



**Maternal perspectives of child
health consultations by medical students**

Dr Maree O'Keefe

Department of Paediatrics

University of Adelaide

Submitted June 2002

ABSTRACT	4
STATEMENT	6
ACKNOWLEDGEMENTS	7
INTRODUCTION	10
CHAPTER 1 PARENT EVALUATION OF MEDICAL INTERVIEWS: A LITERATURE REVIEW	
1.1 INTRODUCTION AND OVERVIEW	12
1.1.1 <i>The importance of feedback</i>	14
1.1.2 <i>The role of standardised patients in interview skills training</i>	15
1.1.3 <i>The developing role for real patient evaluation of medical student interviews</i>	17
1.1.4 <i>Conclusions and formulation of literature review questions</i>	18
1.2 METHODS	19
1.3 WHAT ARE KEY INTERVIEW ELEMENTS IN A MEDICAL CONSULTATION?	20
1.3.1 <i>Clinical competence</i>	20
1.3.2 <i>Patient-centredness</i>	22
1.3.3 <i>Patient and doctor characteristics</i>	25
1.3.4 <i>Conclusions</i>	27
1.4 WHAT IS THE RELATIONSHIP BETWEEN SPECIFIC MEDICAL INTERVIEW ELEMENTS AND PATIENT EVALUATIONS?	27
1.4.1 <i>Conclusions</i>	28
1.5 WHAT IS THE VALIDITY AND RELIABILITY OF PATIENT EVALUATIONS?	28
1.5.1 <i>Validity</i>	30
1.5.2 <i>Reliability</i>	32
1.5.3 <i>Conclusions</i>	33
1.6 WHAT ARE THE APPLICATIONS OF INFORMATION GAINED FROM PATIENT EVALUATIONS OF MEDICAL STUDENT INTERVIEWS	34
1.6.1 <i>Conclusions</i>	35
1.7 WHAT IS THE FEASIBILITY AND ACCEPTABILITY OF OBTAINING PARENT EVALUATIONS OF STUDENT INTERVIEWS	35
1.7.1 <i>Acceptability to patients</i>	35
1.7.2 <i>Feasibility</i>	36
1.7.3 <i>Acceptability to students</i>	37
1.7.4 <i>Conclusions</i>	37
1.8 SUMMARY	37
1.8.1 <i>Reliability and validity</i>	38
1.8.2 <i>Acceptability and feasibility</i>	38
1.8.3 <i>Education impact</i>	38
1.9 AIMS AND HYPOTHESES	39
1.10 ETHICAL APPROVAL	40
CHAPTER 2 DEFINITION AND ASSESSMENT OF KEY CONSULTATION ELEMENTS	
2.1 INTRODUCTION	46
2.2 DEFINITIONS	47

2.3	DEVELOPMENT OF INTERVIEW TRANSCRIPTS.....	48
2.3.1	<i>Identification and measurement of clinical competence and patient-centredness</i>	49
2.3.2	<i>Transcript development</i>	50
2.3.3	<i>Manipulation of clinical competence and patient-centredness</i>	52
2.4	VIDEOTAPE PRODUCTION	54
2.5	INDEPENDENT INTERVIEW ASSESSMENT	55
2.5.1	<i>Independent assessment of clinical competence</i>	56
2.5.2	<i>Independent assessment of patient-centredness</i>	59
2.5.3	<i>Comparison of videotaped student interviews with general practice interviews</i>	66
2.5.4	<i>Interview length and patient-centredness</i>	67
2.5.5	<i>Independent assessment of information content</i>	68
2.6	DISCUSSION.....	69
2.7	CONCLUSIONS	71
CHAPTER 3 PILOT TESTING OF VIDEOTAPES AND QUESTIONNAIRES		
3.1	INTRODUCTION	81
3.2	STUDY LOCATION AND SUBJECTS	83
3.3	METHODS	84
3.3.1	<i>Measures</i>	84
3.3.2	<i>Videotape screenings</i>	86
3.3.3	<i>Statistical analyses</i>	87
3.4	RESULTS	88
3.5	DISCUSSION.....	89
3.6	CONCLUSIONS	92
CHAPTER 4 THE RELATIONSHIPS BETWEEN STUDENT CLINICAL COMPETENCE, PATIENT-CENTREDNESS, AND MATERNAL SATISFACTION		
4.1	INTRODUCTION	98
4.2	STUDY LOCATION AND SUBJECTS	100
4.3	METHODS	101
4.3.1	<i>Videotape screenings</i>	102
4.3.2	<i>Measures</i>	102
4.3.3	<i>Statistical analyses</i>	103
4.4	RESULTS	104
4.4.1	<i>Enrolment</i>	104
4.4.2	<i>Videotape realism</i>	105
4.4.3	<i>Maternal satisfaction ratings</i>	106
4.4.4	<i>Maternal and child characteristics</i>	108
4.5	DISCUSSION.....	110
4.6	CONCLUSIONS	113
CHAPTER 5 THE RELATIONSHIPS BETWEEN STUDENT CLINICAL COMPETENCE, PATIENT-CENTREDNESS, AND MATERNAL RECALL		
5.1	INTRODUCTION	139
5.2	STUDY LOCATION AND SUBJECTS	140
5.3	METHODS	140
5.3.1	<i>Measures</i>	141
5.3.2	<i>Statistical analyses</i>	143
5.4	RESULTS	144

5.4.1	<i>Maternal recall responses</i>	144
5.4.2	<i>Maternal and child characteristics</i>	146
5.5	DISCUSSION.....	148
5.6	CONCLUSIONS.....	150
CHAPTER 6 MATERNAL PERCEPTIONS IN MEDICAL STUDENT LEARNING		
6.1	INTRODUCTION.....	167
6.2	STUDY LOCATION AND SUBJECTS.....	168
6.3	METHODS.....	169
6.3.1	<i>Child Health Interview seminar</i>	169
6.3.2	<i>Focus group discussions</i>	171
6.3.3	<i>Standardised patient interview</i>	171
6.3.4	<i>Measures</i>	173
6.3.4	<i>Statistical analyses</i>	175
6.4	RESULTS.....	176
6.4.1	<i>Subjects</i>	176
6.4.2	<i>Child Health Interview seminar</i>	176
6.4.3	<i>Standardised patient interviews</i>	178
6.4.4	<i>Focus group discussions</i>	178
6.5	DISCUSSION.....	183
6.6	CONCLUSIONS.....	187
CHAPTER 7 DISCUSSION AND CONCLUSIONS		
7.1	INTRODUCTION.....	207
7.2	DEVELOPMENT OF THE RECREATED MEDICAL STUDENT INTERVIEW VIDEOTAPES.....	208
7.3	KEY FINDINGS.....	209
7.4	STRENGTHS AND LIMITATIONS OF THESE STUDIES.....	211
7.5	DIRECTIONS FOR FURTHER RESEARCH.....	213
7.6	FINAL CONCLUSIONS.....	215
APPENDIX 1 MEDICAL STUDENT INTERVIEW TRANSCRIPTS		
APP 1.1	HCHP INTERVIEW: HIGH CLINICAL COMPETENCE, HIGH PATIENT-CENTREDNESS.....	219
APP 1.2	HCLP INTERVIEW: HIGH CLINICAL COMPETENCE, LOW PATIENT-CENTREDNESS.....	225
APP 1.3	LCHP INTERVIEW: LOW CLINICAL COMPETENCE, HIGH PATIENT-CENTREDNESS.....	231
APP 1.4	LCLP INTERVIEW: LOW CLINICAL COMPETENCE, LOW PATIENT-CENTREDNESS.....	238
BIBLIOGRAPHY		244

Abstract

This thesis had two principal aims. The first was to determine the relationship between medical student clinical competence and patient-centredness, and maternal satisfaction and subsequent recall of information in child health consultations. The second was to test the application of this knowledge in medical student teaching programs.

Studies of patient priorities in medical care identify doctor competence and patient-centredness as two key elements of successful doctor-patient interviews. However the relative ability of patients to recognise these two elements has not previously been assessed.

In child health interviews with medical students, parents as active participants form their own impressions of student interview skills. These parent evaluations can be formally sought as a component of medical student interview skills assessment, and contribute to medical student learning programs.

Following a pilot study, 60 mothers viewed and rated pairs of videotaped interviews in which the level of clinical competence and patient-centredness of the student were varied independently. Maternal satisfaction ratings were positively correlated with both the level of clinical competence and the level of patient-centredness demonstrated by the student. Maternal recall was also positively correlated with the level of clinical competence, but not with the level of patient centredness. Mothers preferred more competent and patient-centred student interviews.

To test the application of this knowledge in medical student learning, the videotaped interview recreations were integrated subsequently into a child health learning program. Reviewing maternal evaluations of the videotaped interviews illustrated important elements of medical consultations for the students, and demonstrated the practical importance of developing good interviewing skills. Use of the videotapes also afforded students the opportunity to review interview structure and content.

This thesis has demonstrated the ability of mothers to assess the clinical competence and patient-centredness of medical students in videotaped consultations. It included, as a major component, the development and independent testing of a method for standardising medical student interviews so that maternal evaluations for identical interviews could be compared. Applications in medical student learning were also developed and evaluated.