style of general practice.

From a questionnaire given to 328 final year students in five British universities, it was concluded that students look upon exposure to general practice as a valuable contribution to their medical education and that such exposure causes them to be more attracted toward a career in general practice.² Students in this survey valued the experience greatly when it lasted for more than a week. In another survey,³ most students felt that the general practitioner should play a larger role in the teaching of medical students.

Whether these undergraduate attachment schemes cause more students to become general practitioners is open to debate. The previous British survey mentioned³ felt that such schemes caused the student to be more attracted towards general practice, but that the majority of medical students remain undecided about the nature of their eventual career until

after they have completed the undergraduate course. Indeed, several authors have pointed out that schools which emphasized general practice seemed to be producing relatively small proportions of students expressing an intention to enter the field.^{4,5}

Finally, it would be interesting to know what the patient felt about preceptorship schemes. Without the patient there would be no mentor and no apprentice. In a West London survey,⁸ 68 percent of patients accepted without question the presence of a student at their consultation. Eight percent rejected the presence of a student absolutely, and 24 percent gave instances of situations in which they would not want a student present. Other patients thought that what was acceptable in hospital (they had not minded the student there), was not acceptable in general practice where they felt they had a personal relationship with their doctor, and this was something they valued. It is interesting that in our NSW survey, a third of preceptors stated that they felt the patient was embarrassed by the presence of a student.

Summary

The experiences of students and their teachers in the University of New South Wales' General Practice Preceptorship Scheme have been described. The scheme generally seems to have found favour with students. Many stated how they found general practice to be different from hospital medicine and how they now appreciate what the doctor/patient relationship

means. The importance of personal and family history in general practice was also stressed by many students.

The preceptors overwhelmingly gave good reports about their students, but felt that they were not aware of the need for selectivity in history taking, examination and investigation. The experiences of students in overseas preceptorship schemes were documented. It was evident that the NSW scheme was much shorter in duration than any of the overseas schemes discussed. I feel it is relevant that 36 percent of the students in this survey volunteered the statement (in a relatively unstructured questionnaire) that their exposure to general practice was too short.

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Academic General Practice

A New Hospital General Practice Teaching Unit

The formation of the latest General Practice Teaching Unit in an Australian hospital is part of a national trend to teach undergraduates and postgraduates about some parts of general practice using patients separated at triage from the accident and emergency departments. Planning this unit required much negotiating between several institutions and a set of guidelines on organisational relationships was created.

Innovative features of the Modbury General Practice Teaching Unit include payment of teachers to attend compulsory medical education workshops, dividing the Family Medicine Programme trainee's time between the unit and a neighbouring practice and payment of non-academic general practitioner teachers by the South Australian Government, which eliminates the risk that service interferes with teaching

The Modbury General Practice Teaching Unit is currently the only hospital based unit of this kind in South Australia.

(Med J Aust 1991 154: 597-603)

McWhinney¹ states that out of 1000 adults over the age of 16 in the space of a month, 750 will have experienced one illness or more, 250 will have attended their family doctor, nine will

have been admitted to a community hospital and only one will have been admitted to a university teaching hospital. Because we have an ageing population in South Australia there are three adults per 1000 admitted to the university teaching hospital a month.² It is here that the bulk of clinical teaching is carried out. Students learn by practising medicine on patients who wait more or less passively in bed, having resigned their clothing and much of their autonomy to the hospital. This kind of clinical teaching shows much more of the biomedical aspects of practice than the psychosocial. Yet 50% of these medical students will go into general practice, treating patients who are, and generally prefer to remain, dressed, mobile and independent. Psychosocial aspects are paramount here.

There is poor coordination in medical education for general practice, with little input from the Royal Australian College of General Practitioners (RACGP) into the undergraduate medical curriculum and little medical school input into postgraduate training for general practice.

In an attempt to overcome the bias against general practice in the undergraduate curriculum, the Review of General Practice in South Australia³ has recommended the establishment of Chairs and Departments of General Practice. The Review and the Doherty Report⁴ have also recommended that there should be an integrated and sharing approach by the university and the RACGP to general practice education.

The idea for a general practice teaching unit was first described in a paper called "Teaching general practices: what is required".⁵ It recommended that teaching much be done with undifferentiated illnesses, that good teaching takes time and that undergraduate and postgraduate teaching should be under the one roof. It stressed that funding of such a unit should not come from service fees. An extremely important goal was to improve communication and management skills by using video to provide feedback to the students on their clinical manner and method.

It was against this background that in May 1990 the first and currently the only General Practice Unit was opened by the Deputy Premier and Minister for Health, Dr Don Hopgood.

Aim

The Modbury General Practice Teaching Unit teaches and researches general practice. It is not a service unit in the sense of treating large numbers of patients. It aims to teach holistic and comprehensive health care. As continuity of care in the unit is limited to seeing the occasional patient two or three times, this aspect of general practice is dealt with in neighbouring practices.

Structure

There are 16 general practitioners in the unit (12 local and four academic), a part time counsellor, an administration and

research officer, and a clerical officer. The Unit is jointly run by the University of Adelaide , the Family Medicine Programme of the South Australian RACGP and Modbury Hospital.

The State Government paid for the setting up of the unit and pays the running costs. The University of Adelaide donates the equivalent of one full-time academic. The Family Medicine Programme subsidises its trainees and the Modbury hospital provides the facilities and financial administration. The Health Commission pays the wages of the visiting general practitioners.

When requested, the nursing sister in the accident and emergency ward selects patients who can be directed to the unit. People who attend hospital and emergency departments often have problems which would more appropriately be dealt with by a general practitioner. In the United Kingdom, 35% to 59% of these people were considered not to require hospital care^{6,7} and 39% to 66% had morbidity that was neither an accident nor an emergency.^{8,9} In an Australian study, 50% of patients attending the casualty department had characteristics of general practice patients¹⁰. Hospitals are using experienced general practitioners to treat these patients and to teach about them.^{11,12}

After the consultation in our unit those patients who do not need to return for acute care follow-up are returned to their own General Practitioner. We use the Nottingham Health

Profile, the RACGP medical record system and the International Classification of Primary Care in our records.

Organisational relationships

Before the establishment of the unit, a working party, with representatives of the University, Hospital, RACGP, Australian Medical Association, local practitioners and the South Australian Health Commission, agree on the guidelines for its operation. The most important were about the unit's relationship with the University, RACGP, Hospital and local general practitioner.

The agreed relationship with the University was:

- The University of Adelaide has the responsibility for the design and implementation of the curriculum for its enrolled students
- The University has an input into the appointment of staff in collaboration with the RACGP.
- The University should encourage, supervise and support primary care research in the unit.
- Suitable visiting general practitioners working in the unit should be eligible for clinical University titles.

The agreed relationship with the RACGP was:

- The unit must be accredited by the RACGP for the training purposes of the Family Medicine Programme.
- The RACGP has oversight of the postgraduate training in the unit.
- The Co-ordinator of the General Practice at the host hospital should be involved in the unit.

The agreed relationship with the local general practitioners was:

- The unit offers continuing patient care for teaching purposes. However, this is only short term and such patients will not continue to be managed in the unit.
- Whenever possible appropriate referrals are made back to outside general practitioners, either the patient's usual doctor or, if none such exists, the one general practitioner in the patient's area.
- The unit should stress the importance of communication with local general practitioners and promptly inform them when their patients attend the unit.
- The visiting medical staff should be experienced general practitioners, who are currently in active general practice in the area outside the hospital. The only exceptions are some sessions available to general practitioners from either Family Medicine Programme of the University of Adelaide Department of Community Medicine.

- The unit should be an advocate for general practice within the hospital and will contribute to host the hospital's seminars and conferences.

The agreed relationship with the Hospital was:

- The head of the unit has oversight of the standards of practice within the unit.
- The unit should be of equal status with other units and departments in the hospital.
- Visiting staff have the status and privileges accorded to other visiting specialists.
- Access should be available to all facilities and staff which would normally be accessible to a general practitioner, including organ imaging, pathology, pharmacy, physiotherapy, social workers and outpatient specialists.
- Access may also be available to registrars of hospital units for an opinion when appropriate, especially with regard to admission.
- To meet the needs of a primary care unit, the records are separate from other hospital records with linking unit record numbers. Access to the hospital records of patients also treated in other hospitals is available to the unit. Unit records are available to hospital doctors and the rules of confidentiality apply.

Students and teachers

All University of Adelaide fourth year medical students spend 15 hours in the unit and 15 hours in a city general practice. The unit aims to increase their communication skills, their general practice history taking and skills in preventative medicine. The students conduct every consultation under supervision and with videotape recording. They also receive training from our part-time counsellor.

Half of the final (sixth) year medical students attend the unit with the aim of improving their patient management skills.

Eight Family Medicine Programme trainees are taught in a year. They spend half of their time in the unit and half in a neighbouring practice. They are continuously observed and often have their consultations videotaped. They also attend community agencies to develop their primary care networking skills and knowledge. At the end of each session the trainer writes a report on the trainee which is read by the next trainer.

The general practice teachers spend a compulsory 11 hours a year at medical education workshops and receive personal written feedback from students and trainees.

Future programmes will include Family Medicine Programme training for rural practice with release to the hospital for

procedural skills training and linkage to a postgraduate Diploma at one University and a Masters at another.

Feedback

So far six Family Medicine Programme trainees (graduates) have completed their term in the unit. Two found the attachment extremely useful, three very useful and one fairly useful. The overall standard of teaching was considered excellent by two and very good by four trainees. The best form of teaching is perceived as informal case discussion, followed by direct observation and then debriefing after videotaped consultations. Trainees were equally divided in perceiving a little and a lot of improvement in communication skills, while four perceived a lot and two a little in preventative skills.

Feedback from fourth year medical students was obtained by a questionnaire about communication, history taking and prevention (Table). There were 105 replies from 126 students. Eighty-five per cent said they had learned a lot or a fair amount about communication with patients, while eighty-seven per cent said they had learnt a lot or a fair amount about history taking in general practice. Fifty-seven per cent said they had learnt a lot or a fair amount about history taking in general practice.

An empathy score devised by Winefield¹³ has been used with fourth year students, based on trigger statements before and after their 15 hour attachment.

The responses to the two lots of 10 trigger statements were rated without knowledge of which were made before and which were made after training communication. Double-checking of some responses showed that inter-rater reliability was high.

After breaking the before-after code, paired *t*-tests were carried out to check for changes in 16 students' empathy levels. The rating scale ranged from 0 for an aggressive or derogatory response to 4 for a facilitatory response. There was no control group. There was a statistically significant increase in the students' empathy scores from the test before to the test after their attachment to the unit (averages 12.2 and 13.2 respectively).

It has been suggested that this change is unusual in such a short student attachment of 15 hours.¹⁴

Table

Assessment of the General Practice Teaching Unit by fourth year medical students					
	<i>Not at all</i>	<i>A little</i>	<i>A fair amount</i>	<i>A lot</i>	<i>Total</i>
Learnt about history taking	0 (0%)	16 (15.23%)	52 (49.52%)	37 (35.23%)	105
Learnt about communicating with patients	0 (0%)	13 (12.38%)	58 (55.23%)	34 (32.38%)	105
Learnt about prevention in general practice	4 (3.8%)	41 (39.04%)	47 (44.76%)	13 (12.38%)	105

Facilities

We have found that the unit does not have to be especially large in size as the service component is low and teaching is done on a one to four or one to one basis. The tutorial room and the observation Examination Room 2 with its communicating telephone have been very useful as has a portable monitor to play back the videotapes.

Conclusion

The unit is the latest to be formed in Australia and has several innovative features. The payment of teachers to attend the unit's education workshops is one. These workshops are compulsory and if one has been a fellow of the RACGP for more than five years the payment is at specialist rates (this also applies to teaching).

Another innovation is dividing the Family Medicine Programme trainees' time between a neighbouring practice and the unit. The practice gives the trainees the real pressures of practice and continuity of care and the unit provides time for intensive teaching, discussion and observational or video feedback.

The State funding for the unit means that pressure to service large numbers of patients does not get in the way of its main purpose - teaching about general practice.

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* Ower yagoin mate - A South Australian Approach to
Teaching About the Consultation

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Summary

We describe how we have created a learning environment based mainly on the consultation. Translating educational needs into the processes of teaching, learning, assessment, course administration and outcomes over a six year period at the General Practice Teaching Unit in South Australia has meant we have borrowed ideas and made up some of our own. Much of this translation has come from the need to teach consulting skills and this has led to using standardised patients, small group learning, chronic illness management and subjective health profiles.

Undergraduate feedback seems to indicate that they learn a fair amount to a lot about communication with patients as well as history taking and while they state the videotape method is threatening it is never the less useful. Most vocational registrars state that informal case discussion with their trainer is very good to excellent.

* Translation: "How are you going my friend?"

Introduction

Early South Australian approaches to improving the general practice consultation have been driven by the tyranny of distance. Remote communities started to benefit from Traeger's invention of the pedal generator in Adelaide in 1928 which actually used bicycle pedals. This enabled them to communicate with the Flying Doctor by radio for advice and to arrange visits (McKay 1995, McDonald 1994). More recently the quality of the general practice consultation has been emphasised in the teaching of the State's two Medical Schools and the Royal Australian College of General Practitioner's Training Program for vocational trainees. The idea for a General Practice Unit which combined undergraduate and postgraduate training was published in the late eighties (Doherty, 1988, Douglas et al 1988, Review into General Medical Practice 1989). The unit was established in 1990 at Modbury Hospital, a small hospital with a good working relationship with general practitioners. The present unit is run by the University of Adelaide, the Royal Australian College of General Practitioners (RACGP) and Modbury Public Hospital (Healthscope Ltd). This type of integrated structure is unusual in Australia (Moorhead 1991).

The context and inputs into teaching courses

We teach all the medical students from the University of Adelaide who spend 20 hours in their 4th year in the General Practice Teaching Unit and 3-4 registrars who have 30% of

their 6 month attachment in the unit and the rest in local practices.

Because of the need for communication skills training in the medical curriculum and College Training five consulting rooms with video cameras were created. Our patients were triaged from Accident and Emergency but the promised number was calculated on overall attendance which we discovered later to be mainly at night and weekends. This led us to create standardised patients, who are mainly used for undergraduate training. These are real patients or healthy individuals who have been trained to provide a reproducible and unbiased representation of an actual patient case (Barrows 1987). As there was no finance for this we asked for volunteers. Most of our volunteers were elderly so we now have a pool of 25 mostly retired (SP's). As we write their clinical stories close to their own health we now have SP's with an array of problems linked to common chronic illnesses. We then shaped a twenty hour curriculum around this and our aim is to teach the 4th year students communication skills with video feedback in the area of chronic illness using the approach of doctor - patient mutual participation (Szasz & Hollender, 1956). The curriculum involved repeated consulting in this manner to allow students to build up their communication skills and to demonstrate power sharing.

For the registrars who are usually just out of hospital training we aim to help them learn how to consult in a general

practice setting. Our 12 part time trainers who work mainly with the registrars are experienced general practitioners from the district and participate in regular paid teaching workshops. The most common teaching activities are topic teaching, review of registrars' progress, problem cases and observation of consulting. Trainers communicate with each other by writing brief reports on every teaching session to their fellow trainers, and by monthly unit meetings at which time the registrars' progress is discussed. The low service work is done on patients from Accident and Emergency, patients from the Orthopaedic and Medical wards who receive a complete general practice assessment and patients brought in with complex problems from the trainer's practice. The registrar always raises for discussion their difficult patient problems recently experienced in their attached practice where service pressure sometimes makes it difficult for them to easily access their supervisor. Sometimes the training program sends us its most difficult registrars because they know that the registrar in the unit is closely monitored. The remedial role of the Unit has recently broadened to include the training of registrars who have recently failed their RACGP examination. On one occasion the Medical Board sent us a general practitioner who was given the choice of "remediation" or being struck off and the tribunal provided us with the courtroom record.

We have an induction program and a mutually agreed teaching plan for both normal and remedial registrars. Many of our

registrars arrive in the unit with undergraduate and hospital reductionist baggage and some of them have been sent for "correction". It is this latter group that causes us the most anguish. They create considerable discussion at our monthly trainer workshops and have driven some of us literally to tears. These registrars can be found in the pages of Roger Neighbour's book on the "Inner Apprentice". We often seem to find problems with the remedial registrar's Maslow hierarchy of needs (Neighbour 1996). Also before the recent screening of applicants for vocational training we felt that some registrars had drifted into the program because they did not qualify for specialist training. Four of our registrars have felt that general practice was not their niche in medicine after their time with us.

Some processes of teaching, learning, assessment and course administration

- The learners at the Unit range from rural high school students to active general practitioners. However, the main learners are fourth year medical students and RACGP Registrars. They learn separately as the needs of their organisations are different.
- All fourth year undergraduates spend 20 hours with us in groups of four and learn about communicating with SP's in a general practice setting. We aim to increase their number of psychosocial questions, cue recognition and requested information giving. We also aim to increase their awareness

of non verbal communication and to help them negotiate with the SP's with management. They have 12 SP consultations per student and the remainder of the time is spent with video debriefing and tutorials. After this, students spend 20 hours in a city general practice. They complete a workbook on morbidity in consultation with their preceptors (who are volunteer general practitioners in their own practices), a RACGP Health Summary and a commentary with references on a patient with chronic illness.

- The RACGP registrars spend six months at the GPTU with three different trainers. This deliberate emphasis on different trainers allows registrars to be exposed to a wide variety of trainer skills interests and personalities. Registrars also have access to a comprehensive unit library, the hospital library and its computerised search facilities. Individual trainers have created self study 'Teaching Packages' on common General Practice problems including such areas as melanoma, chronic back pain, hormone replacement therapy and non verbal communication. We also organise a structured visit to local community health services.
- On entry to the Unit every registrar completes a short version of the 'Self Directed Learning Readiness Scale' (Bligh 1992). This scale contains three major factors, 'interest in learning', 'learning skills' and 'responsibility for learning'. Registrars' results on each factor are calculated and compared with averages derived from British

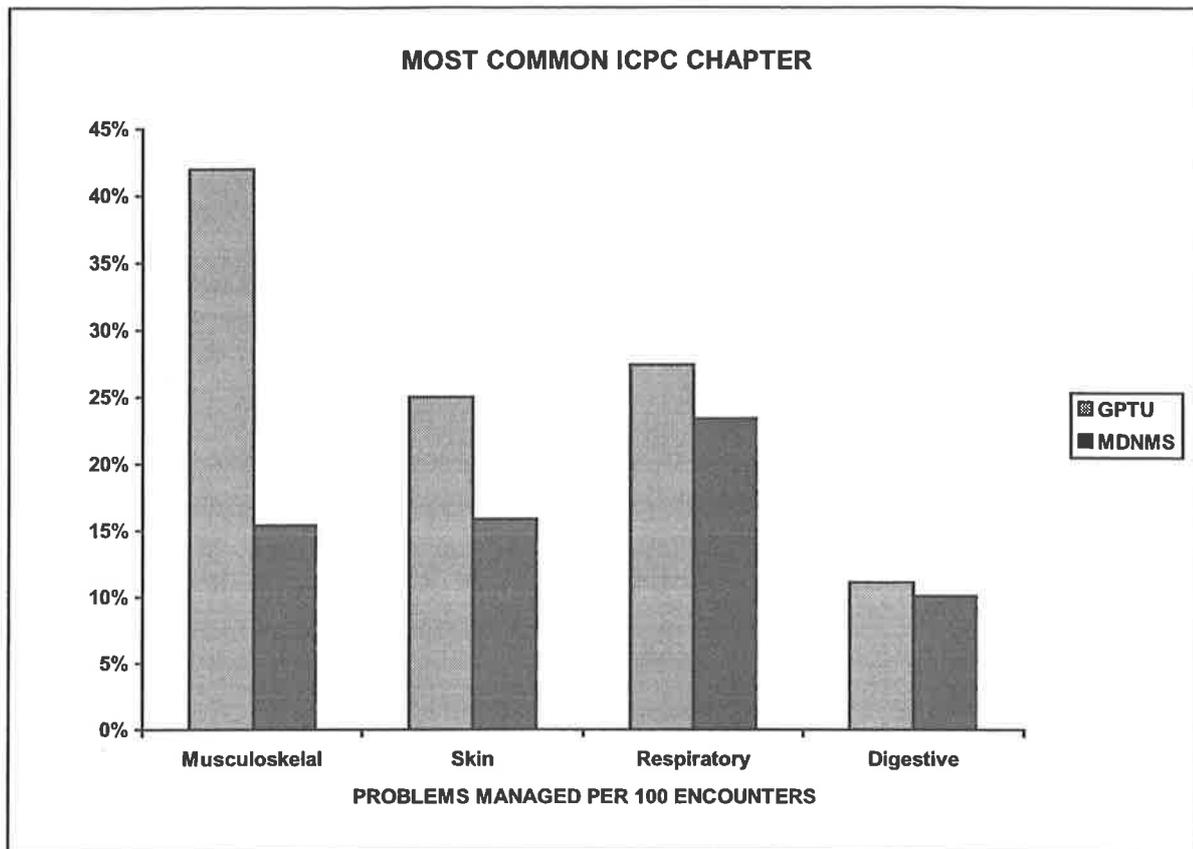
general practice trainees (Bligh 1993). This activity is intended to encourage registrars to consider their approaches to learning. It also prefaces a discussion of their self directed learning skills and their learning plans for the attachment which occurs during the induction period. We find the scale easy to administer and we can score the questionnaire in about 4-5 minutes. This makes it an instant feedback tool and an ideal catalyst to discuss how the registrars feel about learning. It also makes it clear from the start that the registrar is responsible for his or her learning over the next six months.

- Registrars are introduced to the Unit's extended consulting process which includes using the Nottingham Health Profile which every patient completes prior to being seen (Hopton et al 1991). The registrar is asked to look at this at the close of the consultation. We hope that this activity encourages registrars to determine whether they have missed any psychosocial problems in their history taking, when compared with the patients' own responses to the health profile. We have found that the registrars record that this happens in 5% of consultations (n = 1564) and the new diagnosis is mainly depressive disorder, feeling depressed and disturbances of sleep/insomnia. As yet we have not researched if this leads to an improvement in their consulting skills.

- In addition, all consultations are directly observed by the trainer either in person or on videotape and then discussed after the consultation is over. This enables both the content of the problem and the consultation process to be reviewed. Video feedback is done according to a model called: "The Five C's" (Farmer 1986). This model creates a supportive environment by giving the trainee control of the video recorder and encouraging them to first explore positive aspects of the consultation. Here the group leader act as a catalyst, not a critic.

- After the consultation, registrars also record the reason for encounter and define the problem according to the ICCHPC 2 (WONCA 1986) using the process recommended by the ICPC (WONCA 1987). Figure 1 shows the most common problems managed in 1561 consecutive encounters at the Unit. The obvious bias towards musculoskeletal problems (42%) reflects the triage procedure from Accident and Emergency and the exclusion of consultations with medical and orthopaedic inpatients with chronic problems.

Figure 1



GPTU - The General Practice Teaching Unit
MDNMS - Metropolitan Data National Morbidity Survey

Numerical data:

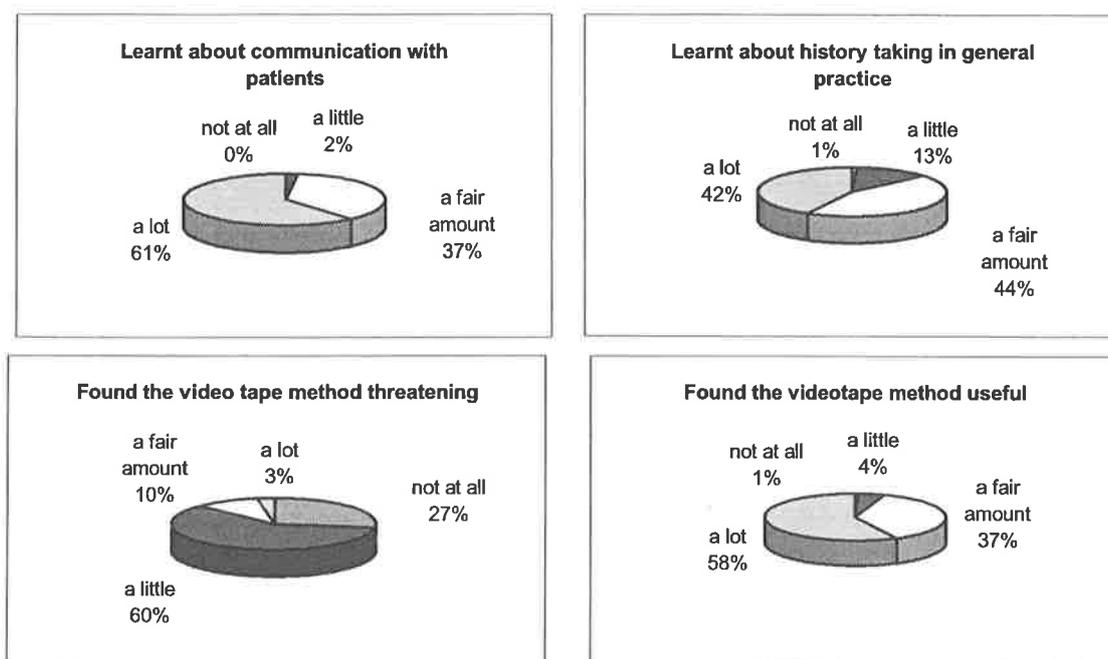
Musculoskeletal:	42 per 100 (GPTU)	15.4 per 100 (MDNMS)
Skin:	25 per 100 (GPTU)	15.9 per 100 (MDNMS)
Respiratory:	27.4 per 100 (GPTU)	23.4 per 100 (MDNMS)
Digestive:	11.1 per 100 (GPTU)	10.1 per 100 (MDNMS)

Learning outcomes

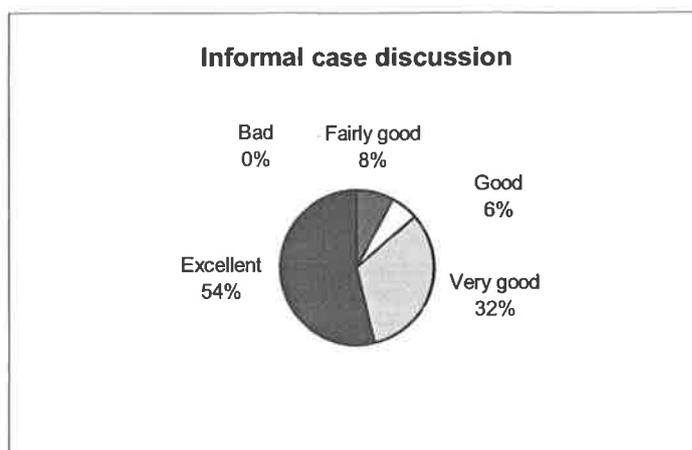
We have seen a significant change in consulting behaviour based on types of questions asked by the students at the end of the course and reinforcing this method creates a more significant change compared with a control group (Moorhead 1995). The feedback from undergraduate students from 1992 to 1996 is shown in Figure 2.

Figure 2: Fourth Year Feedback

n = 538



At the end of their placement, the Registrars were asked to complete a confidential questionnaire giving an evaluation of their term. Fifty of 59 questionnaires were completed from February 1992 to April 1996. From the feedback, 92% of Registrars rated the standard of teaching as: "good to excellent", while 90% rated the direct observation method of teaching as: "good to excellent", the attachment overall as: "Fairly useful to extremely useful", the opportunity to view educational tapes as: "useful"; and the attachment: "helped to improve basic communication and counselling skills". The main strength of the Unit was seen as the opportunity and time for informal case discussion as shown in Figure 3.

Figure 3: REGISTRAR FEEDBACK n = 50

Initiatives

All undergraduate teaching is on standardised patients which seems to work extremely well, while registrars are exposed to patients with chronic conditions from the practices and the wards. There seems to be a need for more exposure to patients with chronic illness in the College Training Program as a report has indicated that Registrars may see mostly acute patients in their basic general practice training (Farmer 1995).

Perceived advantages and challenges with integrating undergraduate teaching with postgraduate

We believe that there are advantages and challenges with this integrated model. The advantages include:

- Sharing of resources so the Unit can provide cheaper teaching than its separate organisations individually and maintain high standards at the same time. Resources are human and physical (the actual space, equipment and library facilities

for example). Being a Hospital department has lots of advantages for teaching and service, like free rooms, access to library facilities and support for subscribing to journals as well as use of all service facilities. Internet communication is available through the university's server. We have found that hospital auxiliary volunteers are altruistic and very loyal. We have a party for them every year and award them certificates. We often give them emotional support with their chronic illness problems.

- Both university and college have allowed us to achieve small group learning for undergraduates (4-6) and one-to-one learning for postgraduates with intensive supervision. This is critical for communication skills training, learning without service pressure and remedial training.
- Enhancing relationships between academics, social workers, specialists and general practitioners. This produces a cross fertilisation of ideas which can be put into practice. (A social worker has one session with the undergraduates). The unit has created the positions of a practice educator and nurse for the trainers' practices.
- Following individual undergraduates through to postgraduate training and giving career advice to undergraduates.

The challenges include:

- Sacrificing research time for administration.
- Coping with the changes in three organisations which means stress for the Unit's small staff and adjusting to financial cutbacks. These adjustments include the training and maintenance of 25 volunteers as standardised patients (SPs) who can also give feedback according to Van Dalen's principles (Van Dalen, 1989). This takes a lot of time and many standardised patients need a lot of emotional support from the Unit (Moorhead 1995). Also new video equipment had to be found by donation from grateful patients and the general practice registrars manage patients without nursing help. A little casual undergraduate tutoring has been donated by a clinical lecturer while the undergraduate teaching workload has increased 180 hours per annum due to university cutbacks. Much time is spent trying to prevent further cutbacks by lobbying the parent organisations. Occasionally one parent organisation has to be "shamed" by informing the other two of lack of commitment.
- Not being able to use basic registrars' to teach undergraduates. Registrars just out of hospital take time to become patient-centred and if they act as role models and teachers they will perpetrate the dominant approach seen in the undergraduate reductionist curriculum.

Conclusion

It is possible to integrate University, RACGP and Hospital into a teaching unit for general practice. We believe that the sharing of resources can lead to a high quality intensive learning environment and permits collaborative teaching initiatives especially in the area of the general practice consultation. We feel that the challenges we have experienced of financial cutbacks and continual negotiation about changes in parent organisations are worth the effort for our unit's educational value.

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Communication Skills Training for General Practice

(Published in Australian Family Physician 1992;Vol 21 No4:457-460)

The value of the practitioner's communication skills in the consultation is widely recognised. Many authors support communication skills training for general practice in such areas as public health, patient satisfaction, malpractice litigation, compliance, somatisation and clinical outcomes in chronic illness. There are many reports of the success of communication skills training worldwide for medical students, general practice trainees and experienced general practitioners.

The importance of skilful interpersonal communication in general practice care is widely recognised. There are some who argue that it is more profitable to train counsellors for primary health care than to improve communication skills training for general practitioners. This philosophy ignores the easy access most patients have to their general practitioner, the way they present often with undifferentiated problems and physical symptoms, and the use of the general practitioner by patients at relatively frequent intervals. In a two week period, 3.4 million or 20 percent of the Australian population consults a doctor; of those, 85.9 percent consult with a general practitioner.¹

Furthermore, the Royal Australian College of General Practitioners has stated as an aim of its Family Medicine Programme that the competent caring general practitioner provides high quality primary, comprehensive continuing health care to the community.² Also, general practitioners manage more than 90 percent of the psychiatric illness in the community.^{3,4}

Communication has been defined as the process by which information, meanings and feelings are shared by persons through the exchange of verbal and non verbal messages.⁵ Communication skilled behaviour means 'a set of goal directed, inter-related, situationally appropriate social behaviours which can be learnt and are under the control of the individual'.⁶ It is widely accepted that most forms of behaviour displayed in social contexts, apart from basic reflexes, can be learnt. Verbal communication is such a behaviour. This counters the naïve assumption that 'good communicators are born, not made' with its implication that nothing much can be done to improve those who are weak.⁷

Training in medical schools and general practices

Descartes likened the human body to a watch and considered the health of that body to be related to its individual parts (as a watch is related to cogs and springs). This reductionist view of health has become a dominant feature of medical education.

McWhinney⁸ has made a plea for holism. He says the holistic view acknowledges that every illness is different, and that the physician is an important aspect of the healing process.

Medical schools around the world are correcting this imbalance. They are realising that instruction and experience in the clinical skills of communication, observation, examination, investigation, and sensible and sensitive management are the crux of personal medicine. For example, Harvard has a three year required longitudinal course in the patient-doctor relationship.⁹ Interviewing skills are increasingly being taught in medical schools.¹⁰⁻¹⁵

Some data suggest that medical graduates of innovative programmes communicate better with patients and are better prepared to deal with a patient's social and emotional problems than are graduates from traditional programmes.¹⁶⁻¹⁷ Communication skills training (CST) being in the curriculum may seem like Banquo's ghost making an appearance: impossible to completely ignore, but certainly not especially welcomed.¹⁸

Improvement of CST skills

According to Gray¹⁹ most complaints about doctor behaviour deal with interpersonal skills. It is generally agreed that the quality of communication determines the success of a general practice consultation, but studies have suggested that this communication is often poor.²⁰⁻²²

It is possible to improve communication skills of students, trainees and general practitioners. Most reports concern students in training. Maguire^{2,3} demonstrated a lasting effect of video feedback on medical students 5 years later with interviewing skills associated with accurate diagnosis, empathy and warmth.

Gask et al²⁴ have shown that general practice trainees taught in a problem-based model with group video feedback can improve the ability to identify psychiatric illness accurately and can change their interview behaviours. General practitioners after group meetings and audiotape feedback have been shown to improve their general interviewing skills.²⁵

Undergraduate training

There are many communication skills training schemes, but a refined example is found at Maastricht in The Netherlands. In 1974 a new medical faculty was founded in Maastricht that adopted the problem-based learning approach of McMaster University, Canada.

In communication skills training, the quality of the doctor-patient interaction is paramount. Topics include asking open ended questions and exploring the reasons for the encounter. As the course proceeds the skills learnt and the situations practised become more complex.

Interviews with simulated patients are carried out once every 3 weeks. In the first year, simulated patients have one complaint and the emphasis is on how the problem affects the patient's lifestyle. Several students meet with these patients and compare information.

In the second year, the interview with simulated patients deals with one segment, for example, examination of the abdomen. Physical examination is gradually incorporated into the encounter. These simulated patient encounters take place without a teacher and are videotaped. Immediately after the encounter the simulated patient provides feedback about such aspects as empathy, congruence and trust.

Van Dalen has observed that in the final 2 years of the course (the clinical years) greater medical knowledge seems to erode the good results of CST in the earlier years.

At the Skillslab, heavy use is made of simulated patients. One hundred and thirty simulated patients are used and are paid the equivalent of \$AUS10 per hour. There are 17 full-time equivalents of staff and 26 training rooms.

In analysing performance-based tests with standardised patients, Van de Vleuten et al²⁶ conclude that intercase reliability is a far greater problem than inter-rater reliability. In all studies reviewed, it was consistently found that performance of an examinee on one case is a poor

predictor of performance on another case. This has been termed the case-specificity problem.

Postgraduate training

There are many postgraduate skills training schemes but space permits only one example.

Oxford University and the Oxford Region's vocational training scheme for general practice have after years of research and medical practice developed an approach to learning and teaching the consultation. This method can be used with video feedback.

Pendleton et al²⁷ have defined seven tasks in the consultation. They all require good communication skills. These tasks are:

1. To define the reasons for the patient's attendance including:
 - the nature and history of the problems and their causes
 - the patient's ideas, concerns and expectations
 - the effects of the problems
2. To consider other problems:
 - continuing problems
 - risk factors.
3. To choose with the patient an appropriate action for each problem.

4. To achieve a shared understanding of the problems with the patient.
5. To involve the patient in the management and encourage him or her to accept responsibility.
6. To use time and resources appropriately.
7. To establish or maintain a relationship with the patient that helps to achieve the other tasks.

Pendleton et al²⁷ use this framework to assess a consultation, and for the purpose of debriefing they map the consultation on the first five headings. A mark is put on the map at the relevant heading after either the doctor or patient speaks. At the spots the observer can write comments, what was said or the number indicating the spot on a video recording. Then a line is marked on a Likert scale without numbers for the consultation rating scale that covered the same headings. The result is the basis for debriefing a trainee on the consultation with precise comments about the consulting tasks. The trainee is asked how he or she felt the consultation went, receives positive feedback from the trainer, is asked how he or she would 'do' the consultation if there were a next time and is given specific criticism from the trainer in a similar view. The method allows for different styles of general practitioner consulting.

There are increasing reports of the success of communication skills training for medical students, general practice trainees and experienced general practitioners. Use of

videotapes to provide feedback is universally recognised, but critical to this process is the trainer's empathetic, constructive yet challenging feedback. Communication skills training is expanding in medical schools, in postgraduate training schemes and in continuing education schemes for experienced general practitioners.

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APPENDIX E

 Health Summary		DATE COMMENCED	SURNAME	RECORD NUMBER
		GIVEN NAMES Philippa June		
DATE OF BIRTH	MARRIED	SEX	COUNTRY OF BIRTH	ADDRESS
		F	Australia	
MARITAL STATUS			NEXT OF KIN	
OCCUPATION			RELIGION	
	Retired		C/E	
EMPLOYER or SCHOOL			BLOOD GROUP	PHONES: Home Bus
			Flh	

SOCIAL AND FAMILY HISTORY

Age 75 - Lives at home with retired husband
6 children

Father died age 51 - pneumonia
Mother died age 63 - pulmonary embolus
Mother - rheumatoid arthritis
Brother - coronary occlusion - age 63 bypass done

Alcohol - nil
Cigarettes - gave up in 1980 (was smoking 20 a day)

PROBLEM LIST			Code	IMMUNISATIONS		ALLERGIES & SENSITIVITIES		
Date	No.	Past Problems		Year	Type	Year	Antigen	Type and Severity
1984		Thyroid deficiency	1982	Tet tox	1980	Aspirin (upsets stomach) NSAIDS	Abd pain	
1989		Acute pancreatitis						
Active Problems (from commencement date)			MANAGEMENT				Date Resolved	
1985		Thyroid deficiency	Oroxine 150 mcgm daily (thyroxine)					
1985		High cholesterol triglycerides	Diet Lipex 40mgm daily					
		Chronic varicose insufficiency	Paroven caps (prevents capillary leakage) Aristocort cream (decreases eczema)					
		Hypertension	Frusemide 1 daily					

PATIENT: Mrs Philippa

ROLE: "I can't lose weight"

1. You are 78 and live at home with your retired husband aged 85 and you have 6 children.
2. You normally attend this practice but today you are seeing a new doctor as your 'normal' doctor is on holidays. This doctor has your medical records which contain the following information:

Age = sex = occupation = marital status.

Family history:

Your father died age 51 from pneumonia. Your mother died age 63 from a pulmonary embolus. She also suffered from rheumatoid arthritis. Your brother had a coronary age 63 and had a coronary bypass operation

Social history:

You are 78 and live at home with your retired husband.

Alcohol: Nil

Cigarettes:

You gave up smoking in 1980 (were smoking 20 a day)

Past history: Borderline hypertension 1955
 Thyroid deficiency 1984
 Acute pancreatitis 1989

Immunisations: Tetanus toxoid in the past 10 years.

Allergies & Sensitivities: Aspirin upsets the stomach

Active problems:

Thyroid deficiency Oroxine 150mcgm daily (Thyroxine)

High cholesterol diet

High triglycerides diet

Borderline blood pressure diet

3. You have come back to see the doctor for some blood test and Xray results. You saw the usual doctor last week (the doctor you are seeing now is a locum). You saw the doctor because:

a You had itchy swollen ankles

b You had pain in the R hip and both knees.

4. The doctor did a test for rheumatoid arthritis. You had your hips and knees Xrayed Ask the doctor for the results.

5. Your ankles get itchy and you get a rash there sometimes. It gets better with Aristocort. Ask why do you get it?

6. Then you can say: "Have the tests shown anything?" "I'm a bit worried about rheumatoid arthritis". (If the doctor tries to find out why you are worried tell him or her about your mother's rheumatoid arthritis and how the medications affected her). The doctor should give you the result of the rheumatoid factor test (which is normal) and the Xrays which show osteoarthritis in the R hip and knees.

7. Ask the doctor: "What can I do about my hip and knees?" You can tell the doctor that you are going to swimming classes and you play golf.

8. You could ask what should I do to lose weight.

9. The aim of the consultation is to see how well the doctor gives you information about your varicose eczema and the arthritis of your hip and knees.

MANAGEMENT OF OSTEOARTHRITIS

OA is primarily a disorder of hyaline cartilage and subchondral bone, though all tissues in and around involved joints are hypertrophic.

Arrest of and occasionally reversal of OA of the hips and knees can occur using well planned exercise. Exercise maintains healthy cartilage and range of motion.

Aspirin is the drug of choice for both anti-inflammatory and analgesic reasons. Other non steroidal anti-inflammatory drugs (NSAIDS) may be used as they inhibit prostaglandins.

VARICOSE ECZEMA

This is a very common condition in middle aged women and elderly men with varicose veins. The skin on the lower third or half of the inner side of one or both legs has been for a long time congested. Then it can become irritable and develop little fluid filled lesions called vesicles.

The cause is varicose veins. The veins in the leg consist of two functionally distinct groups, the superficial, which drain the skin and subcutaneous tissues, and the deep. The latter lie, together with the muscles, within a tight fascial envelope, the fascia lata.

Certain veins perforate this envelope to connect the two systems. They are the long and short saphenous, joining the deep veins at the groin and popliteal fossae respectively; and certain direct perforating veins.

When the muscles contract, blood in the deep veins is forced upwards, while that in the superficial veins is sucked into the deep system via the perforators. Should the valves in the perforating veins become incompetent, these pressures are transmitted back into them and they, given time, will become dilated and tortuous, i.e. varicose. When this venous hypertension reaches the capillaries, they can no longer function efficiently, the result being the escape of blood and fluid into the tissues and this leads to pigmentation, eczema and sometimes ulceration.

ANTI NUCLEAR ANTIBODIES

This blood test is a highly sensitive test for the diagnosis of systemic lupus erythematus being positive in >95% of patients. It is positive in up to 70% of other systemic rheumatic conditions.

Date Commenced		 Health Summary		CATEGORY & NUMBERS		SURNAME		RECORD NUMBER	
				GIVEN NAMES		Vickie			
DATE of BIRTH		COUNTRY of BIRTH		England		ADDRESS			
MARITAL STATUS		SEX		NEXT of KIN		RELIGION			
Widow		F				Church of Christ			
OCCUPATION		Retired Accountant		RELIGION		Church of Christ			
EMPLOYER or SCHOOL		BLOOD GROUP		Rh		PHONES:		Home Bus.	

SOCIAL AND FAMILY HISTORY

Grandmother. Lives at home on her own with her dog

Sister and mother - Ischaemic heart disease

First and second husband died

Alcohol - nil
Cigarettes - nil

PROBLEM LIST			Code	IMMUNISATIONS		ALLERGIES & SENSITIVITIES		
Date	No.	Past Problems		Year	Type	Year	Antigen	Type & Severity
1975		Mild sensori neural deafness		1991	Typhoid		Penicillin	
1993		Reflux oesophagitis		1992	Fluvax			
		L4-5 S1-L5 Disc narrowing		1992	ADT			
				1997	Fluvax			
Active Problems: (from commencement date)				MANAGEMENT				Date Resol
		Type IIA hyperlipidaemia		Diet				
		Rosacea (skin flushing)						

PATIENT: Mrs Vickie

PATIENT ROLE: "Reflux oesophagitis and family worries"

1. You were born on 26 December 1922 and you are a grandmother. You live at home. You are a retired accountant.
2. Your sister and mother suffer from ischaemic heart disease. Your second husband died from a cerebral tumour. Your first husband drowned.
3. You don't smoke and you don't drink.
4. Your past health includes:
Mild sensori neural deafness
Reflux oesophagitis - 1975
L4-5 L5-S1 disc narrowing
5. Your immunisations include:

Typhoid	1991
Fluvax	1992
ADT	1992
6. You are allergic to penicillin.
7. Your active problems include type IIA hyperlipidaemia (a genetic cholesterol problem) which you manage with diet and rosacea (skin flushing).

8. You have come to see the doctor for your Xray results. Your films and results will be with the doctor (they show a narrow disc space in the backbone in your neck with arthritis and possible irritation of nerves. There is arthritis in the smaller neck joints).

9. If the doctor talks about osteophytes (bony projections from the blocks of bone in the backbone) ask what is an osteophyte? Ask if the doctor mentions spondylosis what does that mean? (Narrowing of the discs between the blocks of bone in the neck).

10. The narrowing of the 5th and 6th cervical vertebrae bodies could allow pinching of the nerves that supply the outer upper arms and cause pain. You have been having some pain here but it has gone away a few months ago.

11. Tell the doctor that your main problem is your neck muscles. These ache and the ache is much worse when 'you are under stress'. If the doctor wants to know what is stressing you, mention your current concerns. If the doctor ignores this, ask could you have your blood pressure checked.

12. You can shape your story around the following worries:
 - a out of control feeling
 - b worried about your friends

c worried about family

d worried about dog's health

13. The aim of the consultation is to see how good the student is at giving information and how well the student deals with your worries (how good is he or she at listening). The student should link your worries with your neck muscle tension.

Date Commenced		 Health Summary	CATEGORY & NUMBERS	SURNAME	RECORD NUMBER
GIVEN NAMES Edward					
DATE of BIRTH	COUNTRY of BIRTH	Australia		ADDRESS	
MARITAL STATUS	SEX	M	NEXT of KIN	Mrs ML (Wife)	
OCCUPATION	Retired Engineer		RELIGION	RC	
EMPLOYER or SCHOOL	BLOOD GROUP	Rh	PHONES:	Home	Bus.

SOCIAL AND FAMILY HISTORY

Age 65
Married 37 years - no children

Father - TB
Mother - heart problems - ? thyroid age 74 years
Sisters - 3 living, 1 deceased - MI 42 years
1 living - MI 65 years

Alcohol - 20 mg/week
Cigarettes - reformed smoker (23 years ago) 30 a day
Cholesterol - 5.1

PROBLEM LIST			Code	IMMUNISATIONS		ALLERGIES & SENSITIVITIES		
Date	No.	Past Problems		Year	Type	Year	Antigen	Type or Severity
1948 1951 1973 1981 1991		Appendicectomy Gastrectomy Cholecystectomy - subphrenic abscess 2 x hernia repair MI - with minor damage to papillary muscle to mitral valve		1991	Tetanus		Nil known	
		Active Problems (from commencement date)	MANAGEMENT			Date Resol		
1981 1988 1990		Inguinal hernia (reducible) Arthritis Angina with exercise			Self reducible Prednisolone, Solazophrin, Enteric Anginine			

PATIENT: Mr Edward

ROLE: "Arthritis"

1. You are 72 and married and live at home with your wife. You have no children and are retired. You used to be an engineer. Hobbies include orchid growing.

2. You normally attend this practice but the doctor you usually see is booked out so you are seeing his partner who can fit you in. You are coming about your arthritis. The doctor has your medical records which contain the following information:

Age - sex - occupation - marital status

Family history:

One of your sisters died from a coronary age 42. You have a living sister who had a coronary at 65 years. Your mother had thyroid problems and possibly a heart problem.

Social history:

You are a reformed smoker and gave up 23 years ago. You drink 2 glasses of alcohol a week. Your cholesterol reading was 5.1. Hobbies include growing orchids.

Past history:	Appendix removed	1948
	Gastric ulcer operation	1951
	Gallbladder removal and	

subphrenic abscess	1973
Hernia operation (unsuccessful)	1981
Coronary	1991
Immunisations: Tetanus shot	1991
Active problems: Inguinal hernia (reducible)	1981
Arthritis (on Prednisolone Salazopyrin, Enteric aspirin)	1988
Angina with exercise (Anginine)	1980

3. The reason for visiting the doctor is to see if anything can be done for your arthritis.
4. Ask the 4th years can they help with your arthritis?
5. With the arthritis ask: "What sort of arthritis have I got?" Show them your hands.
6. As a reward for listening well and trying to understand you, you could let him/her know how your arthritis affects you. You feel angry and frustrated because it affects your gardening, general house maintenance - you can't hold a hammer - you can't paint etc. The steering wheel on the car is hard to hold and repotting your orchids hurts your shoulder and hands. Also when you wake up in the morning your joints are stiff. You are unhappy about the wasting of muscles on your hand.

7. Ask what can be done for your arthritis. If the student talks about non steroidal anti-inflammatory medicines like: Indocid, Voltaren, Brufen, Feldene, Naproxyn - tell him/or that you have tried them all and they upset your stomach. Ask if physiotherapy would help - you tried wax baths and exercises before and that helped. What about an occupational therapist - to help you perform tasks at home? "What tablets can I take?" - Aspirin in more than your current dose upsets your stomach. They could offer gold salt treatment or increase your Salazopyrine or Prednisolone. If they say this you could say that you are seeing your rheumatologist next week - should you ask him that. Then you can thank the doctor and finish the consultation.
8. You should look a little fed up and in some pain.
9. The only physical examination needed is blood pressure - if running out of conversation. The aim of all of this is to train the student to understand a patient whose health is affected by a chronic illness and show caring communication with you. We will score the students effort in giving you correct knowledge and being a good preventer and trying to stop the arthritis getting worse, warning you not to put on weight and being careful to avoid causing stomach bleeding.

4TH YEAR STUDENT NOTES

MR

Osteoarthritis tends to affect the distal joints of the hand, rheumatoid the proximal.

Management can include:-

1. Aspirin - full dose 3-4g daily (watch for a peptic ulcer - Aspirin will make it bleed).
2. Physiotherapy - work on extensor muscles to stop flexion deformity.
3. If that doesn't work try the NSAID's non steroidal anti-inflammatory drugs - Indocid (Indomethacin) Voltaren (Diclofenac sodium) Naprosyn (Naproxen) etc. They too can upset ulcers.
4. Oral gold (can cause diarrhoea) or injections.
5. Salazopyrine (Suphasalazine) tablets (do 3 monthly checks for decreased neutrophils in the blood) used if disease not responding to NSAID's. (May slow down the disease). You can increase the dose if you think appropriate.
6. RA usually is a continuous disease in 50% of sufferers.
7. Rheumatoid nodules can form - like little soft cysts.

PATIENT: Mrs Mary

ROLE: "Hormone Replacement"

1. You are 68 and live at home with your retired husband. You have no children.
2. You normally attend this practice but your present doctor is on study leave and you are seeing his partner. This doctor has your medical records, which contain the following information:

Age - sex - occupation - marital status.

Family history:

Your mother is 91 and is healthy and lives in a nursing home. Your father died at 75 from war injuries. A grandmother has glaucoma.

Social history:

You are retired and live at home with your husband. You enjoy looking after orchids and travel. You gave up smoking 26 years ago (you were a social smoker). You drink about 1 glass of alcohol a month.

Past history: Hepatitis	1974
Nausea	1984
Gallbladder removed	1987
Hysterectomy	1981 (Oophorectomy)

Immunisations: Tetanus toxoid 1990
 Influenza 1990

Active problems: Difficulty swallowing -
 for endoscopy 1991

3. You have come to see the doctor because you are wondering about side effects of your Prozac. Ask the doctor what they are. Then ask if they affect your sex drive (which has decreased further since taking them).
4. Mention your dry vagina and night sweats and how it is causing problems with intercourse. Is there anything that can be done about it. It has been a problem for years. The student will probably talk about Hormone Replacement Therapy. If you want more information about HRT you can ask.
5. Ask would there be any other causes of your low drive? You could mention that you try hard to climax but that doesn't seem to work.
6. You could mention the stress you are under from your mother and also your husband's partial impotence.
7. If all this is too much for the doctor ask to have your blood pressure checked. Do you need to have a mammogram.

8. The consultation is designed to see how sensitively the doctor gives you information about hormone deficiency.

HORMONE REPLACEMENT

1. Prozac is fluoxetine and is a serotonin uptake inhibitor. It is mainly used for major clinical depression.

In 1 in 10 patients the following side effects may occur:

- tiredness
- diarrhoea, nausea
- anxiety
- insomnia
- decreased libido.

2. Hormone deficiency (oestrogen) is linked with chronic vaginal dryness and hot flushes HRT can correct this and decrease cardiovascular disease.

Give conjugated oestrogen 0.625mg daily orally or Ethinyl Oestradiol 20 mcms daily for 25 days (or skin patches). Skin patches can be put on twice a week.

If the patient has an endometrium use Medroxy Progesterone 10mg daily for last 10 days. This decreases the risk of endometrial carcinoma.

3. Low libido can be related to:

- antidepressants (Anorgasmia) try Moclobemide
(a mao inhibitor). The fluoxetine can stop and
Moclobemide started on the next day
- arthritis in patient or partner
- discomfort due to oestrogen deficient vaginal lining
- life style stress
- potency of male partner (penile injections might help)
- low testosterone post menopausally (use implants)
- trying too hard (like sitting for an exam)

Some Practical Aspects of Teaching and Researching Communication Skills with Standardised Patients

Robert G Moorhead

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News. Southern Research Consortium. United States.
1995;2:13-17)

A standardised patient is a performer trained to represent a real patient case for use in teaching and evaluation. They are used because they can produce a standardised stimulus and give each student the same challenge. They are easily arranged in time and space for teaching students and can be used without the student harming the patient.

Standardised patients have become a common feature of medical education since they were introduced by Barrows over 20 years ago (Barrows 1971). He felt that the standardised patient can reproduce faithfully the physiological manifestations of a patient on observation, interview and examination. They also are more readily available, can play ethically and medically unacceptable problems and can be trained to give feedback to the student (Newble 1979).

Learning environments and how standardised patients fit it

Pacoe et al (1976), proposed a list of characteristics needed for teaching and learning interpersonal skills and this has been modified by Riccardi et al (1983). We have used these

characteristics to teach undergraduates in the General Practice Teaching Unit at Modbury in South Australia.

The first characteristic is to isolate the essential elements of the communication skill, define them and teach them systematically. To do this we use standardised patients with real chronic conditions (lasting more than 6 months). While others standardise the person to the "story", we standardise the person to a story that is very close to their own experience. With chronic conditions comes the mutual co-operative model of consulting as described by Szasz and Hollender (1956).

This model stresses an active partnership between the patient and health care provider, where patient treatment adherence can be increased. To support this concept in the minds of our medical students we find it helpful to let them think on the correlations between physician-patient communication and physiological health measures. Kaplan found that better control of diabetes and hypertension was associated with more patient control, more information seeking by the patient, more patient involvement and more emotional exchange in the initial visit (Kaplan et al 1988).

Then video feedback is given on non verbal communication, information giving and picking up cues. The types of questions asked are also systematically assessed.

The second characteristic is to let students practice the skills in either simulated or actual interpersonal situations. Our students each consult 12 standardised patients (SP's) over 20 hours in their early clinical training, with feedback. They are encouraged to reflect and apply what they have learnt to subsequent consultations. The skills are practised in consulting rooms equipped with video recording and at times consultations have "props" like blood tests or Xray results.

The third characteristic is giving immediate descriptive (not normative) feedback on student performance, including self assessment. Patient and peer feedback is also appreciated by the students and is a key influence on their learning. One of our trainers has evolved a structure for giving video feedback which gives the student control over the video recorder and encouraging them to first explore positive aspects of the consultation. The tutor should act as a group leader here and acts as a catalyst not a critic (Farmer 1986).

The systematic feedback on questions asked by the student is measured by us using the probing the problem questions in a classification of doctor's statements (eg directive or closed, physical, psychological and social), percentage of cues missed and whether there were statements giving information. (Gask et al 1988)

Fourthly training should be given in small groups. Our groups range from 3 to 5 and they mostly stay with the same tutor.

We can video tape in four different rooms simultaneously which makes it easier to organise our SP's. This gives the group afterwards a good chance to debrief and reflect on their tapes.

Fifthly the small group dynamics are critical to learning. Emotional baggage has to be confronted and previous attitudes analysed.

Sixthly repetition reinforcement and ongoing assessment is an integral part of the training program. Currently we are assessing an experimental group of students who received 6 hours of different more reinforced training to see if their measured skills are in any way different. Overall communication skills training is labour intensive and hence expensive so efficient and effective methods still need to be sought.

Finally video tapes can be used to separate elementary skills. It is a revelation for many students to see for example mirroring occurring unconsciously during the consultation. This can be analysed with sound and on slow motion without. Also the tape can be stopped while the student reflects on what he or she could have done differently at that point if they had done the consultation again.

Training the standardised patient

Abrahamson et al (1992) feels that the type of patient problem to be simulated is determined by the purpose for which the SP is to be used.

Our need at Modbury was to encourage students who were just entering their clinical years to improve their communication skills and history taking in a family medicine setting. We had a limited budget so we asked for volunteers to be SP's. Others in the field have warned against this and pay their SP's. We provide support generally and tea and coffee and give them a party at the end of the year. There appears to be considerable altruism in the hospital volunteers where we work and they frequently say how much they enjoy helping to make the students into doctors. This may be a vast untapped teaching resource in many hospitals. On the positive side most of the SP's are punctual, enthusiastic and perform their role consistently. On the negative side they have busy lives and often go on holidays so they can't come to the Unit. A major problem has been with standardised diabetic patients whose real diabetes has been unstable. Three out of twenty-five SP's have died as a result of their chronic illness and this affects the Unit emotionally. Our SP's tend to be retired and suffer from chronic conditions. The students consistently state how valuable the experience is of consulting with the SP's. They also value the tutor, SP and peer feedback during the course.

How are standardised patient cases developed?

We have modified a method used by Van Dalen to create a script for the SP (Van Dalen 1989). The script includes the following material.

1. Biographical data (age, gender, profession, marital status and social circumstances).
2. The starting position is a visit to the doctor who is acting as locum tenens. This means he or she has never seen the SP before and reads a health summary about the patient which accurately follows the official form provided by the Royal Australian College of General Practitioners. Each student is given 3 minutes (using a timer on the desk) to read this information. As the student may not have much knowledge about the area of the impending consultation, a sheet of relevant information is provided "the cheat sheet". The duration of each consultation is 10 minutes and is timed. After the timer rings the student has 1 minute to wind up the consultation. This is a learning process for time management. Most general practice consultations last 10 minutes in Australia and the student has to learn when to run over time or when to get the patient to come back. This is an introduction to the concept of continuity of care - there is only one consultation, but it lasts for decades.

The Health Summary includes demographic data, brief psychosocial data, family history for conditions that commonly run in families, alcohol and cigarettes, past history by year, immunisations by year, allergies and sensitivities and current problems.

3. The main complaint: This is the reason for visiting the doctor. This can be told at the beginning but some consultations have a hidden agenda where the reason for consulting will emerge if the student displays relevant communication skill.
4. Spontaneous information: this is information that should be given to all students/trainees in every SP contact. This information is given bit by bit in the course of the interview.
5. Non-spontaneous information: This is basically the hidden agenda. While many of the consultations with the SP's have hidden agendas, not all do. Earlier training in the medical course seems to have made students think that there will always be a hidden agenda. We include some consultations without hidden agendas because that is what occurs in real life. We notice at the beginning of our course that many students think the way to find out what the hidden agenda is, is to simply ask, "is there anything else?" They get frustrated when this does not work.

Non spontaneous information is information given to the student as a "reward" for attending to the patient. The way in which the SP gives non-spontaneous information can range from a clear and complete answer to a vague answer or no reply at all to the student's first question. Many SP histories are written where the patient gives a cue or affect laden statement in the consultation and it is then up to the student to pick this up either then or fairly close to then.

6. The psychological meaning of the patients complaint: This means the patient's fears wishes and expectations - everything the SP thought about his/her complaint.
7. Expectations: What does the SP expect from the doctor? Is it information, moral support, reassurance or counselling etc? We limit the physical examination to using the sphygmomanometer or taking a peak flow but of course SP's can be used for all physical examinations.
8. Reason for encounter: The script must state why the SP is going to the doctor.
9. Interpretation of the role: All the necessary remarks about the way in which the SP must perform the role. For example, looking anxious, closed up position, clothing. The non verbal requirements should be not specific to one part of the consultation but be an overall request. A lot

of the SP's natural body language is instructive when teaching on the video afterwards. It pays to be honest to the student in this debriefing when an SP does a 'nose flick' at the point where he/she may be lying about their simulated role. The SP's display a lot of natural body language as most of their role is real.

10. Physical symptoms: The SP must know the nature and degree of these.

11. Physical examination: Students and SP's have been told beforehand what examination may be required and what is not.

12. Data the patient shares: A written list of information that is on the Health Summary has been given to the SP. The SP must know what is on the chart.

Research, primary care and standardised patients

Researching before and after student attitudes to aspects of the training was relatively easy. Finding a control group operating at the same time however was not possible because of difficulty of changing curriculum structure elsewhere in the course. However the literature offers no evidence of spontaneous changes in untaught students' attitudes.

We have found students on completing the course said they were significantly more comfortable with seeing themselves on video

and receiving feedback from videotapes. They said that taping helped improve rapport building skills, helped them understand themselves better and understand the SP's body language better as well as their own. (All $p < 0.0001$ 2 tailed Wilcoxon matched pairs signed rank test).

Assessing changes in student behaviour using standardised patients helped us rediscover "Flanagan's law". Flanagan's law states that Murphy was an optimist (Murphy's law is: if anything will go wrong, it will). Little things can destroy the ability to record enough consultations for research:

- batteries that suddenly run flat;
- students who play with the camera controls;
- students who are late (the SP's invariably are on time);
- the medical faculty communication chain;
- a student may not arrive and fellow students say he/she has decided to give up medicine;
- video tapes that run out before the consultation ends;
- forgetting to turn on the recorder;
- unauthorised people entering the consultation when it is in progress;
- the hospital announcement system interrupting conversation in the consultation;
- students who become ill etc;
- short weeks due to public holidays (affects length of training)
- being sent an unequal number of students.

We also found that boxes holding about 20 videotapes are difficult to carry over a reasonable distance.

A useful feedback tool has been the debrief worksheet (see appendix). This enables the teacher to quickly note with the video counter number such things as a change in the student's or SP's body language, whether a cue was given or recognised if given and when an open ended question was given by the student. This enables rapid fast forward or reverse to the area to discuss. We do stress the importance of non verbal communication in our teaching but we do not evaluate it yet for research purposes, but in the future, we may consider using measures such as the Profile of Non-Verbal Sensitivity. This is a 45 minute film of an individual's ability to decode the meaning of facial expressions, body movements, postures and voice tones (Rosenthal et al 1979). The most common non verbal communication we notice is the position of the SP's upper knee (if knees are crossed), the nose flick, position of arms, steepling of hands and non verbal mirroring.

We have a rater who is a psychologist and who is blind to the details surrounding each videotaped consultation. While we used a validated rating scale we still found disagreement on classifying some questions asked by the students. This rating scale is the same scale that we use for all student feedback and is a modification of the scale used by Linda Gask (Gask 1988, see Appendix). We chose items in that scale that found common events in the consultations Gask studied. Two sessions

together with our psychologist created three pages of questions which could be ambiguously classified and we reached agreement on where to put them. A subsequent analysis of inter-rater reliability using a weighted Kappa (Cohen 1960) demonstrated around 0.9 for all the types of questions asked.

Other variables that required controlling included the teaching curriculum in the experimental and control group which had to be reproduced exactly each time and the length of the teaching in both groups which was allowed to vary only by 5 minutes. The consultations themselves were timed - we found simple clockwork kitchen timers to be useful. The consultations all lasted 10 minutes and the blind rater wrote down the first and last question asked by the student so inter-rater reliability could be checked accurately.

Another variable is that of the cases played by the SP. They have a structured protocol which has been agreed to by the SP and the writer and this is monitored to make sure they do not wander off in another direction. The students sometimes push them off track but the SP's soon bring them back to the structure with things like why they came, what information they want and cues about their concerns. When the SP's are ill they simply cancel their attendance. Most of the time they are playing their role their chronic condition is stable. However there are day to day minor variations in their role that we cannot control.

For evaluation of a student's behaviour we use 4 SP consultations before and 4 after training to try to cope with case variability e.g. age, sex of the SP. Each student sees the same group of SP's as their colleagues and are watched to make sure one does not tell another what the next consultation is about. It is interesting for us all to see how different students handle consultations with the same SP. We have not noticed performance of the SP's declining after several consultations, but we do not ask them to do more than 4 consultations in a day.

Preliminary findings on 54 students in a single blind randomised controlled trial have found significant differences before and after with the number of open ended questions about feelings in the experimental and the control group. (Wilcoxon signed ranks matched pairs test $p < 0.0001$ and $p < 0.02$) There was also a significant difference in the differences between the experimental group which asked more open ended questions about feelings at the end of the course and which received more video debriefing than the control (Mann Whitney U test $p = 0.002$). We do not know if this student behavioural change will last as some of the courses they will go on to do not stress communication skills.

We obviously believe that communication skills can be taught using standardised patients and video feedback. We feel to get results that the SP's need thorough training with follow up observation and feedback and that volunteers can be used.

We also feel that reinforcing the positive aspects of the students' behaviours by video debriefing in an atmosphere of support is a powerful educational tool. Research can help to find which emphasis we need to place on which parts of this process remembering that this is a labour intensive exercise and hence expensive.

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The Curriculum for Fourth Year Teaching at the General Practice Unit

There are 5 morning sessions at the unit which usually run from Monday to Friday. The number of students is usually four. The aim of the curriculum is to introduce the student to the general practice consultation and the mutual participation model of consulting as described by Sasz and Hollender (1956). This means consulting with standardised patients who have chronic illnesses and reflecting on the consultation in a small group teaching environment. The principles in the learning experience are based on Egan's Comprehensive, Client - Oriented Model of Helping which includes:

1. A conceptual understanding of the steps of the model - reading, lectures etc.
2. A behavioural understanding of the helping model - watching others or videotaping of others.
3. Initial mastery - practicing skills under supervision.
4. Further mastery - using them in practical situations - "Professional Adolescence".

5. Lifetime learning - Full mastery is a journey rather than a destination.

Egan G, The Skilled Helper 1990 4th Edition Brooks/Cole
California.p18

THE MONDAY MORNING SESSION

Short introduction and video desensitising

The students are required to arrive at the unit at 8.45am and they are separated from the standardised patients who also arrive. The staff organise the 4 consultations for each student on an itinerary sheet. Prior to this each of the 4 consulting rooms have been tested for sound and vision and fresh batteries inserted into the sound system. The preliminary "cheat sheets" (see Appendix) have been put in the consulting room desks and the presence of timers on the desk noted.

At 8.50am the teacher has a short tutorial with the 4 students. In this tutorial the students are asked what they know about the course from their colleagues. They have been told surprisingly little as in 4th year they are separated into small groups all over Adelaide. They usually mention videotaping. Their previous experience of videotaping is sought and it transpires that in 2nd year they had interviews with another student or a person paid to roleplay ("rent-a-patient") which was videotaped and sometimes this was played back with a tutor present.

The teacher mentions that it is normal to feel threatened by the process of being videotaped and this can be by seeing their own body from different camera angles and being embarrassed by their behaviour. Also the compression of pitch by the recording system is mentioned and how there are about 15 pitches to the human voice. The confidentiality of tapes is mentioned saying in jest they won't be shown to the Dean or sent to a local television station for a program on "bloopers".

Also mentioned in this short tutorial is the standardised patient. The students mention they have interviewed "rent a patients" in their previous year and some express dissatisfaction with this as an artificial experience. They have never seen a standardised patient before and they are told that 90 to 100% of what the standardised patient tells them is true. This because the training of the standardised patient includes their own health history to a great deal if not entirely. The mood of the students seems to be one of threat when they are told that in 5 minutes they will consult with 4 of these standardised patients. Indeed the teacher often jokes that they can all go home if they want to.

The "cheat sheet" is then introduced to the students. This is contained in a Royal Australian College of General Practitioners' History Folder and contains a RACGP Health Summary, empty progress notes, sometimes test results , a

letter from a consultant or hospital doctor, an Xray or CT scan film and the "cheat sheet."

The Health Summary contains the patient's demographic details, social history and smoking and alcohol history. The family history includes premature coronary heart disease (under 55), diabetes asthma, epilepsy, depression, migraine, peptic ulcer, breast, colon, brain and melanoma cancer and thyroid disease. Then the past history is recorded by year and also immunisations in a similar fashion. The patient's allergies are also recorded and a list of current problems is made by year of origin and with medication and management included. Each student is allowed to peruse this and ask any questions. The "cheat sheet" has been designed to enable the student to get a basic idea of the illness the patient is suffering from. This is because of the student's limited clinical knowledge at this stage of their training. The information on the sheet is enough to read in 3 minutes and not enough to discourage lateral thinking by the student. The students are told they will have 3 minutes to read the notes and the consultation will last for 10 minutes. A kitchen timer is placed on the consulting room desk. When the bell rings at 10 minutes the student is allowed 1 minute to finish the consultation. They are told that the average consultation time in Australian General Practice is 10 minutes.

The students are told that they are not required to examine the patient with the exception of taking a blood pressure or a

peak expiratory flow, if they think it appropriate. Despite their training in the previous year many students still do not know how to take a patient's blood pressure as evident in the wide range of readings between them. This sometimes leads to anxiety on the part of the Standardised patient and sometimes we have to put on the notes for the student not to examine this patient's pressure. Students also need to understand how to put on a blood pressure cuff as the side facing them varies with different brands of cuff.

Often a student will ask: "what do you want us to do?" The teacher replies do what you think a general practitioner would do. This does not make them feel any more comfortable as their previous exposure to general practice in the curriculum has been 4 sessions in 4 years. The teacher repeats the answer when asked: "do you want us to do what we did last year in the Communication Course." The lack of specific guidance is deliberate to enable the student to get a feel of the general practice consultation and to respond to it from their own personal resources.

Four consultations

The students rotate through 4 consulting rooms and meet 4 different standardised patients. At the end of this each student will have consulted with each of the 4 standardised patients. Rarely due to last minute failure of a standardised patient turning up is a substitute standardised patient used from the staff. The teacher and staff start the timers and the videotapes. This lasts from 9.am to 10. am and is followed by a morning tea of 30 minutes to 10.30am.

The housekeeping

This lasts for 10 minutes and consists of the assessment, timetable and handouts. The assessment consists of a mark for trying to improve consulting skills and for attendance at the unit at the required time. The following preceptor attachment marks are mentioned, a log book for 20 patients with either acute or chronic disease, two health summaries and commentary on a patient on whom you have done a health summary with chronic illness. At the end of the year there will be 2 extended matched questions taken from the recommended reading for the course: A Textbook of Family Medicine. McWhinney I Oxford University Press 1989.

In the commentary study the doctor patient interaction and describe principles of management of the patients chronic problem. About five references are enough. While you preceptor will read the commentary he or she will not mark it. In fact I will mark it (RM)

Failure has a positive aspect

At the same time a timetable is handed out and a handout on Failure in Medicine. It is stressed that failure is an integral part of medicine as there are so many variables involved and the key to this problem is learning by one's mistakes. This also applies to learning how to consult in general practice and the attachment to the unit is about reflecting on this after each consultation. The students are reminded of the author of the poem on failure who works in an American Medical school and who had a group of 4th year students who could not make their experiment work. After repeated meetings at the "Department of ignorance" they decided to send off the buffer solution to an independent analyst to check it. It was found that the buffer solution was faulty and the students were the first to find out despite the solution being supplied to many medical schools with no one finding this out. This is a constructive example of dealing with failure. The students in the unit at this stage are still apprehensive but interested now they have a taste of what the attachment is about. The students are also reminded that 50% of what they learn in medical school will be different in 10 years time.

The handouts are:

Findlay D. Body Language, *Aust Fam Phys* 1987; 3:229-236

Cameron-Hill Patricia and Shane. *Angry People*, Yates Seminars, Windsor, Victoria.

Kerwin Ann. Can you imagine, he said, that they have not failed anything? The curriculum on medical ignorance. Tucson Arizona.

Garcia-Shelton. Interviewing and communication skills. Ch6 in p51-56

McWhinney I. The importance of being different. *British Journal of General Practice* 1996;46:433-436

Monday Feedback from 4 consultations

The students are asked to reflect on the consulting they have just done. They often say how they felt their lack of knowledge was a major disadvantage. While the "cheat sheet" is very useful it doesn't spoon feed the student and creative thinking about the patient's problems is needed. This problem reflects the importance placed on knowledge in their training and their examinations. Occasionally a student will realise that they can look up the MIMS book on the consulting desk which describes most prescribed medications.

Giving information in a fashion that minimises medical jargon is another problem for the student. A good example of this is if they have the standardised patient Mrs Lewis who asks the student: "What is an ACE inhibitor?" The problem with this answer is the student is tempted to talk about enzymes and Angiotensin 1 which is still jargon. Mrs Lewis may know what an enzyme is because she is a retired horticulturalist and

part of the exercise is to find out how much the patient knows about the topic.

Another problem is the concept of time management. With a timer ticking on the desk they feel the pressure of time. As explained before this is a psychological pressure similar to the general practitioner's consultation where while there is no ticking clock there is instead an appointment system and patients waiting in the waiting room. Some of these will be angry if they are kept waiting. The problem of what to do when 10 minutes are up is discussed in a teaching model later in the teaching session.

The students express confusion as what to do during each moment in the consultation. They find that the model of consulting which they have learnt in the hospital ward setting just doesn't work. The time factor is one thing but the other is that they have an ambulant patient who wants to be heard and who is often seeking information about their problems. They find that their patient is not lying in a bed, nor passively answering a set of rote learned questions. Their systems review is impossible to apply and the need to be selective in the probing the problem questioning arises. The student is also confused as to whether to treat the consultation on a communication skills basis as learnt in the principles picked up in previous years of training or to apply the hospital ward method with its many closed physical questions and rote learned systems review. This conflict is

made worse by the behaviour of the standardised patient who at many times is in control of the consultation. The student often gets out of control with all of these conflicting values of consulting and admits they really have been thrown in the deep end. The way they adapt to this is from their own strengths and for many they are in a learning mode to see if they can make their consultation have a better outcome. On the question of outcome an overhead is shown of the findings of Kaplan's study in Boston on the chronic conditions of Diabetes, Hypertension and Duodenal Ulcer. There is another overhead on doctors with a participatory decision making style. The results were that in a randomised controlled trial better diabetic control as measured by glycated haemoglobin and hypertension control as measured by diastolic blood pressure was linked to more patient involvement in the consultation, more information seeking by the patient, more patient say in the management and more emotional exchange in the first consultation.

The student comes to realise that the consultation in general practice is a very dynamic thing and not telling a patient what to do or asking questions without thinking very deeply. They acknowledge that this form of consulting is more demanding than what they do in the hospital.

The students usually have to be asked what common morbidity patterns appear in the 4 consultations. The first is that most standardised patients are over 55 and suffer from chronic

illness. This allows an introduction to the Mutual Participation model the students, when asked, say they feel low in power when consulting because of their lack of more than basic knowledge and the fact that the standardised patient has lived with his or her chronic condition for a long time and picked up a fair amount of working knowledge along the way. We played the videotape of the Fish Slapping Dance from the Monty Python series - the allegory is that knowledge is power and the doctor has the big fish. The students are asked who is Szasz and Hollender. They were given information on this in their First Year Behavioural Science course. This question is greeted with silence and I tease them with statements like names of British Comedy Duos eg French and Saunders and Hale and Pace as similar groups of people. Then I ask them what is the "sick role". While they remember what this is to a degree, they do not know who postulated this hypothesis (Talcott Parsons). The "sick role" is basically about the patient who becomes ill and goes to the doctor. The doctor diagnoses the condition and advises the patient what to do. The patient does what the doctor says and is given time off his/her work with a certificate. The patient does his/her best to get better and then returns to work. I ask then, how does the Talcott Parson sick role model apply to chronic illness. After deliberation they realise that if you cannot be cured, you cannot be a patient in the sick role model. I add that the model does not apply to preventive medicine or to psychosocial problems.

Szasz and Hollender postulated a model with 3 elements to describe the power of doctor and patient in the consultation. The first is the active passive element where the patient is told what to do. This could be the induction phase of being anaesthetised or having a plaster put on for a fractured wrist. The second may be suggesting that the patient should be taking antibiotics for their Tonsillitis but the patient is concerned that they might get thrush with antibiotics (they got thrush with antibiotics several times before). What follows is information giving about narrow and broad spectrum antibiotics and some sort of negotiation between patient and doctor). The third model is that of mutual participation an overhead here records the following statement:

"Patients are active processors and recipients of information; there is therefore a clear need to develop a mutuality of expectations between patients and HCPs. Only when such expectations are congruent will patient satisfaction and accompanying treatment adherence be increased.

Such joint consideration of mutual expectations will help to nurture a more equitable relationship between patients and HCPs, a relationship where patients can assume greater responsibility for the outcome of the treatment. The task for the HCP shifts to one of helping patients help themselves, as described by Szasz and Hollender's (1956) mutual participation model."

The common problem with consulting is using the wrong model. In some consultations the active passive model is used when the mutual participation is more appropriate. This method improves patient satisfaction and compliance. Of course other factors are related to compliance like an appointment system and other system factors, simplification of the management task for the patient, the relationship between patient and doctor and the patient's ideas and beliefs. The students are shown a videotape of a consultation where the doctor is played by Rowan Atkinson in a dominating active passive way. The patient is suffering from hypertension and his diastolic reading is elevated. The patient is told off because of this and accused of not taking his tablets. It turns out that the patient is terrified by his doctor and this is why his patient's pressure is elevated.

A Managerial Model of Consulting

A video called: "Can you spare a moment" from Video Arts which has been borrowed from the Royal College of General Practitioners' Library is shown. While addressing managers in business it relates very well to the mutual participation model. The four headings addressed are: 'Setting up the interview,' 'Encouraging patients to talk,' 'Helping them think it through' and 'Letting them find the Answer.'

The Cartoons

1. Academics "Sad case took the Uni gold medal....."
2. Holism vs. reductionism.
3. Interesting spleen in bed six.
4. Statement on chronic illness.

STEROTYPE OF 4TH YEAR MEDICAL STUDENT

51% Female

Australian

21

1-2 Siblings

Heterosexual

(more than Arts Faculty)

Alcohol

(skullduggery drinking club)

Ectomorph

Saints, PAC

Pembroke, Seymour,

Norwood High

Few kids

Few married

Malaysian

23

3-5 siblings

Heterosexual

Orange juice -

Muslim

Ectomorph

Boarding school

Few kids

Few married

Why at a party do you deny you are a medical student?

THE TUESDAY MORNING SESSION

9.00am

The lemon game

The first part of the session lasts for 45 minutes and consists of the "Lemon game" which has been adapted from Professor Ken Cox from the University of New South Wales.

For 4 students select 5 lemons of varying sizes and shapes. If you do this you will get strange looks from fellow shoppers in fruit shops. Put these in a bag and refrigerate and they will last for 6 weeks. Also have 4 eye masks like airline passengers use. Ask permission for the students to play the game. As they don't know what it is about their response indicates how much the teacher is trusted. However this game has never been rejected by students.

Then ask the students to select a lemon from the bag. After this tell the students to examine their lemon carefully as they will be giving a tutorial on their lemon in a minutes time. Note the different way the female students hold the lemon with the finger tips as opposed to the males volar aspect of the distal 2 phalanges. This is to get them to start observing body language. After they have had enough time to examine their lemon ask each one to present. They usually describe shape and size in centimetres and distinguishing marks. When all the presentations are finished ask them to put the lemons back in the bag. There is still the fifth lemon in the bag. Then hand them the blindfolds with comments like no

free trips on Malaysian Airlines or this is the only time you can legitimately go to sleep in a tutorial and not get caught.

The rules are that you will hand them a lemon. If it is theirs they should keep it in their lap. If not they are asked to pass it to their colleague on their left. In the case of the last student on the teacher's right they should pass it forward so you can take it. Hand out all 5 lemons to the blind folded students. If it is eventually rejected it will end up in your hand.

Most students select their own lemon. When everyone says they have found their own lemon tell to take off their masks.

Then ask them with what process did they choose their own lemon. They will mention size and a particular characteristic of their lemon and the answer is the shape - the 3 dimensional shape of the lemon. Then ask what is the word for the recognition of shapes. It is stereognosis which they might remember from geriatrics.

This is an introduction to stereognosis or pattern recognition and the aim is to help the student learn its importance in general practice.

Some other analogies can be made first. Some rural students can individually recognise 20 to 30 sheep. It is easier if an animal has colours like the sienna brown and cream of

Hereford cattle and the black and white of Friesian cattle. Another analogy is bird watching in the Coorong. If a bird flies in from Siberia you might tell from its silhouette whether it is male or female, adult or juvenile. The so called lateral view used by radiologists is a key factor in recognition. Indeed the silhouette of the head of a bird of prey will keep other birds away from your apricot tree - at least for a while.

Ask the students what do the Americans mean by friendly fire? They will give an example from the Gulf War or at least usually one male student will. It is a failure of pattern recognition - although unpopular officers have sometimes been shot in the back. Ask the students if they were at the court marshall of some one who fired on his own troops and they were the defending officer what possible reasons could there be for the "friendly fire". They could include poor training, impaired concentration due to drugs or alcohol, misleading information such as there is none of our lot in that sector and radar blips or aircraft silhouettes which are similar in appearance. If a specific example is discussed never refer to the enemy by nationality, call them Darth Vada's lot as our students come from many countries. An example of stereognosis in warfare is its use in protection. Camouflage is an example and so is the programming of surface to surface missiles at sea. Most naval vessels will have such a protective mechanism and one form is firing a charge under a collection of metal strips so that a bigger image is created away from the ship so

the missile is diverted. The missile's computer is programmed to lead the missile to the biggest object which might include an aircraft carrier.

Then ask what about medicine? Where does stereognosis fit in here? They will mention symptoms and signs. On asking are they classical symptoms or signs they will say classical but sometimes atypical. They certainly will mention the hospital morbidity and it is worthwhile pointing out that only 3 out of 1000 adults in a month end up in a University Teaching Hospital, whereas 250 will go to their general practitioner (McWhinney Textbook of Family Medicine 1989 p28) They certainly have not seen the classical and atypical lemons in general practice.

One can say that it is normal to learn classical symptoms and signs first - after all you do not learn to correct a hook or a slice on the first golf lesson. Another point is to ask if the students rote learn for the exam then forget about most of it afterwards. If they do not agree ask them what they remember about the Krebs's cycle. The point about lemons is you have to have them in your mind for the rest of your clinical life. Also it is critical that in general practice we know the subtle difference between what is normal and what is not. The lead time gained from this can lead to picking up cancer at a treatable stage or picking up serious illness which requires urgent management.

Ask them what sort of lemons do you have compared with theirs. The teacher has learnt his or her lemons by experience - the patients have taught him or her. The students have learnt them from the hospital ward and from textbooks. A story to illustrate this is useful. The great Master of Nineteenth Century General Practice James McKenzie went into practice in the 1890's at Burnley in Lancashire. The Gulf Stream made Lancashire humid and this was conducive to the spinning of cotton imported from the USA over the Atlantic. Hence Burnley was a cotton spinning town and as part of the Industrial Revolution agrarian people were attracted to work in this town. The back to back tenement housing created overcrowding and the Lancefield Group A Streptococcus was in its element. McKenzie (whose photograph is in the General Practice Teaching Unit in the hallway) saw many patients with Rheumatic Fever and Mitral Valve disease. He threw away his recently bought selective physical examination textbooks and let the patients teach him the lemons. He kept meticulous records and recorded the Carotid pulse, the Jugular Venous waves , the Apex beat and the Radial pulse on an instrument he built himself. This included a smoked rotating drum with stylii that scratched off the charcoal. Then he varnished the record and kept it with the patient's notes. One day he notices that the Mitral Valve murmur in a patient went away when a fluttery wave appeared on the smoked drum. He felt this was due to paralysis of the Left auricle deducing that the blood flow through the stenosed valve had diminished. He called this condition Auricular Fibrillation and became the Father of Cardiology.

Now give them a true story and ask them to be the doctor.

This a story that happened to myself when I was in practice in Newcastle NSW. I had just finished my morning surgery when the practice secretary told me there was a home visit to do. It was to a Mr Smith who was a new patient although I had looked after his wife previously. She was a reliable patient and this made me feel the visit was justified. When I arrived Mr. Smith was in bed. His age is 55, he works in a factory, there is no history of common family illness, the children have grown up and left home and he is a smoker. His complaint is that he "feels awful doctor". He has felt this since this morning. The teacher can now be the patient and let the students ask questions. All the answers will be negative. The selective physical examination reveals a Blood Pressure of 120/80, Normal Heart sounds, Chest clear, Abdomen normal. On examining his chest I had my hand on his shoulder and noticed when I took my fingers off his skin that the blanching time took a bit longer than I thought to go away for the temperature of the room.

If the students are making hypotheses remind them of an occasion during the course when they discussed the hypethetico - deductive model of Karl Popper. This is based on creating an hypothesis and continually testing it until or if it is destroyed. They will remember the analogy about all swans are white until you see a black one. One can emphasise that this

model is commonly used in general practice. When they are creating hypotheses in this clinical story they sometimes eliminate a lot of chronic problems because the onset of symptoms started when the patient woke up.

Then say to the students they are the doctor and what is each one going to do? They are still standing at the bedside and the patient is anxious because he doesn't know what is wrong and so is his wife. There are no other things the patient says are worrying him. Some students will say to ring them if things get worse, others will come back later in the afternoon, some will come back that evening and others will admit him to hospital.

Then I tell them that the patient died that night. This produces quite a lot of concern among the students who want to know why the patient died. I ask them to think about it again. If they can't get the reason I tell them that the most powerful instrument in general practice is the retrospectoscope. Why would a man age 55 who is a smoker feel awful in a sudden way, have poor capillary refill and subsequently die? In reality the patient died of a silent myocardial infarct. This emphasises the snapshot the general practitioner got of a progressing acute atypical condition and supports the students who wanted to go back for another visit. Many students wanted to order a battery of tests as a dragnet and had no hypothesis. The hypothesis I don't know but I can't eliminate a serious cause here would warrant urgent

intensive monitoring. Many students are concerned they would be wasting the hospital's time and financial resources by sending someone with such vague symptoms to hospital. In reality the patient died in the coronary care unit despite all the appropriate care but of course we gave him the best we could to save him.

In summary many of our lemons are taught to us by our patients (the previous pattern was taught to me by a patient with a silent infarct 10 years previously), often the differences between a normal and an abnormal lemon are subtle, and in general practice we rely on our communication and patient relationship skills, selective history and examination skills, choice of investigation and referral and overall our lemons. Some people would call the lemons clinical intuition or a diagnostic sixth sense.

Being a professional

9.45am

The students are shown a cartoon of a doctor finding he is sitting next to a talkative patient of his on a long overseas plane flight. This is an opportunity to discuss the nature of being a professional and how in particular a country general practitioner has to draw appropriate lines with patients on different occasions that are clinical and occasion that are social. If the doctor is too kind in the consultation there is a danger that an important test may not be ordered and a crucial diagnosis missed.

Further overheads show how a consultation has been classified by Roger Neighbour. The examples given are my own consultations which were marked by a visiting general practitioner to my practice on an Interpractice visit as part of my Continuing Medical Education. Not all aspects of all the three consultations got good marks and admitting this demonstrates that honesty about one's feedback is expected from the students during the attachment. The areas assessed in my consulting were the Connecting Phase, The Summarising Phase, the Handover Phase the Safety - Netting phase and the Housekeeping Phase. The aim of this is to show that being a professional means having good consulting skills.

The patient centred consultation

Show the students the overhead on the patient centred consultation from Textbook of Family Medicine I McWhinney 1998 p 118. Here the patient attends with cues of unwellness which today we would call reason for encounter. The traditional pathway follows the History, Physical examination and Laboratory tests and leads to a Diagnosis, which we would call an hypothesis. The other pathway involves the patient's Ideas Thoughts and Expectations as well as the Impact of the illness on the patient. Most students from the previous consultations yesterday express confusion as to which pathway to follow and are just as confused as the faculty as to whether to be a problem solver or a care giver. McWhinney feels the answer is integrating both in the general practice patient centred

consultation. This leads one to the last label on the overhead which is Integration. I usually say that the holistic approach was followed at the Coan school of Medicine and the Nidian school was more reductionist. McWhinney Op cit p113) Indeed I ask them to answer who wrote the saying "Life is short, and art is long, the occasion fleeting and judgement difficult". As a clue I say he played centre forward for Greece in 400 BC. He lectured on the island of Kos. Hence the Coan medical school.

The next overhead concerns this statement by Hippocrates and reflects on its significance to today's general practitioner. Charmian Clift has been regarded as Australia's greatest essayist and lived on a Grecian island with her novelist husband George Johnstone. The aim of this is to show that it is an art to practice this integration in the consultation and it takes a long time to acquire indeed I am still acquiring it. This skill is one of the arts of medicine.

Show the overhead of the tied up patient answering the many closed ended physical questions. The patient centred consultation does use these questions but to lesser extent than the traditional hospital history taking.

Show the overhead of the person with the box saying this way up. From where that person is looking it does look the right way up but not to the person in charge. This has relevance for patients in the consultation where their ideas may be not

picked up. An example is the patient who only believes in natural remedies.

Body Language

10.00 am

Ask the students what overall is the most powerful form of communication in the consultation and let them give individual answers. The choice is from non verbal , paralanguage (the way a person says something) and verbal. Birtwhistle from the USA feels it is non verbal. However if you tell a patient they have cancer obviously the verbal component is the most important. This of course doesn't happen very frequently.

Then ask who taught them body language? They might say third year communications course but it is most likely their parents. Who taught their parents? Their parents. This introduces the cultural factors in non verbal communication and as the students have such varied ethnic backgrounds this will become evident in their videotapes that will be seen this morning. The cultural expression is to be encouraged as this is an honest part of the their non verbal communication. The students sometimes are confused about whether to fake body language or not and sometimes feel they have to follow certain formulae like sitting with their knees slightly apart and leaning forward. Many feel uncomfortable with this and feel this discomfort will be what is transmitted to the patient.

A universal form of body language is using the hypothenar edge of the hand in a cutting manner with the upper limb straight

to make a point when arguing. This crosses all cultures. However what is acceptable in one culture for some other forms of non verbal communication is not acceptable in others. An example is eye contact in communicating with Aborigines. Another cultural story is that there is a town in Northern Italy which was conquered by soldiers from the south centuries ago. They could not go any further because of the Alps. The invaders when they said "no" would toss their heads back whereas the locals would simply shake their head. Today in this town the descendants are still using these different ways to illustrate the same point.

Demonstrating body language

First emphasise the role of the swivel chair in the tutorial room. Some students when consulting will swing the chair so their shoulders square on towards the patient when asking questions and then swing back to listen.

The students don't understand ambiguous body language so sit in the chair to demonstrate by crossing your arms and spreading your knees apart and ask what am I saying? The top half is closed and the bottom half is open, so you are sending a mixed message. Some students will challenge this by saying how do we know that you are crossing your arms because you are cold and not being threatened? The answer is that you may be cold and it is up to the observer to keep observing to see if this is true from the congruence or incongruence of what you say, how you say it and further body language.

Cross your knees and ask the students how positive you seem towards them. By swivelling the chair you can include 2 students and be neutral or exclude the rest. They should eventually conclude that if the crossed knee on top has its medial aspect facing the patient the patient feels more comfortable. Ankle crossing is a similar variant.

Find out who has blue eyes. If no one does then illustrate the story. The blue eyed student has an obvious pupils because of the absence of melanin in the iris. Hence you can see sympathomimetic amine influence at a distance. Accident and emergency is full of people with this who also sometimes smell of alcohol. Also we become alert to the situation when a patient says there is nothing wrong and their pupils say otherwise.

Tell the students that there are other common body language movements especially of the hands which will become obvious when their videotapes are played back. This will be greeted with groans of anguish.

Show the cartoon overheads of the man at the party trying to understand body language, the group of men with an obvious authoritarian man lying about creating a relaxed friendly atmosphere, the man saying one thing and pointing in the other direction (here you can mention turning off the television and watching the body language of politicians or car salesmen),

the doctor not maintaining eye contact and the result with a patient with an axe in his head and the doctor giving totally inappropriate management because he wasn't watching his patient.

Avoid jargon

There are 13000 new words that a medical student acquires during the medical course. The public don't understand all these words and the doctor should explain things in language the patient understands. Having confidence to draw is useful especially for the stomach and the reproductive system. There is an overhead to illustrate this. The Malaysian students appreciate this as they have learned English and the medical terms and after graduation will be required, if not a fee paying student, to work in a hospital often where the people speak a different dialect.

Also patients sometimes do not know where their anatomy is. Examples are where the heart is and the stomach. Show the overhead on where people think their thyroid gland is.

Smell

Smell is a powerful form of communication - Perfumes and aftershaves are a multi billion industry. In medicine the smell of fear or sympathetic system response is an example as well as the effect of pheromones.

Morning tea

10.30am

Debriefing videotapes

10.30am

First the students are told that the student whose tape is being debriefed can hold the infra red monitor and fast forward through any part they don't want to show us. (No one has fast forwarded through the lot yet.)

After watching the consultation use the Pendleton Rules. (Pendleton D, Schofield T, Tate P, Havelock P The consultation An approach to Learning and Teaching.1990 Oxford Medical Publications p 69 - 71)

Also look at the hand out based on Farmers rules for feedback

Finally give the students a copy of their consultation using Gask and Boardman's rating. The questions are probing the problem questions and are open or closed and physical, psychological and social. In the centre of the sheet is a Gask score of the percentage of open psychological questions asked of overall probing the problem questions for her group of general practice trainees before and after training. Stress that this is only a description and not indicative of the student's overall consulting style. The session should finish at 12.30.

1. Briefly clarify matters of fact

It may be difficult to evaluate a consultation without access to a few crucial details such as the dose of a particular medication prescribed or whether the doctor had discussed the effects of a problem in a previous consultation. These few details should be discussed first but this is not to be used as an occasion to make points under the guise of a rhetorical question such as 'What on earth did you expect to achieve by examining the man's chest with his shirt on?'

2. The doctor in question goes first

It is important to allow the learner to make the first comments about his consultation. Learning will take place much more easily when the learner develops a realistic idea of his own strengths and weaknesses. What is more, the learner's remarks reveal his values and his degree of perceptiveness. The teacher needs to know about both of these matters. But it is sufficient to know that feedback is much more acceptable when the learner feels in control.

3. Good points first

In order to prevent the unhelpful spiral of attaching and defending, we insist that the learner's strengths should be discussed at length before any suggestions are made. We may think in terms of a bank account - deposits precede withdrawals. In this way we also ensure that anxiety is not raised above the minimal level which is always present

when a learner allows colleagues or a teacher to observe his performance.

A doctor's investment of himself in his work is usually considerable and negative comments can be hurtful, so there must be encouragement rather than punishment. Another reason for the discussion of strengths is that the learner needs as clear an idea of what should be preserved in his consultations as he does of those aspects which could profitably be changed. Babies thrown out with bathwater might illustrate the point rather well but learning theorists would talk in terms of positive reinforcement leading to the maintenance of desirable behaviours. There is an additional reason for discussing strengths which concerns the teacher. In observing the work of several learners the teacher will notice that their strengths and weaknesses are in different areas. The teacher needs to understand how that successful achievement of each of the tasks may be brought about. When the teacher discusses any learner's strengths in detail, he becomes familiar with possible ways in which each task may be achieved. When he notices that a learner is weak in an area in which another learner was strong, he is more able to help.

4. Recommendations not criticisms

When those tasks are discussed which were not achieved well, it is essential that recommendations should be made. Simply to inform a learner that a task was not achieved is of little help. If, on the other hand, the learner is told

how he might have achieved the task, he has the opportunity of putting the matter right. But, again, we start with the learner.

It may be that the learner knows only too well which tasks he did not achieve. He may also have perfectly good ideas about how he might have achieved the task. If this is the case, the teacher does not have to be a critic at all - merely a helper. Even if the learner cannot make his own recommendations, the helping role of the teacher is still dominant when specific suggestions are made. It may be that the teacher and the learner disagree about those tasks which were achieved well and those which were not. In this case, a discussion of criteria is needed. What criteria might we use to decide whether the effects of a problem were explored adequately and appropriately? And how might we apply these general criteria to a specific consultation with a particular patient. The teacher and the learner will need to discuss these matters and to achieve an agreement. But the discussion is part of the educational exercise. Resolution of this form of discussion may only be possible when research evidence is considered or when a more detailed examination is made of the task, the problem, the patient, the doctor and the available resources. All of these matters are usefully discussed by both learner and teacher - thus, disagreement can provoke learning too.

THE WEDNESDAY MORNING SESSION (1993-1994)

On Wednesday the students were randomised into two groups

From 9.00-10.30am **the control group** let:

Two students watch videotapes of their tutor consulting with patients. These tapes were showing the tutor's skill in psychotherapy.

From 10.45am-12.30pm

Two students had an open discussion about the tutor's videotaped consultations. Here the issues dealt with a holistic and preventive care. Then follows a discussion about clinical skills followed by a discussion on primary care primary care ophthalmology and ear nose and throat.

The Wednesday morning **experimental group** let:

Two students from 9.00-9.30am have a tutorial which was an introduction into the feelings and emotional side of consulting with patients. A handout on listening skills was given to the students and they are asked to fill them out (see X). They are also requested to write down six or seven points which make someone a good listener and six or seven points which make someone a bad listener.

At 9.30am the consult with a standardised patient. Each student had two 10 minute consultations and this was followed by 5 minutes feedback from the SP. At 10.35am there is a short morning tea and at 10.55 a tutorial is

conducted for the two students on listening skills and personal values and dealing with emotions (see Y). More specifically this included understanding how to ascertain the client has understood explanation and/or instructions, how to work with interpreters, how to deal with strong emotions and how to understand the implications of shock.

X**LISTENING**

Please answer the following questions with the closest correct answer.

This is **not** an exercise used for assessment.

When you take part in a conversation, meeting or discussion; do you

	<i>Always</i>	<i>Often</i>	<i>Seldom</i>	<i>Never</i>
1. try to have the last word	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. try to judge the value of the message's content, not the speakers ability.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. look for basic ideas, discriminating between fact and opinion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. listen for ideas and underlying feelings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. fight distractions and actively concentrate on listening?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. enjoy listening to difficult and variable presentations and subjects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. wait impatiently for the speaker to finish so you can say something?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. quite often finish the sentence for slow speakers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. determine your opinion on the subject and get ready to give that opinion?

10. use several forms of note taking when you want to recall the information?

11. get annoyed when the speaker is emotive over a subject in which you are not interested?

12. keep a poker face so that the speaker does not know what you are thinking?

13. prepare questions to try and trap the speaker

Y

VALUES QUESTIONNAIRE

Please read these questions and mark which, if any, you agree with. There may be more than one. There are no right or wrong answers, and it is just for discussion.

- 1 If I were an intern and was convinced that one my colleagues was practicing unethically, I would:
 - a) first discuss the matter with my colleague
 - b) report him/her to the superior eg registrar
 - c) ignore the situation for fear of negative consequences
 - d) report the situation to the ethics committee of the hospital
- 2 Doctors who work with culturally diverse groups of people without having crosscultural knowledge or skills:
 - a) are violating the medical rights of their clients
 - b) are probably guilty of unethical behaviour
 - c) should realise the need for specialised training
 - d) can be said to be practicing ethically.
- 3 If I had strong feelings toward a patient, I think I would most likely:
 - a) discuss my feelings with the patient
 - b) keep them to myself and hope they would eventually disappear
 - c) discuss them with a colleague or supervisor
 - d) accept them as natural unless they began to interfere with the doctor-patient relationship.
- 4 If a patient evidenced strong feelings of attraction or dislike for me, I would:
 - a) help the patient work through these feelings and understand them
 - b) enjoy the feelings if they were positive
 - c) refer the patient to another doctor
 - d) direct the consultation into less emotional areas.
- 5 If I felt a patient of the opposite sex was reluctant to discuss certain issues with me, I would:
 - a) refer the patient to a Dr of the same sex.
 - b) confront the patient with my suspicions.
 - c) ignore the problem.
 - d) slowly try to build the patient's confidence in me.
- 6 With respect to value judgements in patient interaction doctors should:
 - a) feel free to make value judgements about their patient's behaviour
 - b) actively teach their own values when they think patient's need a different set of values
 - c) remain neutral and keep their values out of the consultation process
 - d) encourage patients to question their own values and decide upon the quality of their own behaviour.

- 7 Doctors should:
- teach desirable behaviour and values by modelling them for the patient
 - encourage patients to look within themselves to discover values that are meaningful to them
 - reinforce the dominant values of society
 - very delicately, if at all challenge clients value system.
- 8 If a patient came to me with a problem, and I could see that I would not be objective because of my values, I would:
- accept the patient because of the challenge to become more tolerant
 - tell the patient at the outset my fears concerning our conflicting values
 - refer the patient to someone else
 - attempt to influence the patient to adopt my way of thinking.
- 9 If I were to have lesbian or homosexual clients, a major concern of mine would be:
- maintaining objectivity
 - not knowing and understanding enough about this type of lifestyle
 - establishing a positive relationship
 - pushing my own values.
- 10 Of the following, I consider the most unethical behaviour to be:
- promoting dependence (eg constant attendance) in the patient
 - becoming sexually involved with patients
 - breaking confidentiality without a good reason
 - accepting a patient whose problem is beyond my competence.
- 11 Regarding confidentiality, I believe that it is ethical:
- to break confidence when there is reason to believe that the patient may do serious harm to him/herself
 - to break confidence when there is reason to believe that the patient will harm someone else
 - to break confidence when the parents of a patient ask for certain information
 - to inform the authorities when a patient is breaking the law.
- 12 My view of peer review is that it is:
- something I could use on a permanent basis
 - a threat to my status as a professional
 - valuable when I reach an impasse with a patient
 - a way to learn, and to get insights into how I work with patients.
- 13 If I suspected a patient of misleading me with regard to prescribing rugs, I would:
- refuse to prescribe.
 - write a prescription this time, but refuse to see the patient again.
 - suggest they seek some expert help.
 - discuss your concerns with the patient.

THE THURSDAY MORNING SESSION (1993-1994)

The students were still divided into **experimental** and **control groups**.

The control and experimental groups ran from 9.00am to 12.15pm. The number of tapes debriefed in the control group was two and in the experimental group four.

The control group viewed a videotape which was created by Sir David Goldberg and Linda Gask from the Department of Psychiatry in Manchester, United Kingdom. This tape aims to teach the skills of reattributing the symptoms of somatising patients which have been misattributed by them to an organic cause when there is an underlying psychosocial cause, to the psychosocial cause. This tape established three stages to linking somatic symptoms to psychological distress. They were, 'feeling understood', 'changing the agenda' and 'making the link'.

Under Stage 1 'feeling understood' the following points were made: First, the doctor (student) should take a full history of the pain by eliciting other associated symptoms and asking about a typical pain day. Secondly, respond to mood cues. This was demonstrated on tape using an actor with lower back pain consulting with a general practitioner. The responses of clarification, empathetic comments and probing the patients mood state were demonstrated. Tasks were exploring social and

family factors, checking for biological symptoms (like loss of appetite in depression) and carrying out a brief focussed physical examination.

Under Stage 2 'changing the agenda' the tasks described were 'feeding back the results of the physical examination', 'acknowledging the reality of the pain', 'reframing the patient's complaint' (by reminding the patient of mood symptoms and linking them to life events).

Under Stage 3 'making the link', seven different strategies were shown for doing this by demonstrating them with consultations with videotaped actors and general practitioners. The seven strategies were:

- between anxiety and physical symptoms
- between depression and physical symptoms
- by practical demonstration
- to life events
- in the 'here and now'
- with illness in other family members (by explaining shared symptoms - 'identification by explaining shared illness behaviour).

After watching this tape the students consulted a standardised patient (non somatiser) - each student having one consultation each. After morning tea (20 minutes) there was a video debriefing of these two tapes.

On Thursday morning the experimental group started and finished at the same time as the control group. Between 9.00am and 10.30am the two videotapes that were made by the experimental students on the previous day were debriefed by the tutor. Then after morning tea the two students had another consultation with a standardised patient and the SP gave five minutes feedback. This consultation was videotaped and a debriefing came next. Also the Boardman and the Gask scores were calculated for probing the problem questions and given to the students.

THE FRIDAY MORNING SESSION

All the students meet at 8.50am and each student is asked what things they have picked up in terms of their consulting skills in the past week (4 morning sessions). I try to develop their replies a bit. After that they are given the same exposure to standardised patients that they experienced on the Monday morning.

Each student consults 4 standardised patients with each consultation lasting 10 minutes (timed). The 4 students all see each standardised patient. In 1993-1994 at the end of the consulting the study stopped and these consultations which had been videotaped were analysed for comparison between the initial tapes on Monday. The experimental and control groups tapes were also compared.

The standardised patients are new to the students on Friday - they are different from the standardised patients previously seen during the week.

Inter-rater Agreement

Classification of difficult questions

Open questions

No social chit chat to be recorded at the beginning.

The open question included open or closed questions, of an opening type and any not classifiable questions later like:

"And how is your general health?" "How are things at home?"

Open Physical

"Why do you hate taking medication?"

"What do you understand about asthma?"

"How has this arthritis affected your life?"

"What stopped your golf?"

Patient - "I do take aspirin." Doctor - "What is that for?"

"How long have you had it?" Answer - "Within the last year."

"Within the last year?" (not a probing the problem question, more a reflective one).

Open Social

"How long have you been back from Brisbane?"

"How are things with your wife?"

Closed Physical

"Have you been told about diet?"

"Do you find it hard to control your diet?"

"Are there any problems that you have?" (after talking about a physical condition).

"It's not a very high score (peak expiratory flow), is it?"

"Does the arthritis stop you from doing a lot of things?"

"Do you have a family history of breast cancer?"

"Which hip is it?"

"Are there any other things that are worrying you?" (If a general dragnet question).

"How do you think it (the exercise) would go?"

"When you feel depressed - is that when you notice the pain?"

"Do you want to know more about arthritis?"

"Do you have any other problems?" (related to physical health).

Closed Psychological

"Does that make you frustrated?"

"Is there a main reason why you are worried about lung cancer - is there something public or in the papers?"

An instruction is given and then the doctor says "OK?"

Closed Social

"Do you smoke?"

"Does your wife smoke?"

Cues given

"I find it harder to do everything."

"I'd love to work if I was allowed to."

"I'd like to get rid of the asthma."

"I hate insulin."

"I don't like seeing doctors."

"I just have to put up with it."

Statements not regarded as cues

"I feel better sitting."

"I love chocolates."

Doctor - "Does that make you frustrated?" Patient - "Yes, it does make me frustrated."

"Yes I'd be happy with that." (In response to doctor making a statement).

"I don't know whether the stress from the Menieres Disease has caused the blood pressure".

"That's what I was concerned about, having been a smoker all my life." (not in current tense).

Other areas of agreement

We agreed not to record reflective questions as they were not probing the problem questions. For example the patient may say "the tablets make it better". Then the doctor says: "they make it better?" This is not rated.

In the consultation (after the opening) if the doctor asks: "Can I ask you about your family life?" This is not recorded. (it is not probing the problem - it is asking permission from the patient). Again, in the same vein the question: "Can I ask you about your family life?" is not rated.

With cues, if a cue is given and it was not picked up and the same cue is given again or for that matter given yet again, it is recorded only once. That means only fresh cues are recorded. It is not picking up on a cue by simply using the word "so" as a reflection. For example; if the doctor replies to the patient by saying "so you want to lose weight?" and does not follow this up any further, it is not rated as picking up a cue.

Often students ask an open ended question and instantly tack on a closed ended one to it. The last question is the one rated and naturally is a closed ended one. Students will argue against this decision but we felt the patient answers the last question not the first. When a student asks an open ended question about feelings and during the answer the feeling is mentioned this is not regarded as a cue. However if during the answer another feeling is brought up, this is rated as a cue.

Sir James Mackenzie (1853-1925)**Views on General Practice Education and Research**

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Summary

Under and postgraduate medical education has undergone change in this century. As we enter a new millenium it might be timely to reflect on the thoughts of Sir James Mackenzie who left his mark on general practice education and research around the beginning of this century. Have all his wishes come true or is he still a prophet crying in the wilderness?

Introduction

James Mackenzie was a visionary Scottish general practitioner of the late 19th century who received international acclaim for his research into rhythms of the heart. He firmly believed in the importance of basing medical education in the community and the value of observation of patients in general practice for research.

Mackenzie was born in 1853, the third child of a highland farmer, at Pickston Hill near Scone, Perthshire. Macbeth's Woods of Birnham and Dunsinane lay to the north and east of the farm. Times were tough for a farmer in the 1870's yet the Mackenzies managed to send all three children to Edinburgh University (with a bag of oatmeal each). This was due to the progressive farming methods used by his father as well as his

industriousness plus the inspiration of his mother. His brother wrote of her:

"...she was the mainstay of the family. She had a strong, indomitable spirit, and when things were going badly on the farm it was her noble soul that rose above difficulties and trials. She was also the unostentatious and generous helper of the poor in the village, and all in distress came to her for assistance and comfort."

James owed much to his parents and his mother's influence endured throughout his life.¹

Childhood learning

Mackenzie demonstrated that he was a reasoner at an early age. Brought up in a strong Presbyterian family he used to have difficulty in memorising the shorter catechism and often argued about this with his father (an elder in the Kirk). He wrote to his father - remember what St Paul says "I had rather speak five words with my understanding than ten thousand words in an unknown tongue" (1 Corinthians 14, verse 19).² Looking back at his early education - the local parish school and the academy at Perth, he said:

"...the things that I remember most clearly about my school education were that I was considered a dunce at most of my classes, and that the subjects in

which I did well were those in which my understanding rather than my memory was called into play".³

Mackenzie left school at 15 at his own request and began his working life apprenticed to a Perth chemist. He worked 80 hours a week on an annual stipend of five pounds. His limited leisure hours were spent reading Scott, Smollet, Fielding, Dickens, Thackeray, Huxley, Darwin and Tyndal.⁴

The Undergraduate

He commenced medicine at 21 at Edinburgh University and managed to scrape through the scientific years by hard work and committing long passages from lectures to memory and on many occasions he did not understand what he was memorising. However he delighted in the later clinical years and won 3 medals. His reflections on a medical education are similar to his earlier thoughts on his schooling:

"...examinations are specially contrived for the purposes of discriminating those with the best memories, and to them all the honours and prizes are given.....the individuals who, on the contrary possess more of the power of reasoning than their fellows, receive no consideration".⁵

Mackenzie had a reflector learning style⁶ as he obviously preferred to think about data thoroughly before coming to a conclusion. He later demonstrated his ability to theorise

about arterial and venous pulse waves. It is suggested that this learning style is similar to that of current British general practitioner trainers.⁷ If he were alive today he would probably be an advocate for problem solving case work for medical undergraduates as this has been linked to graduates having better analytic and communication skills.⁸

While at Edinburgh University he studied surgery under Joseph Lister who first grasped the importance of Pasteur's work. Mackenzie headed his notes on one of Professor Lister's lectures on bacteria and wound sepsis with an elaborately pencilled "germs again".⁹ He foresaw the excesses of reductionist medicine and in an address concerning the defects of medical education said later in his career:

"...again the microbic theory of disease has distracted people from the scientific theory of symptoms. There is less and less ability to draw deductions from the use of the unaided senses. Much research is carried out in laboratories, apart from the patient, or in hospital wards on patients who have long been ill. Patients must be studied in association with their natural environment and the stresses and strains of real life".¹⁰

Later Mackenzie reflected on his undergraduate training and predicted the future role of the general practitioner academic:

"There is an important idea which has been omitted in the consideration of medical education, namely that a teacher of *practical matters must be one who has experienced what he teaches*. We all recognise that the best teacher for a youth who wants to be a shoemaker is a man who is in the habit of making shoes. If he wants to be a chemist, he goes to a teacher who has a practical knowledge of chemistry. That idea in relation to these subjects will be accepted universally. Unfortunately this commonsense idea is rarely applied to medical education. The vast majority of students who enter on the study of medicine ultimately become general practitioners, and yet a student may pass through his curriculum and be instructed for years by a large number of teachers, not one of whom has had any experience of the life he is to lead as a general practitioner. As a result a large portion of the student's time and energy has been spent in acquiring information that is of no use to him in the practice of his profession, while much of the knowledge which he often finds essential has never been given to him."¹¹

Mackenzie later continued to direct criticism at medical education and the trend to fully embrace the model of reductionist medicine that was to characterise most western

universities in the 20th century. He repeated that: "Medicine is taught by specialists; the problems of general practice are not carefully investigated and the general practitioner has no opportunity to teach from his experience".¹² The money from Mackenzie's estate helped to correct this as it was used to help found the first Chair of General Practice in the world at Edinburgh University in 1963.¹³

On the curriculum he said: "Much of the teaching in medical schools deals with rare or established conditions of disease. Many of the ailments with which the general practitioner is confronted are looked on, in hospital practice as too trivial to deserve consideration".¹⁴

Mackenzie continued to criticise the composition of his medical curriculum by saying of the student:

"If we turn to the consideration of the subjects he is taught, it will speedily be realised how much of his time and labour are spent unprofitably. In his training he is taught a variety of subjects which tradition has imposed upon the teaching world as being necessary to his education, such as botany, zoology and chemistry. It may be said that a knowledge of these subjects is necessary to enable him to understand and appreciate the facts in his other studies, such as physiology and clinical

medicine. Admitting this is true how much is necessary for this purpose? The teachers are men skilled in their particular subject, but have little knowledge of what part of their subject is necessary and what part is immaterial to one who does not intend to become a botanist, a zoologist or a chemist, but a practitioner of medicine. Seeing that these subjects are of a vast extent, and that the medical student can only acquire a knowledge of a small part, it is not unreasonable to expect that his instruction should be limited to that portion which will be of real use to him in his studies and in the practice of his profession."

In the same vein Mackenzie argued:

"Anatomical books and teachers of anatomy give as much or more prominence to a detail, such as a tuberosity on a bone, which will never be referred to again in the student's life, as to some vital point like the centre of respiration."¹⁵

Today Abrahamson¹⁶ shares this view and while agreeing with the shibboleth: "Medical students must learn the basic sciences", he asks: "what will our graduates have to be able to do that might require their learning this 'material'?"

Indeed it is likely that if Mackenzie were alive today he would heartily agree with Abrahamson who said: "Departments organized according to discipline, ... tend to become instruments of the territorial imperative with regard to the curriculum". Abrahamson also feels that sometimes inter department committees in medical schools still play territorial politics.

In general practice Mackenzie realised that there was a major gap in his undergraduate education. Mackenzie did not receive a patient centred undergraduate education. He found that:

"Most of the patients had no physical signs, and often such physical signs as I detected had no seeming relationship to their complaints. The patients felt ill, or suffered from pain or other disagreeable sensation. These subjective symptoms had received but scant attention in our training and I was unable to appreciate them".¹⁷

The Vocational Trainee

After university, Mackenzie had a house appointment at the Edinburgh Royal Infirmary and in 1879, following a locum stint in Durham, he started work in Burnley. His mentor was Dr Briggs who gave him a room at the top of his house at 68 Bank Parade. Immediately he found his text books useless for understanding the health of the Burnley people, buying a large medical encyclopaedia was not a help either. In his spare

time Mackenzie set about working to know the meaning of the signs and symptoms he met with everyday as they affected a patient's living. He was able to draw on the accumulated experience of Dr Briggs for two learning objectives:

1. an understanding of the mechanism of symptoms; and
2. an understanding of their prognostic significance.¹⁸

Mackenzie wrote:

"I had not long been in the practice when I discovered how defective was my knowledge. I left college under the impression that every patient's condition could be diagnosed. For a long time I strove to make a diagnosis and assiduously studied my lectures and text books, without avail ... for some years I thought that this inability to diagnose my patients' complaints was due to personal defects, but gradually through consultations and other ways, I came to realise that the kind of information I wanted did not exist".¹⁹

Murdoch²⁰ calls this "Mackenzie's Puzzle". He feels that today in our medical schools the mismatch between what the books say and what the patients feel can go unrecognised by teachers, and as a result family physicians, residents and students can find themselves in a state of blundering similar to that experienced by Mackenzie.

McWhinney²¹ comments on this by saying: "A student who learns clinical problem solving in a tertiary care hospital will tend to have a frame of reference appropriate for patients with serious and well defined diseases in their later stages. If a student uses this frame of reference for solving problems in family practice, he or she will get into difficulties, the kind of difficulties described so well by James Mackenzie many years ago".

Much of his research occurred when he was in practice at Burnley in North West England from 1879 to 1902. Britain was an industrial nation at the time and Burnley functioned as a mill town for the manufacture of cotton. The year Mackenzie arrived 56 townspeople died from scarlet fever and in 1883 the infant mortality rate was 205 per 1000 live births.²² Rheumatic fever was common and Mackenzie heard many mitral valve murmurs in his patients.

The Self Directed Learner and Continuing Medical Education

Fate then intervened on his fertile mind. When he lost a young patient who died in labour from heart failure, Mackenzie resolved to research heart disease. He decided to study the venous pulse (in the neck) as well as the apex beat or arterial pulse. Mackenzie today would have criticised any approach to continuing medical education for general practitioners which had a tendency to cater for low levels of self directed learning (SDRL). Those with low levels of SDRL

look for external direction and didactic teaching, while those with high levels respond to facilitation but want to learn autonomously.²³ Mackenzie put his autonomous learning style to good use and recorded:

"...after much labour I hit upon a plan almost ridiculous in its simplicity. This method consists of placing a hollow lead cone or funnel (called a 'receiver') over any pulsating part where the surface of the skin permits the cavity of the funnel to be hermetically closed. This receiver is connected by means of an India rubber tube to a Marey's tambour and lever, the latter of which can be made to write on the smoked paper of a Dudgeon's sphygmograph or revolving cylinder. The advantage of this method is enhanced by the fact that several such receivers can be used to take tracings at one and the same time of heart beat and of arterial, or venous pulse".²⁴

In 1892 a further development of this phlebograph was made and Mackenzie called it his clinical polygraph. This is illustrated in his book, 'The Study of the Pulse, Arterial, Venous and Hepatic and the Movements of the Heart'²⁵ which was his first publication after 20 years of general practice research.

Using this new instrument Mackenzie studied an immense number of tracings and applied them to symptoms and signs of patients with heart problems. His first discovery was in a patient with missed heart beats. With simultaneous recordings of pulse and neck vessels, he noticed that at the moment the beat was to be missed, the left ventricle of the heart had contracted too soon whereas the auricle maintained its normal rhythm. He invented the term "extra systole" and called the pulse the irregular pulse of the adult type. The tracing is recorded in his book *The Pulse*.²⁶ No one believed him but he persisted with his research. He said "notwithstanding the complete indifference with which my work was viewed, I knew I was getting at the truth".²⁷ Mackenzie kept tracings (varnished after being recorded on a smoked drum) of these patients' extrasystoles and found that they were all alive and well and in active work six years further on. With tracings and fifteen to twenty years of observation he described what he called the "youthful type of irregularity"²⁸ which we know of as sinus arrhythmia. At the time patients exhibiting this arrhythmia were confined to bed for months and Mackenzie proved the pointlessness of such an approach.

The reasoning of Mackenzie is evident when reading about paralysis of the auricle and the murmur of mitral stenosis. In the chapter entitled *Paralysis of the Auricle and the Ventricular Form of the Venous Pulse (The Pulse)*,²⁹ he wrote:

"... in all the cases when there is only a ventricular venous pulse, I have never heard a presystolic murmur ... even when at the post mortem examination well marked mitral stenosis was present. Thus in 1894 in taking a tracing of the slow pulse in Fig 218, I scratched the tracing indicating that there was a systolic murmur and a long murmur during the pause in the pulse. After death there was found marked mitral stenosis. In 1899 I came across an exactly similar case ... The explanation then dawned on me. First there was no presystolic murmur, meaning thereby auricular systolic, even though there was marked mitral stenosis, because the auricle was incapable of contracting. Second the long diastolic murmur was evidently due to the onrush of blood from the dilated paralysed auricle through the mitral orifice during the ventricular diastole".

This a third type of irregularity which he described as 'paralysis of the auricles'. Here when there was a ventricular contraction the jugular veins bulged instead of contracting. Also the pulse was irregular and no two beats were the same. Many of these patients with auricular fibrillation had fast pulses and heart failure. The potency of digitalis in slowing the ventricular rate in auricular fibrillation can be attributed to Mackenzie. He wrote

"... so long as the heart beat at a rate under 80 these patients were pretty well; whereas when the rate exceeded 110, they gradually showed increasing signs of heart failure. I therefore tried in each case to keep the heart in check with digitalis and was frequently able to regulate the dose to that amount which kept the rate under 80 and thus enabled the patients to pursue their occupations for years, though at a lower level than in health".³⁰

Later Lewis applied the Einthoven string galvanometer to Mackenzie's patients with auricular paralysis and found the p wave missing.

Mackenzie was also able to infer that in certain conditions the auricle and ventricle would beat simultaneously^{31,32} and that when the ventricular venous pulse is present, contraction occurred from fibres joining auricle and ventricle.

Today Mackenzie would have been regarded as a good 'triple jumper'. The triple jump³³ is a strategy for assessing process in problem based curricula. The student classically is asked to think about a problem and to consider hypotheses. Then the student devises a suitable experimental test. Finally the student re-evaluates the original hypothesis and the experimental tests on the basis of the new information supplied. The student would then be assessed on problem solving skills, self directed learning skills and knowledge of

the problem area. Mackenzie's triple jumping would have been judged well and considered valid as it applied to several problems thus avoiding content specificity.³⁴

He fought for his ideas in London and became a respected teacher and consultant. Unlike Jenner 100 years before, he was elected a member of the Royal College of Physicians and received a knighthood.

At 65 Mackenzie returned to general practice at St Andrews in Scotland. Here he lectured, worked on general practice research and revised his book "Diseases of the Heart." To the end, Mackenzie preached that the specialist who concentrated on diagnosing and treating one organ was disadvantaged by the generalist. The true "science of medicine" as he delighted to call it, must be based on clinical observation of the whole person. A research worker once explained to Mackenzie that he was not sure whether or not the small blood vessels of the skin were under nervous control from his studies of the web of a frog's foot under a microscope - "one can see the blood moving in the small vessels of the web" he explained. Mackenzie nodded and added, "one can also see a girl blushing when the name of her lover is mentioned".³⁵ Another example of patient centredness can be gleaned from the statement:

"When it happens that the abnormal manifestation indicates that there is something wrong with the

heart, the question may be more clearly realised by asking what it is the patient fears".³⁶

Mackenzie showed that despite difficulty, it was possible to do significant research in general practice. In a review of his book on 'The Pulse'³⁷ the reviewer stated:

"... we often hear that in the bustle of general practice, scientific work is impossible ... and it is almost pathetic to read in the preface 'I have seldom been able to give an uninterrupted hour's study to the subject ... days and even weeks (have elapsed) before I have been able to resume it.'"

In 1925 Mackenzie died, ironically from a disease of the heart, angina pectoris. He insisted that an autopsy be performed after his death to have colleagues study his heart.

Still a prophet?

Mackenzie strongly believed that the basic science of medicine is clinical observation. Here he was supported by Osler who felt that western medical schools were creating a scientific ethos which would impose itself between physician and patient. Mackenzie believed that general practice was the best place to learn the natural history of disease. McWhinney³⁸ feels that unfortunately there is very little evidence that this example is being followed today. He feels it is rare to read a description of clinical observations made over a long period

of time by the author himself. McWhinney feels that today's general practice research is the result of extracting data from other practitioners' records and if follow up occurs it is for a short time. To wait ten years before publishing one's results would earn few grants and little credit in medical school.

However this assumes that if Mackenzie were alive he would have been a general practice academic. Mackenzie had a poor opinion of his undergraduate university and its apparent lack of providing a deep learning experience for general practice. He did not know the politics of "grantmanship"³⁹ and if he were alive today he would share Howie's concern that much academic general practice research is not regarded as useful by real general practitioners.⁴⁰ His research would possibly be related to the general practice observation of chronic illness in patients over a long time and his education criticisms directed towards any medical school that largely avoids studying: "patients in association with their natural environment and the stresses and strains of real life".⁴¹ In short Mackenzie may not be welcome in some academic departments of general practice today and would need to choose his university carefully.

Professor John Howie of Edinburgh University's Department of General Practice can trace his ancestry back to Mackenzie and has in his possession a script written by Mackenzie for his grandmother (Fig 1). Howie⁴² believes Mackenzie was certainly

right, for example, when he wrote that medical teaching should start with the simple and that the complex then became easy, and also in his belief of the importance of the general practice contribution to research.

Mackenzies's close friend Sir Thomas Lewis wrote of him in his obituary:

"... he was an exceptionally vigorous and strong personality, intolerant of statements founded on tradition, trenchant and acute in criticism, rich in personal experience, combative in argument, but open never the less to conviction on all questions without reserve. He saw, as few or none of his day saw where clinical knowledge ends and ignorance begins".⁴³

Mackenzie's memory is perpetuated in the annual James Mackenzie lecture of the Royal College of General Practitioners and the Chair of General Practice at Edinburgh University. The Mackenzie Report into General Practice in the Medical Schools of the United Kingdom in 1986 was financed by the Mackenzie Fund.⁴⁴ This fund was created from the residue of monies from the estate of Sir James Mackenzie.

Mackenzie was typical of many of the 19th century masters of general practice. He had a rural background and was a meticulous observer of general practice patients. He

persevered with his research enquires despite initial rejection. He broke new frontiers of discovery by studying his general practice patients over long periods of time in their own environment. This ecological paradigm of medicine still remains largely untapped today. He will also be remembered as one of the great visionaries of general practice and his criticisms of medical education still carry some weight today.

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Figure 1: A script written by Sir James Mackenzie for Professor John Howie's grandmother

Mr Mitchell,



By Alexander Brown 27/3/20
 Opt. Chas. 3/11
 Aug 10 3/11

in table paid 2nd class.

3/5/20

Change to my account. James Mackenzie

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