Through the Fog:

Nursing Care of Patients Who Are Confused While in ICU

A thesis submitted in fulfilment
of the award of Doctor of Philosophy

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March 1999

Abstract

Acute confusion is recognised as a significant clinical problem in critically ill patient populations. Nursing care of these acutely ill, confused patients is challenging and there has been scant research on which to base this care. This study is an investigation of how nurses care for patients who are confused while they are being treated in an Intensive Care Unit (ICU). Through the use of ethnographic methods the ICU setting was studied to reveal how cultural beliefs and values construct nursing practices and therefore care of patients. Participant-observation fieldwork in a general ICU took place over a six month period and was followed by in-depth interviews with twelve of the nurses who were observed during fieldwork. ICU nurses in this study described care of patients while it was occurring (during field study) and elaborated and clarified their meanings through the interviews. The data reveal that ICU nurses define different types of patient confusion and base their clinical assessment in part on the social and cognitive accessibility of patients. That is, ICU nurses in this study based clinical judgements on the extent to which they could establish interpersonal contact with patients. Although patients were unable to verbalise their experiences because they were intubated nurses used interpersonal interaction in an attempt to understand patient behaviour that was indicative of confusion. Therefore, understanding the patient as a person helped these nurses to clinically assess confusion. Numerous cultural practices mitigated against knowing the patient in this way and these practices were interrogated for their impact on care of confused patients. Conclusions drawn from this study present the view that ICU nurses bring a perspective into the care of confused patients that is distinctly nursing. Their ability to establish interpersonal contact with confused patients demonstrates care that is based on a perspective that is uniquely nursing therapy. A new conceptualisation of confusion, as experienced and as expressed is presented. The use of interactive data and processes express nurses' attempts to understand confusion as it is experienced. While cultural practices in ICU subvert understanding of the patient perspective, ICU nurses are able to maintain their nursing therapy position.

Candidate's Statement

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being available for loan and photocopying.

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Acknowledgments and Dedication

First, I express gratitude to my supervisor, Professor Alan Pearson, for his timely advice and wise guidance throughout the study and preparation of the thesis. His uncanny knack of getting to the heart of a matter reflects his deep understanding of nursing and its development as a discipline. We share a journey that is more important than the production of this manuscript, that is, a love of nursing and its advancement.

Thanks also to Professor Sharon McKinley, who was present when the idea for the study emerged, and who stood by and encouraged me every step of the way. Her belief in the study and my capabilities were sustaining, particularly in times of doubt. Her instrumental support through discussion of my analysis proved invaluable to my understanding of critical care nursing.

I also express my heartfelt gratitude to my great friend, Dr Mary FitzGerald, who generously offered herself and the warm hospitality of her home. This study has provided an opportunity to cement a treasured friendship.

My fellow PhD students are also instrumental to this work. Our discussions at research schools were continuously stimulating and sustaining for me. I especially appreciate the colleagueship and friendship of Professor Jill White, Suzie Robertson-Malt and Mary Ebbott. Also, I offer a special thanks to Dr Kenneth Walsh for friendship, great singing and a fun trip to the Barossa.

It goes without saying that this work would not have been possible without encouragement, understanding and sacrifices of my immediate family. My sons, Richard and Russell, offered comic relief and useful distractions when I needed them most. My husband, Charles, provided practical assistance, especially in final editing of the manuscript. More importantly, his never-failing support for my endeavours provides a stable rock on which I know I always can lean.

My mother, father and sister have contributed to the thesis in ways that are difficult to express. My concern for the welfare of other people and my desire to become a nurse began in our home. Our family experiences of critical care have aided my human understanding of the experience of critical illness. My dad's spontaneous and witty evaluation of being in an ICU provides a wonderful subtitle for chapter four.

Finally, I thank the ICU staff who participated in this study, especially the nurses who generously gave their time to me, willingly sharing their thoughts and openly expressing their feelings. Their permission to let me enter their nursing world made this study possible. I hold them in high esteem and stand in awe of their knowledge and skill. Their commitment to the people who are patients in ICU is unfailing.

It is to these ICU nurses that I am most grateful
and to whom I dedicate this work.

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Chapter 1

Setting the Scene:
"Oh, the fear was unbelievable" (Peter's story)

DEVELOPING THE QUESTION

My interest in this research was sparked during involvement in another study, an investigation of former patients' experiences of being critically ill and cared for in an intensive care unit (ICU). A number of these former patients described strange cognitive experiences while in ICU, but it was the story of a young man, Peter, that stood out for me. He vividly related a nightmarish tale of being frightened and suspicious during his final night in an ICU. These emotional responses were a direct result of the mental confusion that he experienced after being in ICU nearly two weeks. During that time he survived numerous, life-threatening complications following open-heart surgery.

As a result of his confusion he lost meaningful contact with the external environment. He thought that he was being transported across the ocean to have his body parts removed and donated for transplantation. His all-consuming fear was not understood by the very people who had helped to save his life, the ICU nurses. His incoherent attempts to summon his wife back to his bedside confirmed what he suspected; the very people who had saved his life (although, at the time he could not appreciate this fact) were now 'out to get him'. He diligently watched the clock on the wall in an attempt to time his escape from the ICU. His behaviour reflected an excitable, agitated and hyper-alert mental state; he was acutely, albeit temporarily, confused. Eventually his behaviour was controlled with sedation and mechanical restraints. His confusion abated the next day, at which time he was transferred from the ICU to another part of the hospital. Because he

could recall the details of his confused state, both in the short and long term, he realised the ridiculousness of his thinking during the episode. However the anxiety, fear and trepidation he had experienced remained with him for months after discharge from the hospital.

As I listened to Peter's story the researcher in me remained open and calm, but the nurse in me became upset and concerned. How was it that nurses caring for Peter in the ICU did not repond to his terror? Even though his thoughts were illogical, why couldn't they recognise his underlying fear? I reasoned that, after all these years and advances in health care, the problems of patients' confusion in ICU could be better understood. I shared my thoughts with one of my fellow researchers, who is an experienced critical care nurse, only to learn that patient confusion in ICU remains poorly understood. This spurred my interest in the central question of this research project, *"How do nurses care for patients who become confused while in ICU?"*

I brought to the study my clinical background in mental health liaison nursing. In my capacity as a mental health nursing consultant I came to know some the challenges faced by ICU nurses. My initial clinical experience in ICU occurred during my university undergraduate education in nursing, many years ago, at a time when ICUs were becoming commonplace in general hospitals. My own father was admitted to an ICU a few years later and I experienced critical care as a loved one of a patient. While these previous experiences initiated me to the ICU environment I did not enter this study fully cognisant of its cultural values and mores. Through experiencing and understanding how

ICU nurses care for patients who become confused, I feel, like those previously confused patients in ICU, that I too have come *'through the fog'*.

BEING A PATIENT IN ICU: WHERE AM I?

Patients in a general intensive care units are very ill, often close to dying, dependent on machinery for survival, immobilised by equipment, and frequently beset with anxiety and pain. They often have arrived in ICU following traumatic events such as automobile accidents, a sudden life-threatening illness or a worsening of a serious health problem. The environment is alien, demanding and difficult to absorb and understand. Sophisticated machinery dominates the setting. The nurses and doctors who work there seem both powerful in their ability to operate the machines and capable in their knowledge of caring for such very sick people.

Making sense and meaning in such a foreign environment adds to the burden of illness and treatment. It is no wonder that patients find it hard to 'think straight' while in ICU. Continuous noise and activity and lack of sleep and rest increase the burden. A combination of high demands and lowered resources serves to create stress in people who are patients in ICU, making them particularly vulnerable. Therefore, it is not surprising that mental confusion is often experienced by ICU patients.

Research into Patients' Experience of ICU: Cognitive Changes

Results of studies exploring former patients' experiences of being in ICU reveal how often cognitive functioning is impaired in this population (Anderson, 1982; Asbury, 1985; Ballard, 1981; Bergbom-Engberg & Haljamae, 1989; Chew, 1986; Daffurn,

Bishop, Hillman & Bauman, 1994; DeMeyer, 1967; Easton & MacKenzie, 1988; Elpern, Patterson, Gloskey & Bone, 1992; Jablonski, 1994; Johnson & Sexton, 1990; Jones, Hoggart, Withey, Donaghue & Ellis, 1979; Keep, James & Inman, 1980; Laitinen, 1996; Owens & Hutelmyer, 1982; Riggio, Singer & Hartman, 1982; Simpson, Armstrong & Mitchell, 1989; and Turner, Briggs, Springhorm & Potgieter, 1990). Comparisons of the extent to which former patients report cognitive changes in these studies are difficult to determine because of variations in sample sizes and methods. However, of those studies with large sample sizes and using similar methods, the percentage of participants who reported experiences of altered cognition range from 68% (Owens & Hutelmyer, 1982) to 28% (Turner, et al., 1990). While either of these percentages is noteworthy, the clinical importance of confusion may be even greater when considering that patients are often reluctant to discuss cognitive changes due to feelings of embarrassment (Laitinen, 1996).

While the reported prevalence and incidence of cognitive changes in ICU are revealing, patients' descriptions of their cognitive experiences are even more enlightening. Some experts argue (Vermeersch & Henley, 1997) that patient cognitive changes are best understood from an outside perspective because self-report is precluded by the nature of confusion. However, in the above mentioned studies, ICU patients were able to describe, albeit in retrospect, what it is like to be confused. The descriptions reveal the experience from the inside perspective of the patient.

These cognitive experiences of former ICU patients indicate disturbing dreams and crazy nightmares (Elpern, et al., 1992, Bergbom-Engberg & Haljamae, 1989; Jones, et al.,

1979; Easton & MacKenzie, 1988) and hallucinations while in ICU (Anderson, 1982; Chew, 1986; Easton & MacKenzie, 1988; Owens & Hutelmyer, 1982). Distorted perceptions of what was occurring around them led some patients to believe that ICU staff were drug dealers (Easton & MacKenzie, 1988), and others to believe that cardiac monitors were keeping their hearts beating (Anderson, 1982). Distortion of time perception is frequently experienced (Jablonski, 1994), as well as disorientation (Ballard, 1981; Turner, et al., 1990) and problems with awareness and memory (Riggio, et al., 1982). Participants in one study reported losing all sense of time (DeMeyer, 1967), and nearly half the participants in another study 'lost track completely' while in ICU (Asbury, 1985). These altered thought processes often have a persecutory and paranoid undertone (confirmed by Heath, 1989, in a review of first-person accounts of being a patient in ICU), resulting in anxiety and discomfort (Bergbom-Engberg & Haljamae, 1989). Ashworth (1980) concludes that "some of the dreams described [by ICU patients] make it obvious that the patient is in an entirely different frame of reference" and "living in a different world" (p 113).

The picture that is presented by patients reflects difficulties that they experience in making sense of what is happening to and around them while in ICU. In what is now a classic article on delirium, Engel & Romano (1959) provide an eloquent description of delirium from the perspective of the person experiencing it. They urge readers to familiarise themselves to the nature of the experience of mild delirium by recalling the "experience of being awakened suddenly in the middle of the night, especially in a strange place" (p 269). Difficulties with orientation and perceptual distortions, as well as illogical, incoherent thinking are all experienced. In ICU more severe episodes of acute

confusion can and do ensue, with the majority of patients in ICU minimally experiencing some clouding of awareness and disturbance in ability to attend to the external environment.

While illuminating, the retrospective accounts of patients are also worrisome. The high incidence and prevalence of problems associated with altered cognition warrants greater understanding in relation to implications for nursing care. ICU nurses are in a prime position to understand patient confusion and to alleviate its associated clinical problems. How they meet such challenges in caring for confused patients is the focus of this study.

STUDY OVERVIEW

This study focuses on how nurses care for patients who become confused while in ICU, with particular emphasis on how nursing care is constructed through cultural meanings. It is an investigation of a general ICU as a social unit with members who share understandings and cultural practices. In this sense the study is ethnographic. Methods used for data collection include traditional ethnographic fieldwork approaches of participation in and observation of the natural setting of an ICU. Following the fieldwork, in-depth interviews were conducted with nurses from the setting. The overall aims of the study (more fully explicated in Ch. 3) are: to understand how nurses approach the care of ICU patients who are confused, to examine the effects of cultural practices on this care, and to explain how the cultural meanings construct nursing care.

ORGANISATION OF THESIS

This chapter sets the scene of the study by reviewing literature on being a patient in ICU, with specific reference to the experience of cognitive changes. An outline of the study

aims and methods locates the study methodologically. In addition, an overview of the thesis is provided along with notes on style and a glossary of words and phrases used throughout the work.

Chapter Two provides background to the study through presentation of a review of the literature on patient confusion and delirium in the ICU, labelled "ICU syndrome". The difficulties with conceptualisation of the syndrome are apparent in this literature review which not only describes but also analyses the literature. A brief synopsis of the literature on elderly patients who become confused while in hospital serves to clarify the clinical problem, and reinforces documented difficulties in managing patient confusion.

Chapter Three situates the study through a discussion of the methodology of ethnographic inquiry. Discussion of three major methodological issues: political problems in the representation of others, authenticity and trustworthiness in interpretation, and the reflexive relationship between researcher and researched, provides appropriate background to the data collection and analysis undertaken throughout the study. Methods of data collection, fieldwork and interviews, are described fully, followed by detailed descriptions of four levels of data analysis.

Chapter Four is an ethnographic account of the ICU in which the study occurred. The account represents a level of data analysis and is more than simply a background portrait of the setting of the study. The account describes patterns of behaviour, daily routines and the general nature of nursing care within the ICU. Cultural beliefs and values are

discussed in relation to how they effect nursing practices. The ethnographic account presents the daily flow of activities in which care of confused patients takes place.

Chapter Five focuses on the clinical assessment of confusion. A review of the literature on clinical assessment of confusion in hospitalised patients highlights the documented difficulties in clinical assessment. The findings of the study, in relation to how the ICU nurses assess patient confusion, reveal that these ICU nurses use systems for assessment that are mentioned but not fully discussed in the literature. These systems rely on interaction with the patient and are uniquely nursing in nature.

Chapter Six explores the care and treatment of patients who are acutely confused. Descriptions of care that are found in the literature are placed into four categories of care. The categories include: the prevention of confusion, identification of underlying causes, management of its symptoms and management and prevention of its consequences. The findings from this study, demonstrating that nurses in this study were more concerned with management of symptoms and consequences than with prevention and identification of causes of confusion, conclude the chapter.

Chapter Seven presents a synthesis of how the culture of the ICU impacts on care of confused patients. It begins with a brief review of how ICUs have been conceptualised and examined as stressful environments. The impact of technology is discussed briefly as it is often perceived to be the central defining factor in ICU care. The need to humanise this technologically-driven environment is then discussed, as it is recognised that nurses are central to the humanising process. Knowing the patient is crucial to the process, yet

this study reveals that nurses often do know the patient on a personal level. The paradox of not knowing the patient, yet using interpersonal interaction in the assessment and care of confused patients is explored in relation to the culture of ICU. Practices and routines are examined in terms of how they affect nursing care of confused patients.

Chapter Eight links together the entire study. Difficulties in the conceptualisation of confusion are discussed in relation to confusion as it is expressed and confusion as it is experienced. Making contact with the patient and its importance in clinical assessment and nursing care of confused patient reinforces the need to know the patient. Despite this, the culture does not enable nurses to focus their attention on the person who is the patient. The conclusions drawn focus on the importance of nursing therapy in ICU and hold implications for advancing this notion.

NOTES ON STYLE AND LANGUAGE

The term **patient** is used to connote people being cared for in ICU. It is used in favour of other terms such as client or consumer because it is used and understood by nurses in this study. The term **family** is utilised to connote all people significant to an ICU patient who were present at the bedside of the patient, not just those people related to the patient by blood or marriage.

The terms **delirium** and **acute confusional states** are not used throughout the thesis as much as the generic term 'patient confusion' because this term reflects the language used by the nurses in this study. Some nursing researchers suggest using the term delirium (Foreman, 1990; Geary, 1994) because of its clearly defined diagnostic criteria

(American Psychiatric Association, 1994). However, in this study the terms confusion, and patient confusion are used because they reflect a nursing perspective (Vermeersch, 1990) and because delirium is a medical diagnosis.

Square brackets [...] are used to encase words that are added to direct quotes in order that they make sense to the reader, for example *"...[we] can prolong life or [we] can prolong death...in ICU the barriers between them [life and death] come down and the distinction is blurred"*.

Use of *Italics* and Quotations

- **'Single quotation marks' without italics** indicate colloquial phrases used to illustrate a point.
- **"Double quotation marks" without italics** indicate quotations from published material and are cited as such.
- ***'Single quotation marks'* with *italics*** indicate phrases and comments by study participants, usually ICU nurses, that were heard repeatedly throughout the fieldwork study and are therefore not attributed to one particular person.
- ***"Double quotation marks"* with *italics*** are direct quotes from individual participants, mostly nurses, in this study, recorded during fieldwork and interview transcription, and reproduced verbatim.

GLOSSARY OF TERMS

Acute confusional state: a term often used interchangeably with delirium.

Delirium: the medical diagnosis of confusion, with defined diagnostic criteria.

DSM: the Diagnostic and Statistical Manual of the American Psychiatric Association, which specifies diagnostic criteria for delirium.

ET tube: endotracheal tube

ICU: intensive care unit.

ICU syndrome: a term coined to describe acute patient confusion in ICU.

Intensivist: a specialist doctor trained and qualified to care for critically ill patients.

Intubated/ Intubation: patients with an endotracheal tube or a tracheostomy tube connected to a mechanical ventilator.

ICU nurse/s: the nurse/s working in the ICU at the time of this study.

MSE: a mental status examination, usually formalised

Chapter 2

The Clinical Problem of Acute Confusion in ICU: "A disease of medical progress" (Nahum, 1965)

INTRODUCTION

This chapter reviews relevant literature about the clinical problem of acute confusion in ICU patients. It begins with a discussion of the identification and conceptualisation of the ICU syndrome, a name used to describe the clinical picture of patients who became confused while in ICU. A discussion of delirium in hospitalised patients, especially the elderly, serves to illustrate the "ICU syndrome" as an example of an acute confusional state or delirium. Reports of incidence and prevalence of acute confusion in ICU demonstrate the scope and significance of the problem. The paucity of research in nursing care of confused patients in ICU serves to reinforce the importance of this study.

THE ICU SYNDROME

A high incidence of mental status alterations was recognised in the critically ill patient population from the time that ICUs first opened in the 1960s (Blachly & Starr, 1965; Egerton, & Kay, 1964; McKegney, 1966). Currently these mental status problems are increasing due to changes in sedation practices (ICU patients are more alert) and an ageing patient population in ICUs (McCartney & Boland, 1993; Rasin, 1990; Westcott, 1995). The observed mental status alterations are primarily cognitive, with disorientation, perceptual disturbances and impaired information processing being most pronounced. As patients 'lose touch with reality' they often became frightened, agitated and restless, demonstrating behavioural disturbances that create potential dangers to

themselves while they were critically ill and dependent on life-saving machinery. Early accounts of cognitive changes in ICU patients emphasise a physiological basis (eg., McKegney, 1966) as these changes were recognisable as an acute organic brain syndrome. However the behavioural manifestations led some authors to focus on an emotional nature of the mental status changes (eg., Kleck, 1984).

Originally these mental status changes were associated with the stress of being in the ICU environment and the terms "ICU psychosis" and "ICU syndrome" were introduced to describe these psychological responses (Dracup, 1988). The term "ICU syndrome" was coined by McKegney (1966), who referred to it as a "disease of medical progress" (quoting Nahum, 1965). McKegney (1966) outline mental status problems in relation to the post-operative period following cardiac surgery, what Nahum (1965) referred to as "madness in the recovery room". The year before Blachly and Starr (1964) and Egerton and Kay (1964) described similar problems in post-cardiotomy patients, upon noting a high incidence of psychotic states in this population. There is speculation that mental status changes in critically ill patients were recorded in the literature prior to the above mentioned citations, but these were misrepresented as depression or schizophrenia (Granberg, Bergbom-Engberg & Lundberg, 1996).

Identification and Conceptualisation

The symptoms of the "ICU syndrome" are recognisable as those of an acute organic brain syndrome or delirium, which by definition has an underlying physiological basis, albeit not always identifiable. Each of the early accounts of the syndrome stressed physiological factors in its development, however the cognitive changes were viewed as

emotional responses to the strange and stressful environment of the original critical care areas, many of which were an extension recovery rooms for open-heart patients (Kornfeld, 1969).

Investigations into environmental influences (Keep, 1977; Keep, et al., 1980; Wilson, 1972) led to ICU design changes. The inclusion of orientation cues, such as external windows and internal clocks characterised second-generation ICUs, based on a new design. When these units were compared with their predecessors, a decrease in anxiety and confusion were noted (Dracup, 1988). However the problems of psychological sequelae to being a patient in ICU have not been eliminated entirely by environmental design changes. For example, Bradburn & Hewitt (1980) report that patients' subjective experiences of sleep are not altered by modification to physical environmental.

Some experts argue that the focus on stress responses to the ICU environment distracted clinicians from considering that patients in an ICU are prone to delirium by virtue of their underlying medical illness (Adams, 1984; Kornfeld, 1980; Tesar & Stern, 1986). The symptoms of delirium are easily mistaken as purely psychological or emotional because they are manifested through behaviour. Such a conceptualisation may delay the diagnosis and treatment of a serious underlying physiological problem. The conclusion that the strange and stressful environment of an ICU leads to altered cognitive reactions is understandable, but may have focused attention away from the delirium as a grave prognostic sign, signalling deterioration of that patient's clinical condition.

"ICU syndrome" has been conceptualised as both a physiological problem and a psychological problem. The view that the cognitive changes noticed when people were critically ill and cared for in an ICU are suffering from a psychological problem may have contributed to poor understanding and impeded research efforts. Psychological problems may not be perceived with the same degree of seriousness as physiological crises, especially among ICU staff, who are most concerned with keeping the patient alive. Mental status changes noticed in post-cardiotomy patients were considered psychological because patients had a lucid period post-operatively before developing the symptoms of an acute delirium. Kornfeld (1969a, 1969b, 1971) differentiates post-cardiotomy responses and acute organic brain syndromes in the critically ill population. Some experts urge that delirium be seen as brain failure (Crippen & Ermakov, 1992; McCartney & Boland, 1993). An acute organic brain syndrome (delirium) has a physiological basis (American Psychiatric Association, 1994), and Kornfeld (1969a, 1969b, 1971) placed the responses of cardiac surgery patients into a different category to those patients who are critically ill and develop an organic brain syndrome of delirium. Unfortunately, the ICU syndrome has become a catch all phrase that oversimplifies the psychiatric problems of ICU patients as a psychological response to the ICU environment. "Such oversimplification has dangerous implications" (Kornfeld, 1980:17).

Some investigators identify more than one type of "ICU syndrome". Katz, Agle, dePalma & DeCrosse (1972) conclude that a physiological cause can be identified in patients whose cognitive impairment is global; whereas those patients whose cognitive impairment is selective, that is not all cognitive processes were affected, seem to be reacting to the environment. Heller, Frank, Malm, Bowman, Harris, Charlton &

Kornfeld (1976) differentiate those patients who develop ICU syndrome immediately upon awakening after surgery from those patients whose mental changes begin after a lucid period post-operatively. Conclusions about differentiation between the types of confusion are therefore based on whether the response is to the environment or as a result of identifiable physiological factors.

These studies highlight the complexity of the syndrome and point to a variety of factors as possible contributing ones. Researchers have not always distinguished different types of cognitive responses of patients in ICU and this has resulted in a conceptual muddle. The results of these studies help to explain why the ICU syndrome has been conceptualised both as a psychological response (Cochran & Ganong, 1989; Fisher & Moxham, 1984; Kornfeld, 1980; Kleck, 1984; Taylor, 1971), and as an indication of physiological problems that the patient's clinical condition is deteriorating (Adams, 1984; Crippen & Ermakov, 1992; Easton & MacKenzie, 1988; Helton, et al., 1980; Holland, Sgoi, Marwit & Solkoff, 1973; Jensen & Justic, 1995; Katz, et al., 1972; Tesar & Stern, 1986). In the literature conflicting ends of the spectrum can be found. Kleck (1984) cautions that reference to ICU syndrome as an organic illness minimises the functional or emotional elements of it, while Adams (1984) warns that focusing on psychological theories has resulted in little attention to organic pathology.

Relationship to Post-cardiotomy Delirium

As previously stated, the concept of an ICU syndrome developed out of reports of a high incidence of delirium following cardiac surgery and has been most clearly delineated in post-operative, open-heart surgical patients. This is the delirium observed in the

recovery room (Holland, et al., 1973). The frequency of this disorder has been well established in the heart surgery population and the incidence of confusion in this population has decreased as a result of improvements in surgical techniques (eg., shorter operative time and bypass exposure) (Eisendrath, 1980).

In the surgical ICU population the syndrome emerges from interaction of a number of factors, prior to surgery (eg., ability to withstand stress, age, poor coping), operative procedures (eg., anaesthesia time, complexity of procedure), drugs post-operatively, and the intensive care milieu (eg., disturbed sleeping and dreaming, fatigue, pain, anxiety, lack of orientation cues). A person's feeling of being in touch with reality depends on intact interaction of internal and external environments and this is lost in acute delirium. Patients in a surgical ICU are in a state of enforced passivity in a strange and constricted milieu (Nadelson, 1976).

Post-cardiotomy delirium has causes that are easier to explain and measure than in the general ICU population, for example, length of anaesthesia time and pump time and the extent of pre-existing heart disease. In the case of cardiotomies the stress of an unfamiliar environment can be lessened by pre-operative visits and preparation of patients by staff who will care for them post-operatively. No such opportunities exist in a general ICU, as gravely ill patients are admitted most often without warning and preparation.

Because post-cardiotomy delirium, the forerunner to "ICU syndrome", relates to psychological causes and psychological cures, all patient confusion in ICU tends to be

grouped together. This diverts attention from real issues in a general ICU, such as physiological bases of the syndrome. Although first identified in the post-cardiotomy patient population, the concept of an ICU syndrome extended to include all types of behavioural reactions in any critical care environment.

Suspected Aetiology

The varied conceptualisations of the ICU syndrome are a reflection of attempts to find a clear linear cause-effect relationship in terms of aetiology. Behavioural disturbances in ICU are a combination of environment, patient personality and organic influences (McCartney & Boland, 1993). Numerous factors are involved and many have been studied. Much research had been conducted to investigate incidence and aetiological factors in surgical populations (eg., Danilowicz & Gabriel, 1971; Egerton & Kay, 1964; Heller, et al., 1970; Johns, Large, Masterton & Dudley, 1974; Kennedy & Bakst, 1966; Kornfeld, Heller, Frank & Moskowitz, 1974; Layne & Yudofsky, 1971; Quinless, Cassese & Atherton, 1985; Sadler, 1981). Because the typical picture of post-cardiotomy delirium involves a lucid period followed by restless, anxious, confused behaviour progressing to full delirium by the second or third post-operative day (Ballard, 1981; Egerton & Kay, 1964; Lazarus & Hagens, 1968) the conclusion is drawn that the critical care environment is influential. However, when the general ICU patient population has been studied results led to the conclusion that worsening medical illnesses are the probable causes of confusion (Adams, 1984; Heller, et al., 1970).

Investigations into the environments of intensive care units led to the suspicion that sensory alterations: sensory deprivation (Kloosterman, 1983; Taylor, 1971), sensory

overload (Hansell, 1984), sleep deprivation (Helton, et al., 1980, Fisher & Moxham, 1984), and sensory monotony lead to confused and delirious behaviour. These conclusions are based on studies that were conducted with normal subjects exposed to abnormal environmental experiences, such as extreme sensory deprivation (Budd & Brown, 1974; Eisendrath, 1980). Studies conducted to confirm the effects of sensory alterations in the ICU population yielded mixed results (eg., Holland, et al., 1973; Katz, et al., 1972; Wilson, 1972). In reviewing the available evidence, Lipowski (1990), a recognised expert in delirium, concludes that sensory deprivation alone cannot cause delirium, yet would facilitate its progress in vulnerable populations.

There are other difficulties in establishing cause-effect relationships in mental confusion. For example, sensory overload, a bombardment of input into the senses is part of the clinical picture of delirium, as well as a suspected cause of it. Acute confusion places patients into a vicious cycle that prolongs the cognitive alterations through disturbed sleep-wake cycles and increased psychomotor activity (Gustafson, Brannstrom, Breggren, Ragnersson, Sigard, Bucht, et al., 1991). Patients who are delirious experience continuous unregulated thought processes and are flooded with a ceaseless, uncontrollable stream of internal and external stimuli, which are then subjected to faulty and disordered thought processes and perceptual abilities (Adams, 1984).

Another example of difficulties with establishing cause-effect relationships in confusion is that of sleep disturbance, recognised since antiquity as a manifestation of delirium (Lipowski, 1990), and also implicated in the development of "ICU syndrome" (Fisher & Moxham, 1984). The necessity of frequent awakenings following cardiac surgery and

the observed increase in incidence of post-cardiotomy delirium led to the speculation that sleep deprivation was a cause of this type of post-operative delirium. Some of the researchers (eg., Johns, et al., 1974) who explored this relationship found supporting evidence. However, in reviewing research related to this topic, Lipowski (1990) cites studies which produce conflicting results. He concludes that "it appears that sleep deprivation is not a cause of delirium after open heart surgery, but does not rule out the possibility that it may be a contributory factor" (p 120).

There are other examples in the literature that implicate the myriad of factors that cause and/or contribute to mental status changes in ICU. Kleck (1984) states depersonalisation may be the most significant factor in creating behavioural reactions to the ICU experience. Crippen (1990) and Crippen & Ermakov (1992) state that medications are the most common causes of delirium in ICU. Other authors stress that the diagnosis/label of acute delirium in ICU should not be considered without an aggressive search for its underlying physiological condition (Fish, 1991; Weber, Ozako, Bolander & Grysiak, 1985).

There are so many potential causes of delirium in the ICU that a list of them appears to include almost any physiological processes, drugs and environmental factors that an ICU patient might experience. Pursuing and isolating causes, while interesting, is not that informative in understanding cause-effect relationships in the development of delirium in ICU. Lipowski (1990) addresses this in discussing the aetiology of delirium. He urges the inclusion of three classes of causative factors: predisposing, facilitating and precipitating. The predisposing factors increase the patient's vulnerability while the

facilitating factors act as a catalyst in worsening the patient's condition or complicating the delirium even further. The precipitating factors are the organic ones that are known to cause delirium, for example, anticholinergic medications. By definition delirium has an organic basis (as contrasted to the functional basis of neurotic disorders), and should be included as suspected or identified precipitants.

Despite this sensible argument by a leading medical expert (Lipowski, 1990) articles about delirium still list all causative and contributing factors as if they are all equal in importance. This leads to a lack of clarity of thinking about delirium may discourage clinicians from searching for a cause because there are too many possibilities to consider, thus complicating diagnostic decision-making.

Nomenclature Problems

There are problems with describing confusion (Neelon, 1990) and as many as thirty terms have been used to describe the clinical situation of a patient who becomes confused (Liston, 1982). Some of these terms include: delirium, acute brain failure, reversible dementia, clouded states, and acute brain syndrome. In the ICU environment acute confusion has been called: ICU psychosis (Hansell, 1984), ICU syndrome, and, in cardiac surgical patients, postcardiotomy delirium. Medical experts (Adams, 1984; Cassem, 1989; Geary, 1994; Kornfeld, 1980; Tesar & Stern, 1986) argue for the abandonment of the terms ICU psychosis and ICU syndrome, although they still can be found in recent literature (eg., Crippen & Ermakov, 1992; Granberg, et al., 1996). Terms such as ICU syndrome reflect a simplistic view that the cognitive changes associated with the syndrome are a direct result of the ICU environment, thus ignoring the many

physiological influences that cause and exacerbate confusion in critically ill patients. Harvey (1996b) argues against the term because it is the patient, not the ICU, who has the symptoms.

Some nursing authors (Foreman, 1990; Geary, 1994) urge that the medical diagnosis of delirium (originally termed acute organic brain syndrome) replace terms such as ICU syndrome because; the term delirium is not as vague or ambiguous; it has diagnostic criteria (American Psychiatric Association, 1994); and, it is associated with underlying pathology, either a medical condition or substance or combination of these. This is laudable because it focuses clinical attention to organic aetiology. The diagnosis of delirium has always been associated with underlying physiological pathology, not a functional disorder. Such recognition would return attention back to where the description of the syndrome first began (McKegney, 1966), as an organic, physiological problem.

The lack of clarity about ICU syndrome is not only semantic but also conceptual. The term confusion is the one most reflective of a nursing perspective (Vermeersch, 1990a). and expresses the experience of loss of capacity to think with usual clarity and coherence. The use of the term confusion as synonymous for delirium is discouraged (Johnson, 1990) because confusion is a symptom, rather than a diagnosis. Medical literature focuses on diagnostic criteria for delirium in an effort to clear some of the ambiguity. It is important that nurses understand the medical diagnosis of delirium, however they usually refer to patients as confused rather than delirious.

More importantly, confusion, as a symptom in a critically ill ICU patient, needs to be differentiated from agitation, anxiety, frustration, which may affect patient coping and is within the realm of nursing diagnoses and care. One issue for nurses is sorting out patient disorientation (functional and/or contextual) from confusion, toxic reactions and/or over sedation.

ACUTE CONFUSIONAL STATES: DELIRIUM

The clinical problem of delirium has been discussed since antiquity (Lipowski, 1990), however it did not appear as a medical diagnosis in the American Psychiatric Association's diagnostic nomenclature manual (DSM) until the third version in 1980.

Definitions and Descriptions

Acute confusion is characterised by transient (although this is only appreciated in retrospect) global cognitive impairment which has an abrupt onset. The clinical manifestations are marked by: attention deficits, disturbances of the sleep-wake cycle, orientation difficulties, memory problems, increased and/or decreased psychomotor activity, illogical thinking, lack of judgement, inability to absorb new information, lability of affect, and clouding of consciousness (Crippen & Ermakov, 1992; Easton & MacKenzie, 1988; Foreman, 1986; Geary, 1994; Johnson, 1990; Kleck, 1984; Tess, 1991). These cognitive changes show diurnal variation and can result in fatigue, incoherent communication, inappropriate behaviour, anxiety, paranoia, illusions, hallucinations and delusions.

In what is now a classic and frequently cited article about the problem of delirium, Engel and Romano (1959) urge doctors to consider lack of functional integrity of the brain, "cerebral insufficiency", with as much regard as that afforded to malfunctioning in other body organs. In addressing the difficulties with under-recognition and poor understanding of the clinical problem of delirium, these authors review medical and psychiatric textbooks of the time, only to reveal a lack of conceptual clarity about the problem of delirium, and the "inadequate and confusing fashion in which delirium and the behaviour of delirious patients are referred to in the literature" (p 268). Other than the review of current state of understanding of cerebral functioning, this article, now nearly forty years old contains information that continues to be relevant to understanding the phenomenon of delirium. Current authors cite similar problems of under-recognition, misdiagnosis and poor understanding of this all too common clinical problem.

Elderly Hospitalised Patients and Confusion

A great deal of what is known about patient confusion in hospital has been developed from studies of the elderly hospitalised patient population. Estimated incidence of confusion in hospitalised elderly patients is approximately 25% (Francis & Kapoor, 1990). Acute confusion in this population is associated with increased hospital stays, increased health care costs, negative health outcomes and poorer quality of life (Inouye, 1993; Levkoff, Evans, Liptzin, Cleary, Lipsitz, Wetle, et al., 1992). Despite the significant problems associated with acute confusion in the elderly, it remains poorly understood, under-recognised and neglected as a focus of research (Foreman, 1986; Francis & Kapoor, 1990; Levkoff, Besdine & Wetle, 1986).

Understanding delirium in the elderly population is impaired by the semantic muddle that surrounds it (Foreman, 1991). Recognition is impeded by poor systematic assessment of cognitive functioning in hospitalised elderly patients (Inouye, 1993). Recognition and appreciation of acute confusion is impeded further in the elderly population because of expected behaviours associated with ageing and the potential presence of dementia with confusion as part of its presenting picture or with superimposed delirium.

Research efforts into acute confusion in the elderly have focused on accurate clinical assessment through the explication of clinical indicators and the development of assessment instruments (eg., Foreman, 1991; Levkoff, et al., 1992; Neelon & Champagne, 1992; Vermeersch & Henley, 1997). Recommended medical management of delirium often focuses on the use off medications (eg., Crippen, 1990). However, there a very few nursing intervention studies focused on prevention or management of acute confusion in elderly patients (Cronin-Stubbs, 1996; Foreman, 1993).

To date, the literature on elderly confused hospitalised patients has highlighted the significance of this clinical problem, yet understanding remains poor, leading to improper diagnosis. Of even greater concern is the lack of research into the management of acute confusion in this population.

ACUTE CONFUSION IN THE ICU: LITERATURE

There is a lack of consistency in measuring the extent of cognitive impairment among patients in the ICU. Because there is little agreement and understanding (as Geary, 1994 and Vermeersch, 1990b claim) about what constitutes acute patient confusion there is

even less chance of determining the precise extent of this clinical problem. As a result, the incidence and prevalence of acute confusion are approximates only (Easton & MacKenzie, 1988).

The estimates of incidence of observed confusion range from: to 20%-30% (Kleck, 1984), to as high as 40% (Geary, 1994). The rate may be even higher considering that patients who are mechanically ventilated are not able to express their mental status through verbal means and confusion may be mis-identified as frustration or depression (Inaba-Roland & Maricle, 1992; Tess, 1991).

Scope and Significance as a Clinical Problem

Patients who become confused while in hospital have longer hospital stays (Fulop, Strain, Vita, Lyons & Hammer, 1987; Shedd, Kobokovich & Slattery, 1995; Thomas, Cameron & Fahs, 1988) as well as higher morbidity and mortality rates (Lipowski, 1967; Tess, 1991; Weddington, 1982). However, as mentioned previously, cause-effect relationships are difficult to establish definitively. "Mortality appears to be higher in patients with delirium because the presence of delirium indicates significant underlying medical problems" (Francis & Kapoor, 1990:70). Patients who are more seriously ill are at greater risk of becoming acutely confused in addition to suffering more complications from their illness and hospitalisation. Patients who are in the last days and hours of life are invariably delirious, so this could account for some of the incidence in ICU.

The general ICU population are the sickest of the sick. An investigation in which severity of illness was controlled, demonstrated that the morbidity and mortality rates

were the same in patients who suffered cognitive impairment and those who did not (Fields, MacKenzie, Charlson & Sax, 1986). However these researchers heed caution because the sample size in this investigation was small for the research design. In contrast, another study (Guze and Daengsurisri, 1967) demonstrated a two fold increase in mortality rates when confused patients were compared to controls matched for age, sex and diagnosis.

Acute confusion will remain a significant clinical problem because of an expected increase with an ageing population (Rasin, 1990). Patients who experience acute confusion in the ICU are at risk of serious complications such as: self-extubation, injuries related to attempting to get out of bed, dislodged invasive catheters, and disconnection of drips that can lead to exsanguination, arterial embolisation, hypoxia, and death (Tess, 1991). Acute fear and its associated agitation (although confusion may also be 'quiet') may lead to self-injuries (Liston 1990) and, in the ICU population, the seriousness of these injuries is magnified by physiological instability and the dependence on mechanical equipment.

No matter what the cause confusion nor how it is described, it is the ICU nursing staff who must care for confused patients on a 24 hour basis, attempting to prevent these complications, control the symptoms of confusion and assist in the identification of underlying causes and contributing factors.

Nursing Perspective

Much research effort has been expended in order to determine characteristics and predictors of acute confusion in the intensive care patient population, however the

nursing research into patient stress in the ICU has been atheoretical in nature (Dracup, 1988). Locating the causes, especially ones that are controllable, is important as this offers hope of preventing the confusion from developing in the first place. However, little research has been focused specifically on the actual care of confused patients in an ICU environment. Dracup (1987) bemoans the dearth of controlled clinical trials of specific nursing interventions as such studies would assist in evaluating the effectiveness of various nursing care approaches in the critical care setting. While there have been a few studies on the effects of family involvement on stress in ICU patients (Budd & Brown, 1974; Chatham, 1978; Fuller & Foster, 1982), recommended nursing interventions about how to care for people in this clinical situation are largely untested.

The standard 'textbook' descriptions of how to care for an acutely confused person, such as those found in the nursing literature, may not be practicable in the ICU environment. For example, nursing interventions suggested in the literature, such as speaking in a low-pitched voice and providing meaningful stimuli (Geary, 1994), may be difficult if not impossible to enact in an environment such as ICU. Nurses in ICUs are primarily concerned with acute physiological conditions. Stimuli such as alarms and other machinery produce noises that have meaning for ICU nurses but may be meaningless and even frighteneng to the patients who are dependent on the technology. Thus the recommended nursing care for people who are confused is problematic, given the nature of an ICU and the nature of the clinical problem itself.

CHAPTER CONCLUSION

The review of the literature reveals a lack of conceptual clarity in relation to the clinical problem of confusion in ICU. This is due, in part, to the complexity of the clinical picture and the myriad of possible causes and factors contributing the problem of confusion. More importantly, there has been a failure to conceptualise confusion in the ICU patient in a clearly defined manner. This, coupled with the lack of nursing intervention studies identifying therapeutic approaches, leaves ICU nurses with the challenging task of caring for confused patients with little clarity or evidence on which to base that care.

Chapter 3

Situating the Study: Methodology and methods: "To sum up another culture is to sum up one's own" (Geertz, 1988)

INTRODUCTION

The methodological approach to the study is ethnographic in nature. Like any approach to research the ethnographic enterprise raises considerations about the nature of reality and truth. In this study these matters are addressed on three counts. These include: political concerns encompassed in claims about representation of others, theoretical concerns about authenticity and trustworthiness in the ethnographic enterprise, and moral concerns that are central to the reflexive relationship between researcher and members of the culture.

The chapter begins with a philosophical discussion about ethnographic inquiry and highlights some of the major methodological considerations associated with this approach to research. The next section of the chapter includes a description of data collection methods, participant-observation fieldwork and in-depth interviews. This is followed by a discussion of the data analysis which emphasises its continuous nature in ethnographic work and explains the various levels of analysis evident throughout the study. Explanations of how the methodological issues raised in the opening section of the chapter are addressed in the study are embedded in the discussion of how data were analysed. Addressing each of these topics presents an audit of the research process through description of the methodology and explanation of the methods employed for

data collection and applied to analysis. Inherent in all sections of the chapter is a justification of the entire research process.

THE RESEARCH QUESTION

The central question of this study is: *How are people who are being treated in an intensive care unit and who experience acute confusion being cared for by critical care nurses?*

Aims of the Study

In exploring answers to the research question, I focused the research lens on how nursing care is culturally mediated. Throughout fieldwork I observed routines, patterns and activities of the ICU, while interacting with its members to develop understanding of the meaning of these actions. I asked ICU nurses to consider their approaches to the care of patients who are confused, encouraged them to articulate their therapeutic intentions and asked them to reflect on how cultural forces shape these intentions. In doing so I was less concerned with individual nurses' perceptions but rather sought to understand their culture by probing for shared meaning among the nursing staff of the ICU. The study is ethnographic because of this emphasis on how meanings are constructed through cultural beliefs, norms and practices, and reciprocally how these cultural patterns affect and construct nursing care.

Conventional ethnographies are sometimes criticised because they simply reproduce ideological common sense and, as such, accept ideas at face value (Hammersley, 1992). In this study analysis of cultural meanings extends beyond mere description through

exposure of nursing care to critique. In this manner the study, as with most ethnographies, is both an interpretive and an explanatory account of a culture.

Through a Critical Lens

Lipson (1994) claims that "the basis of applied research which is conducted with an ethnographic focus is helping to empower or assist the group to make changes in a desired direction" (p 352). While nurses who participated in this study may have developed insights into and new understandings of their nursing care through open dialogue, I did not conduct the study with the intention of altering practice through the investigation. However, I did bring a critical lens to the study because I viewed the care of confused patients in ICU as problematic from the outset.

In bringing a critical lens I did not want to be confined to critical social theory *a priori*, nor to the emancipatory intent of some critical ethnographic methods. Instead I employed Simon & Dippo's (1986) useful trilogy in their discussion of critical ethnography. They claim that a critical ethnography is characterised by: the construction of the phenomenon under study as problematic, an overt intention of subjecting that phenomenon to public scrutiny, and an open reflexivity that brings into consciousness the dynamic and reciprocal influences of researched and researcher.

I viewed the care of confused patients in an ICU as problematic for the theoretical reasons outlined in the literature review of this clinical problem (Ch. 2). Nurses in this study quickly confirmed that confused patients did pose problems in nursing care and my observations within the field further reinforced this position. Throughout the fieldwork

the ICU nurses and I discussed care of confused patients in an open dialogue that sometimes included other members of the culture, thus opening care to public debate. The reflexive relationship between me and the members of the culture developed through my engagement in their cultural work world and this relationship is discussed as a central methodological consideration.

METHODOLOGY: ETHNOGRAPHIC INQUIRY

The term ethnography was used originally to describe a research technique to study groups of people who: shared social and cultural characteristics, thought of themselves as a group, and shared common language, geographic locale and identity. As such ethnography expresses the basic goals of cultural anthropology (Hughes, 1992). Classic ethnographies portray entire cultures, providing 'a portrait of the people' (the literal meaning of the term ethnography), and move beyond descriptions of what is said and done in order to understand "shared systems of meanings that we call culture" (Boyle, 1994:160). However, this investigation is not an ethnography in the classical sense, but rather a focused or problem-oriented ethnography (Boyle, 1994; de Laine 1997; Lipson, 1994). By centring on a specific aspect of a culture, in this case ICU nursing care of patients who are confused, observations were directed toward specific events within the setting. While focused on a specific a problem-oriented ethnography still preserves the social unit as a whole because holistic understandings are characteristic of ethnographic work (Boyle, 1994; Hughes, 1992).

The ethnographic tradition is based on the notion that the social world can be understood by participation in the natural setting, enabling preservation of the environment

(Emerson, Fretz & Shaw, 1995; Germain, 1993; Hughes, 1992) and maintaining an enduring respect for context (Boyle, 1994; Marcus & Fischer, 1986). Active engagement in the life of the culture reduces the distance between self (the researcher) and the other (members of the culture). Relationships that develop through ongoing dialogue build understanding between researcher and participants (Geertz, 1988; Hammersley, 1992).

An ethnographer comes to understand the social world of the other in an attempt to develop an inside view (emic understanding), while recognising that it will emerge from an outside perspective (etic understanding). In this sense the researcher attempts to experience the world of the 'other', euphemistically referred to as 'going native', while appreciating that this experience emerges through the 'self' of the researcher. Although there is no attempt to detach the self, the person who is the ethnographer cannot become the 'other'.

Location within the tradition of ethnographic inquiry predicates the study on the notion that shared beliefs, values and meanings create a socio-cultural context. Such a context gives rise to particular actions and practices; therefore, institutionalised actions are viewed as socially constructed (Purkis, 1994b). However, the very notion of a culture is an artificial arrangement, a constructed reality that is only one of many possibilities (Marcus & Fischer, 1986; Wagner, 1981). I did not merely perceive the ICU under investigation as a culture, but constructed it as such.

In constructing this ICU as a cultural entity, I based my observations and built my understandings on the notion that shared belief systems are expressed through behavioural patterns, especially that of routines and rituals. I probed for "what every member knows" when drawing on shared actions (Purkis, 1994a). I investigated how conventions of a culture become accepted without question by its members (Strange, 1996). I looked for common understandings specific to the cultural group. I explored that which is taken for granted by members of the group. Through observing actions and practices and exploring reasons for them, I explicated how nurses in this setting constitute the social world of their nursing care. Cultural meanings not only generate behaviour but also assist in the interpretation of experience (Spradley, 1980).

Philosophical Foundations

Originally, the ethnographic tradition was based on the belief that the study and comparison of cultures would reveal universal laws governing human activity, a "general science of Man " (Marcus & Fischer, 1986:18). Such 'laws' were perceived to represent reality that is 'out there' in an independent existence. In this realist tradition, discovery, explication and comparison of cultures had the potential to reveal universal theory about human nature. Thus the original goals of the ethnographic enterprise reflected the prevailing views about the nature of truth, based on a realist perspective and conventional beliefs in universality and certainty of knowledge.

However, such conceptualisation of the ethnographic enterprise fails to acknowledge its grounding in the naturalistic/interpretive tradition. Recognition of its interpretive nature endorses that human activity is not simply mirrored in accounts of it, but is constituted

through human interaction. An account of a culture produced by an ethnographer is neither a report of an objective, measurable phenomenon, nor a tale about things that did not happen (Geertz, 1988; Atkinson, 1990). An ethnographic account is an interpretation that is constructed through the experience of being in a culture and through the relationships of the ethnographer with the members of a culture.

Awareness of the constructivist manner in which ethnographies are developed and written created anxieties and concerns among those within the field of ethnographic research (Atkinson, 1990; Clifford & Marcus 1986; Geertz, 1988; Hammersley, 1992; Marcus & Fischer, 1986). Once exposed as constructions, ethnographies could no longer be accepted as a evidence of an objective world that represent aspects of universal laws about human behaviour, but rather acknowledged as interpretive texts that reveal multiple perspectives and multiple realities (de Laine, 1997; Hammersley, 1992; Marcus & Fischer, 1986; Sandelowski, 1993). This realisation, that a translation of culture is an act of interpretation signifying one of many possible constructions, led to a crisis in ethnographic research.

Methodological Considerations

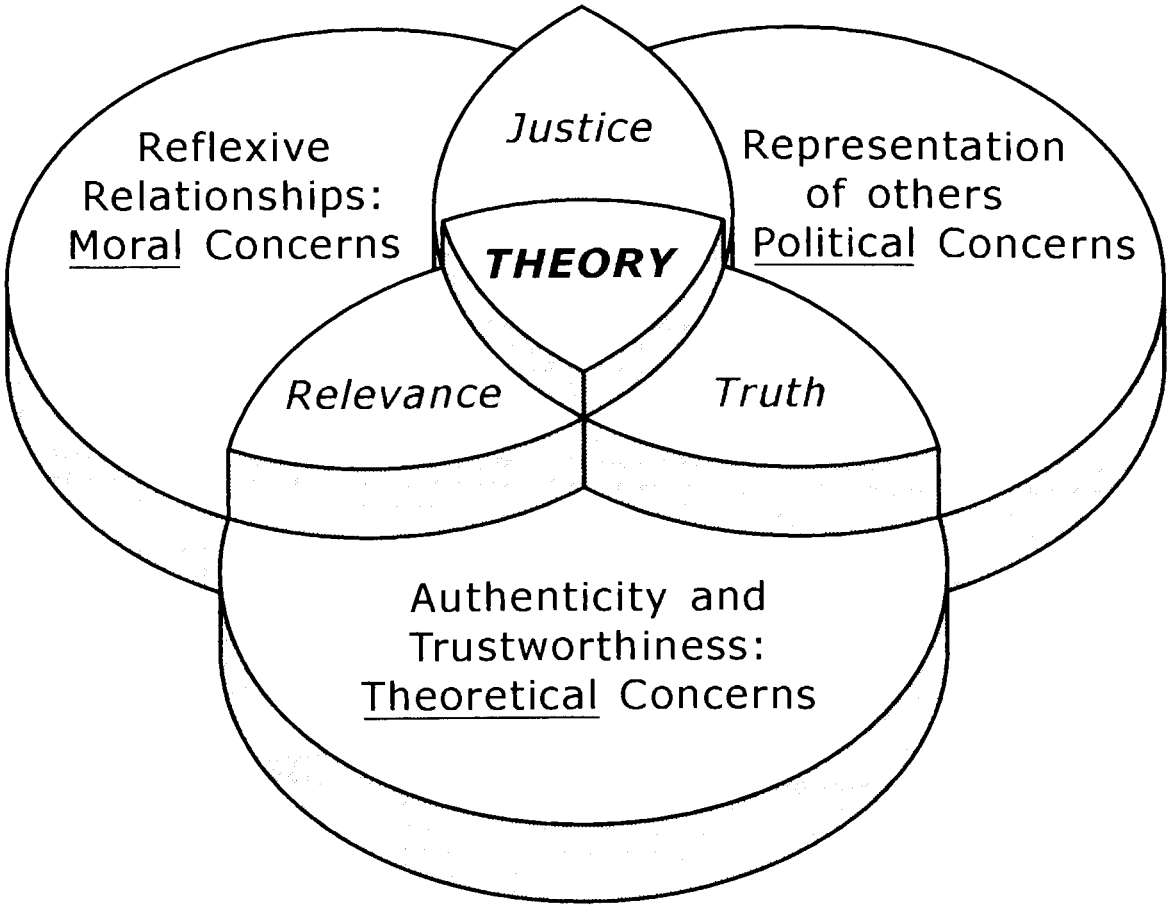
The crisis in ethnographic research focuses on three methodological issues: political concerns inherent in the representation of others, theoretical concerns about authenticity and trustworthiness of ethnographic accounts, and moral concerns about how relationships between researcher and members of a culture are situated. Although dealt with separately in the discussion that follows each is intimately intertwined.

Each of the issues raised here, moral concerns of the reflexive relationship of researcher and participants, political issues in the representation of others, and theoretical concerns of authenticity, bears on and relates to each other. Exploring their relationship to each other, that is, travelling in their overlapping spaces, raises epistemological issues in ethnographic research (Diagram 3.1). Analyses that are authentic and trustworthy and that appropriately represent members of a culture are likely to reflect an accurate account, that is, the analysis rings true (*truth*). Analyses that are both authentic and trustworthy and build upon a reciprocal relationship of mutual respect are likely to be pertinent to the people concerned (*relevance*). Ethnographic research that accurately and appropriately represents members of a culture and remains respectful of human relationships is likely to be fair (*justice*). That good research is relevant, true and just concerned me in each step of this study. The issues are addressed directly in data collection and analysis, outlined in this chapter, and inherent in the written text of the overall thesis.

Representation of Others: Political Concerns

One of the central tensions of the 'crisis of representation' concerns the authority of the ethnographer ('the one') in attempting to represent members of another culture ('the other'). Atkinson (1990) claims that the authority of the ethnographer became a recurrent preoccupation with contemporary commentators on ethnography. Referred to as the "political problems in cultural translation" (Marcus & Fischer, 1986:48), questions of authority expose difficulties of location of author's presence within the ethnographic text. Geertz (1988) aptly expresses the dilemma as a place for the author to stand in the text and to bear the burden of authorship. This location of the author is not simply a

"Truth becomes indeterminant at the theoretical level" (Lather 1986:77)



EPISTEMOLOGICAL ISSUES IN ETHNOGRAPHIC RESEARCH

Diagram 3.1

matter of presence within the text but also confirmation of presence in the field as reflected throughout the text

When the authority of the ethnographer was based on notions of realism (as is the case with conventional ethnographies) the ethnographer functioned as a conduit, merely reporting events from the field, describing them as factual accounts. Ethnographic texts written in this tradition are impersonal, neutral and believed to be uncontaminated by personal bias (VanMaanen, 1988). They are what Geertz (1988) labels "author-evacuated" (p 141). The experience of the ethnographer, as participant in the culture of the other, is described 'as if' she or he was the voice of the other, without overt acknowledgment of the improbability of such an endeavour. These realist accounts, the traditional ethnographies, are concerned with presentation of the native point of view in an attempt to understand the whole by describing the parts (Marcus & Fischer, 1986). VanMaanen (1988) distinguishes this type of ethnographic text (a descriptive, realist account) from a "confessional" (p 47) account. In the latter the ethnographer's personal experiences and views are brought to the foreground, in what Geertz (1988) refers to as "author-saturated" (p 141) account. Author-evacuated texts are an attempt to bring back news from the field as if the ethnographer's presence had no effects. In confessional accounts the story is wholly and passionately that of the author.

Once the realist, "author-evacuated" accounts were deemed improbable, there were serious questions about the authority that ethnographies could claim in relation to knowledge production. Were they...colourful travelogues ...investigative journalism ...persuasive accounts ...powerful narratives? And, more importantly, in what way could

they count as science? What would 'author-ise' them? This was another central tension in the crisis, the theoretical concerns of authenticity and trustworthiness.

Authenticity and Trustworthiness: Theoretical Concerns

As mentioned previously the crisis in the ethnographic enterprise established that ethnographic texts are not simply a report of what happened but rather an interpreted construction of reality (Atkinson, 1990). In constructing an account of another culture there is an inherent risk that interpretations are distortions, although the constructivist nature does not mean that an ethnography is fiction, a fabrication of an active and creative imagination. It does, however, place the onus of responsibility on the ethnographer to convince others that he or she 'was there' and understood what was happening 'there'.

The author's presence in the field is what underpins authority in field studies (Purkis, 1994b). While trustworthiness of an interpretation is a matter of judgement, an ethnographer must show an authentic account that she/he was there in the ethnographic sense. The basis upon which ethnography can explain, analyse or anything else it sets out to do is its "capacity to persuade readers ... that what they are reading is an authentic account by someone personally acquainted with how life proceeded in some time among some group" (Geertz, 1988:143).

Validation rests on understanding of the research process itself (Marcus & Fischer, 1986) and this brings to light the need for reflexivity in the relationship between members of a culture and an ethnographer. Not only must an ethnographer convince the reader that

he/she was there (in the culture), but also to demonstrate sensitivity to human relationships with the members of that culture. Purkis (1994b) argues that the reflexive relationship is what validates ethnographic fieldwork. Without an understanding of how the relationships developed and a critical self-questioning about the production of knowledge about others, the ethnographer cannot account for interpretations of the other.

Being Reflexive: Moral Concerns

Making sense of and interpreting the cultural world of the other through ethnographic work relies on the ability of the researcher to engage within the social world, to relate with its participants and to establish a common ground for understanding. This involves interpersonal processes that require the researcher to maintain an astute awareness of self, along with an ability to critically examine and question oneself. In addition to self-awareness there is a call for continual examination of the reciprocal relationship of the researcher to the participants in the field. Such critical awareness of self and the relationship of researched and researcher is reflexive, involving a process of continual turning of oneself onto oneself.

On the surface, reflexivity is "the dynamic and mutual influence of ethnographer and research field on each other" (Muecke, 1994:194). More abstractly, reflexivity becomes a process in which the ethnographer becomes as much the question as the questioner (Watson, 1987). In being reflexive a researcher allows her/him self to be questioned (Lather, 1986). This involves questioning one's own understandings as well as letting others question understandings.

According to Marcus (1994) there are different types of reflexivity. It can take the form of critical self-awareness that explores how personal value systems are operating. This subjective approach contrasts with a reflexivity that attempts to objectify and distance theory by placing personal values to one side. There is also a reflexivity that recognises the improbability of any knowledge claims. Once multiple realities are accepted as possible then all claims to knowledge become contestable (Lather, 1986) This final level of reflexivity leads to appreciation that any construction of knowledge requires response of and engagement with those positioned differently. In the case of ethnography this involves the response of the participants, as well as others willing and able to question its authority.

Reflexivity has bearing on other methodological concerns. In political issues of representation, reflexivity highlights the tension between the emic (inside, passionate) view and the etic (outside, dispassionate) and the nature of the relationship between the two. Reflexivity explores philosophical and political problems of cultural translation (Marcus & Fischer 1986:48). Awareness of reflexivity has the potential to subvert the authority of the author (Watson, 1987), raising questions of both authority (representation) and authenticity (validation). A reflexive ethnographer accepts these questions and lives with the ambiguity they create.

Reflexivity acknowledges that my perspective as the researcher, an outsider (etic data/ observer-oriented) will not necessarily be those of the study participants, the insiders (emic data/ actor-oriented). I understand the world of the other through understanding

own interpretive frameworks (Anderson, 1991). I use emic and etic to understand how I interpreted the world of the nurses in this ICU. The inside and outside perspectives are reciprocated (Atkinson & Hammersley, 1994) and their relationship to each other constitutes reflexivity.

Reflexivity is the open recognition that I was part of the world that I studied and was affected by it (Boyle, 1994); there is a dialectical nature to fieldwork (Anderson, 1991). I allowed myself to become imbued in a reality that I sought to understand (Lather, 1988). The reflexive aspect of an ethnography is an open acknowledgment that, through the process of interacting, the research has the potential to alter participants' understandings of their practice. Stacey (1988) goes so far as to argue that ethnographic research is an intervention into the lives and relationships with others. Minimally, ethnographic accounts have consequences for those in the setting/culture (Watson, 1987).

Reflexive ethnographers appreciate that the perspective of 'the other' derives from their own translation. That is, an ethnographer comes to understand the other, in this case another culture, through an understanding of his or her own culture (Wagner, 1981). The insights I gained were into myself as well as the other and sometimes increased my awareness of the separation between self and others. I could not perceive/ experience the world through the eyes of those who participated in the study. I was bound my own perceptions and ways of understanding. As I came to understand the ICU culture I became more aware of my own culture of nursing. Thus in attempting to understand the other I turned onto myself and probed the basis of my understandings.

I remained "consciously self-aware" (Lather, 1986) of the position of power I held as researcher in the unit. I continually sought validation throughout the fieldwork and allowed my views to be questioned. I sought clarification, checked out my own interpretations and tested theoretical hunches (not only to be reflexive, but also for the purpose of triangulation, discussed below). In dialogue with the nurses I astutely observed their feedback, and probed for further clarification. For example, my cherished notion of 'knowing the patient' (see Chs. 7 & 8), as a way of personalising nursing care, was not shared by the nurses in this study. They had a different view of 'knowing the patient' and I had to alter my views in order to stay true to their understandings. On the other hand, at the outset of the study ICU nurses confirmed my view that the care of confused patients is problematic; throughout the remainder of the study they enabled me to understand why this is so.

In addressing issues of validity I aimed for coherence, authenticity and the analytical ability to see relationships. Throughout the fieldwork I continually checked and crossed-checked my understandings, allowing myself to be questioned, questioning myself and altering my interpretation in light of ongoing interaction with the nurses in the ICU. I employed these processes of triangulation (Fielding & Fielding, 1986) for the purpose of confirming and/or disconfirming my interpretations and for comparing what nurses did in their care of confused patients to how they accounted for these actions both throughout fieldwork and in the interviews. Another source of data, that was used for triangulation, came from key informants who were not at the patients' bedside as continuously as the nurses in this study. In this sense I used data triangulation for the purpose of convergent validation (Knafl & Breitmayer, 1991).

THE CONDUCT OF THE STUDY

Diagram 3.2 depicts the various phases of the study. I use Geertz's (1988) notions of "being here" and "being there" to depict my experience as a researcher, moving in and out of the field, as shown in the middle section of the diagram. I have made this the middle of the diagram because the researcher's experiences are central to ethnographic work. The top section of the diagram depicts data collection methods, while the bottom section describes the levels of analysis. The vertical lines throughout the diagram represent the interaction of the various aspects of the study.

Prior to Fieldwork

Prior to fieldwork I identified key informants who are knowledgable about critical care and who understand nursing care within this context. These key informants made initial introductions and functioned in a liaison role during the course of fieldwork and throughout the remaining life of the study. Key informants were interviewed continuously. They functioned not only as sources of expertise and intimate understanding of the culture but also they operated as able critics of my ongoing interpretations and subsequent theorising.

Consent

Munhall (1993) refers to the consent required for this type inquiry as "process consent" because of the ongoing nature of negotiations required for extensive fieldwork. The consent obtained for the fieldwork part of the investigation was institutional; that is, all people present in the ICU setting at the time of fieldwork were observed and therefore

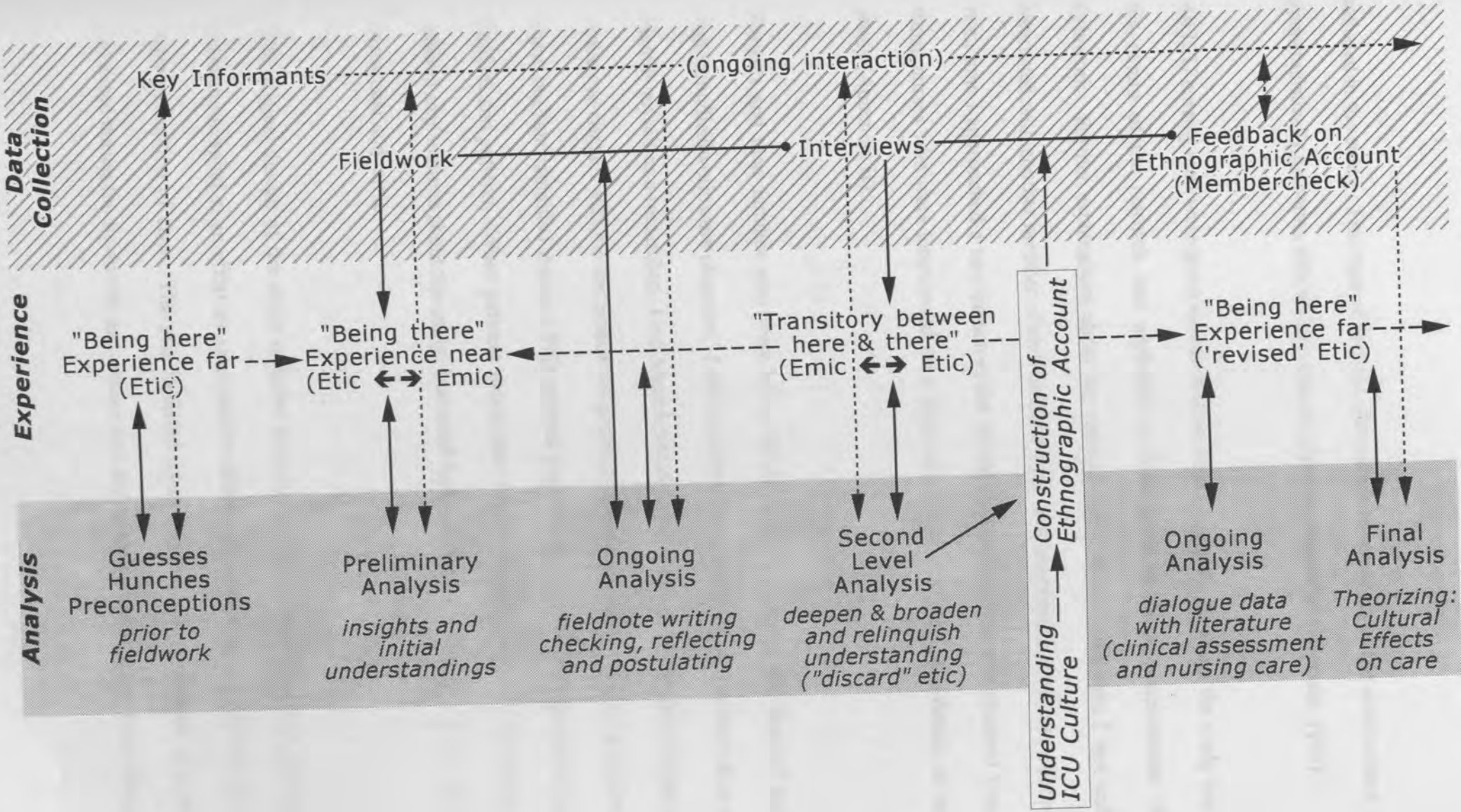


Diagram 3.2 SCHEMATIC REPRESENTATION OF DATA COLLECTION & ANALYSIS

included in the study. This type of consent allowed me to move about the environment, opportunistically gathering data as the research questions demanded (Germain, 1993).

All ICU nursing staff were given an information sheet (Appendix A) about the study and the nature of the research was explained to them prior to the commencement of fieldwork. Further explanations about the research were offered each time I met and interacted with another member of staff in the setting. An information sheet was offered each time I approached a new person in the setting. Written consent was obtained from those nurses who were interviewed on a form which further explains the details of the study (Appendix B).

Patients and their families who were being cared for in ICU during the time of data collection/fieldwork were observed. I did not initiate interaction with them other than to identify myself as a researcher. I introduced myself to patients who were alert enough to make eye contact with me and notice my presence at their bedside. I wore a prominent name tag that identified me as a PhD student and this prompted some questions from families and patients. When patients and/or their family members initiated interaction, I offered explanations about the study, answered their questions, and explained my role as researcher and nurse.

The original design of the study included interviews with patients following discharge from the hospital in an effort to ascertain the effects of various nursing approaches on their perception of care. The plan included interviews with those patients who were confused during the fieldwork, and whose care during their confusion had been observed

and discussed with the nurses involved. Unfortunately all patients who met these criteria died before being discuarged from hospital, rendering the planned interviews inpossible.

Ethical Issues

Individual participants in this research remained anonymous through the use of identification codes and pseudonyms. Nurse were free to interact with me, to terminate a conversation or interview at any time, and/or refuse to answer specific questions, without consequences to their employment or our ongoing relationship.

Munhall (1993) warns researchers to be mindful that the process of being observed is somewhat inconvenient and likely to create discomfort for those being observed,. The initial anxiety that I observed diminished as participants in the cultural unit (insiders) became comfortable and familiar with me (outsider). Of particular importance is the manner in which I asked questions and observed behaviour. I was mindful that my questions could result in nurses perceiving that their practice was being judged or evaluated. In addition if they thought that their understanding of the care of confused patients was being called into question then they might have been tempted to offer 'textbook' answers believed to be 'correct' practice.

I remained acutely aware that these dynamics could happen quite naturally and unintentionally when the meanings of actions are being probed by an outsider. Therefore, it was incumbent upon me, as a researcher, to be sensitive to these possible interpersonal dynamics and to form relationships that encouraged and permitted direct and honest disclosure of an inside perspective. Time spent on the unit early in the course

of fieldwork helped to build trust and to establish healthy working relationships with the ICU staff in an effort to offset some of these possibilities.

Being There: Data Collection

The fieldwork aspects of the study included data collection techniques of observations of and participation in ICU nursing in a general 12 bed intensive care unit of a large metropolitan teaching hospital. I engaged in the nursing world of the unit and recorded my observations, thoughts and feelings at the time. Following each day in the field I reflected on the experience and recorded further field notes as needed. Over a six month period I took part in the daily life of the ICU, conducting fieldwork. I interacted with a total of forty-six of the approximately sixty nurses who were on the staff register at the time. Following this I conducted interviews with twelve of the nurses from the ICU.

In the Field: The Natural Setting

The central method in ethnographic research is participant-observation, which involves the researcher becoming part of the setting and interacting with members of that culture in order to construct meaning of observed behaviour. Based on first-hand experience, that of being there in the field, I used all sensory data, not simply cognition (Hughes, 1992). That is, data collection was reliant on my observational skills and my interpersonal ability to engage members of the culture. Interacting with and relating to the participants were my primary data collection tools, and as such, I as researcher served as primary research instrument (de Laine, 1997; Lipson, 1994).

Fieldwork began with a 3 week (40 hours per week) introductory period in which I 'worked' 8 hour shifts in the ICU. During this time a broad focus of data collection was employed in an attempt to develop what Germain (1993) refers to as a wide-angle lens view. In doing so I was developing a holistic perspective of the ICU culture, before focusing on the care of confused patients. During the subsequent five months I conducted fieldwork in the ICU setting by being in the field 2-3 times a week for periods of 2-9 hours each, with an average time of 5 hours. In this phase of the fieldwork I used "event sampling" (Germain, 1993), the events in this case being the nursing care of patients who are confused in the ICU. However in narrowing the lens I was aware of the need to place all events within the overall context of the ICU and not to isolate events.

The time in the field occurred throughout day and night in part because diurnal variation in acute confusion is an aspect of its clinical picture. In addition I explored how cultural practices varied with the time of day. The specific times of the fieldwork were negotiated with the nursing staff in charge of the ICU and ongoing negotiations resulted in an open invitation to 'come and go as I pleased'. Fieldwork ceased at the point of data saturation (Germain, 1993), although the precise moment that this would occur was impossible to predict at the outset. Total fieldwork time amounted to 160 hours, the equivalent of 6 weeks full time (8 hours per day) work.

Participant-observation

My role of the researcher in this study was that of observer as participant. Spradley (1980) refers to this as a moderate level of participation, although I prefer the notion of interaction within the milieu over the dichotomy of participation and observation.

During fieldwork my interactions with the nurses took the form of open-ended, free flowing interviews, and I asked questions of the nurses when there was something to ask about (Hughes 1992). That is, the 'interviewing' was responsive rather than directive. The conversations I had with the nurses were not formal interviews. I asked them about their nursing care whenever there was something specific that I had observed or an idea/hunch I wanted to pursue.

During the fieldwork my participation in nursing care was predominantly through processes of interaction with the nursing staff in the environment, negotiating and constructing meaning through these interactions. In this sense cultural meanings emerged through the process of interaction (Atkinson & Hammersley, 1994). Through direct involvement over time working with people in an ICU setting, I was able to observe and discuss nursing practices in relation to the care of patients who are confused, searching for patterns and themes that have cultural meaning. ICU nurses who participated during the fieldwork were asked to discuss their care as it was occurring. In this respect they tolerated my intrusions and shared their world with me, which is essential to this type of research (Morse, 1994).

Nurses working in the ICU interacted with me, as researcher, in the discussion of nursing care and, in this regard, I participated indirectly in the care of patients. I made no attempts to initiate actual nursing care. However, as an experienced Registered Nurse, although not an ICU nurse, I was capable of lending a hand with simple, routine nursing care, such as turning a patient, but only did so when requested by the nurses in the setting and only under their direction and guidance.

Although individual responses were sought, I was more concerned with the broad, cultural, perspective (Mackenzie, 1994). Because I was exploring collective understandings I bounced ideas off one nurse onto others. This enabled me to understand shared values and beliefs that were further explored during the interviews.

During my interactions with the nurses in this study (both in the field and in the interviews) I used what one nurse said as a trigger for interacting with other nurses. This is how I learnt of the *'real ICU patient'* (described fully in Ch. 4). The notion of the *'real ICU patient'* is a good example of shared views. While a few of the nurses did not like this phrase and expressed disappointment to hear of its use, every nurse in this study recognised and understood the phrase. Their articulation of its shared meaning revealed it as a cultural construct.

Field Diary

While in the field I maintained a field diary which included: observations (field notes), journal entries (personal reflections and responses), as well as theoretical insights and hunches. Entries into the fieldwork diary were easily made while in the ICU setting because writing in patients' records at the bedside is commonplace for nurses in the environment. I appeared as any other nurse in the setting and my attempts to capture events through recording in my fieldwork dairy blended into the daily routine of the ICU. Even when my recording was done while sitting at the main desk/nurses station I fit into the scenery and could view events on the unit while recording what I saw.

The recordings in my field diary were varied. Sometimes I described in detail what I was observing at a given moment in time. For example, I noted how many people, staff and visitors, aside from patient were in the unit at a given moment in time. At other times I recorded details of particular events that aided my understanding. These events often stood out, for example, the trial of extubation described and used as an illustration in chapter 7.

In addition to interacting with the nursing staff I reviewed written material while in the field. I read patient records, notes of ward meetings, entries into the staff communication book, policies and procedures manuals, bulletin board notices, cards and correspondence from relatives and former patients that were posted on the bulletin boards and any other material that was in public view.

At the conclusion of each visit to the ICU I reflected on my experiences. Most of the time I recorded my thoughts and feelings into a tape recorder as I travelled home from the hospital. These were reviewed and significant aspects of them were transcribed. At other times I would record my reflections directly into my field diary. Sometimes I expanded my descriptions of what I had observed yet failed to note in detail while still in the field. Reviewing my field notes served as a trigger for follow up when next I returned to the field, or to highlight areas to explore with key informants. This was especially true when I needed more information to aid my understanding of an event that I found challenging to interpret. For example, it took me a long time to understand the system of allocation of patients to nurses and I kept probing and asking for more information until I understood. Finally, I recorded my own emotional reactions in

recognition that it was both therapeutic and another source of data. These processes were reflexive in that I continuously explored my motivations and challenged my own perceptions.

While the fieldwork diary proved to be my main source of information about my experiences in the field, entries into it also serve as powerful memory aides. Memories of fieldwork are easily prompted by field notes and reflections, as "sensory material from fieldwork is captured as much in memory as it is in notes" (Marcus & Fischer, 1986:37). My experiences then are embedded into my being now. They are more than simply data for analysis but are and will remain part of me.

In the Interviews: Discussion of Nursing Care

"Participant-observation sets the stage for other techniques, such as interviews ... and further data collection procedures" (Boyle, 1994:163). During fieldwork I developed insights and understandings, preliminary ideas about what was influencing care of confused patients in ICU. In an effort to uncover deeper meanings and enhance my understanding of the inside view of ICU nursing care I interviewed twelve of the nurses with whom I had interacted during fieldwork.

The twelve nurses were selected on their ability to reflect on their ICU culture and discuss in detail their approaches to the care of confused patients. They were able to "tell it like it is" (Germain, 1993:249), as this is crucial to ethnographic understanding. In this respect data from these interviews derive from a focused sample of nurses, who

were able to validate, refute and/or expand observations made during fieldwork and the hunches and inferences from these observations.

These nurses ranged in age from 26 to 46 years old (average 34 years); their nursing experience ranged from 6 to 25 years (average 13 years); they had 2 to 15 years experience working in critical care (average 8 years); and they have been working in this ICU from 7 months to 10 years (average 3.36 years). All but two of the nurses had worked in general ICUs in other institutions. Eight of them had worked in a critical care setting other than a general ICU, predominantly cardiothoracic surgical care units.

The interviews, which lasted from 45 minutes to 2 hours, were semi-structured and focused on a comprehensive view of the nursing care of patients who become confused and how ICU cultural meaning, values and customs affect this care. During the interviews I asked the nurses: their reasons for choosing ICU nursing; to describe ICU care as if talking to someone who knew nothing about it; to describe the 'real ICU patient'; how they assess patients who are confused; how they differentiate types of confusion; why confused patients are so frustrating; what processes they use in caring for confused patients and what they hope to achieve; what helps and what hinders achieving their goals in caring form confused patients; how they come to 'know the patient', and whether this is important; how they communicate with intubated patients; and, what they thought about the patient allocation system and continuity of care. The interviews were audio tape-recorded and later transcribed for analysis.

By the time I interviewed the nurses in this study, I had a general sense of the ICU and felt able to place the care of confused patients within this overall context. That is, I could visualise the scenes that the nurses presented to me and these visualisations were based on understandings I gained from the fieldwork. Not only had I already established rapport with the nurses I interviewed, but I had 'been there' with them in their nursing care environment and shared their work world. They recognised this and I was acutely aware, as I listened to the interviews, that my understandings were enriched by my field experience. I compared my understandings and interpretation with those of the nurses in this study.

Not only did the interviews illuminate my understandings that were tentative and hazy, but also they promoted greater depth of interaction because the nurses were not directly caring for patients at the time (as was the case during interactions in field). The interviews were conducted after preliminary analysis of field data and used to strengthen the study through cross-checks and triangulation of the data (Purkis, 1994b).

Comparing data from the interviews with the data from the field sometimes deepened my understanding, for example, my understanding of why participants chose ICU nursing. At other times the interviews forced me to re-consider an initial interpretation developed during field work. For example, the haphazard and contradictory way that patients seemed to be assessed clinically when confused actually had a cognitive structure that was not evident in the field, yet explained in the interviews (see Ch. 5 for details of this decision-making process).

Being Here: Analysis of Data

In a good ethnography data is not taken at face value but rather considered as a field of inferences (Boyle, 1994). Ethnographic inferences became working hypotheses that were subjected to repeated testing to assure validation (Germain, 1993). All subsequent accounts of this data are constructions or representations (Atkinson & Hammersley, 1994). All interpretations are partial and uncertain.

The search in this ethnographic analysis is to uncover knowledge used by nurses to understand confusion and interpret their care within the context of "culturally constituted environments" (Aamodt, 1991). This emic data, the perspective from the inside, was compared to the etic data, observations and theoretical speculation. Other comparisons were made between the broad focus (wide angle lens view, focused on the ICU culture) and the narrow focus (zoom lens view, focused on patient confusion). The nursing care as it is described and interpreted by the nurses in this study was compared to the nursing literature on the care of confused people in ICU.

The analysis included a search for "patterns, themes, connections and relationships that have meaning for the people in the culture" (Germain, 1993:240). Theoretical ideas and concepts that were developed helped to explain the emerging patterns and themes in the data. Analysis occurred both in parts and in the whole in a search for repeated interpretations, thus allowing the development of patterns of the whole. Categories developed from these patterns were linked through comparison (Boyle, 1994). Observations about what nurses did (actions) were compared to what they said (accounts of actions) in order to ascertain any incongruence between them. Discrepancies

between "accounts and actions represent critical moments to examine the moral order" (Purkis, 1994a:318). Contradictions and inconsistencies were addressed by reaching for complex interpretations, abstracted into patterns and themes.

Analysis of the data of the study occurred on four distinct levels. The first level was that of ongoing analysis while in the field and then deepened and/or altered through the interviews with selected nurses. The next level resulted in the construction of the ethnographic account (Ch. 4). This account provides a holistic view of the daily patterns, routines and rituals of the ICU and their meaning to the nurses who work there. The third level of analysis occurred as the data regarding clinical assessment (Ch. 5) and nursing care (Ch. 6) of confused patients were compared to and contrasted with existing literature in the areas of acute patient confusion. Following this separation of data into discreet aspects, analysis was pulled together in order to explicate how cultural patterns and practices affected nursing care. This final level of analysis is found in chapters 7 and 8.

During Fieldwork: Continuous Revisions

During the fieldwork I kept note of my interpretations and inferences made on the basis of observations and interactions with the nurses and others in the setting. These initial views were subjected to continuous revisions as I sought validation from the nurses in the ICU. This continual analysis and constant questioning is characteristic of ethnographic fieldwork (Hughes, 1992). Such constant questioning and continual re-conceptualisation add validity to the ethnographic method (Purkis, 1994a)

Throughout fieldwork I compared what one nurse said with the others. This is how I discovered the *"real ICU patient"* (previously mentioned and fully described in Ch. 4). After one nurse mentioned it I kept asking all the nurses, only to discover a shared understanding of what this term meant. I then compared this to why the nurses said they worked in ICU (also described in Ch. 4) and discovered congruence between them.

Through the Interviews: Altering Interpretations

Accounts from nurses interview were examined with reference to the context from which they emerged (Purkis, 1994a). The interviews yielded data that were less messy than the field notes because the interviews were structured around specific themes and events. Analysis of the interview data was completed by hand recording themes and insights as the audio tapes were transcribed. Answers to standard questions such as why the nurses chose to work in ICU were transcribed and then coded for commonalities, such as enjoying ICU because of its fast pace. These themes were then interrogated for further relationships, such as the connection between the rapid pace of an ICU and the desire for continuous challenges to clinical problem-solving. The complexity of nursing care in ICU was then linked to nurses desire to be kept 'on their toes'. The insights gained through the interviews were used to enrich the ethnographic account (Ch. 4). Specific sections from the interviews that were incorporated into the ethnographic account include: why nurses chose ICU, real ICU patients, the system of patient allocation, the challenges of communication with an intubated patient. Field note summaries were compared and contrasted to the interview transcripts in an effort to triangulate these data.

Constructing the Ethnographic Account: Themes, Routines and Rituals

Entries in the field note diary served as a prime source of data in the construction of the ethnographic account found in chapter 4. The headings within that chapter constitute the themes that were derived from field note entries and are based on routine activities of the ICU, such as daily ward rounds and change of shift reports. In addition to the usual activities that were obvious through observation, expressed values and belief systems were used as the basis for additional sections. For example, why the nurses in this study chose to be an ICU nurse provided insight into their shared values. Data from the in-depth interviews were used to reinforce and expand these themes and to aid understanding of the daily patterns and routines.

The development of the major themes for the ethnographic account occurred as the fieldwork progressed, that is, through continuous data analysis. Some categories for these themes were obvious, such as the daily patterns of change of shift routines. Others came as a surprise, such as how staff must continually cope with significant ethical dilemmas that are associated with ICU care. The connections between and overlap within the themes were analysed. For example, interaction between doctors and nurses about the sedation of confused patients fitted under headings entitled sedation, nurse coping and doctor-nurse interaction. While doctor-nurse interaction became the primary section for this data, it was also included under the other two with cross-references among all of them. The decision to include this data as a part of nurse-doctor collaboration is based on nurses' dependency on doctors for sedation orders. Nurses often had to indirectly point out the need for or directly request doctor orders.

The themes developed during time in the field were refined throughout the next level of analysis which occurred subsequent to the fieldwork. During this phase of analysis the ethnographic account was constructed. Field note details and interview data that were specific to the clinical assessment and the nursing care of confused patients were analysed separately and included in the relevant chapters, 5 and 6. The rhythms, patterns and practices of the ICU, as interpreted through the ethnographic account (Ch. 4) served as data sources in understanding assessment and care. For example, practices related to patient allocation to nurses directly impacted on the problems of nursing clinical assessment of confusion. As such the constructed story of the ICU was not used merely as a scene-setter or back drop for the study but served as integral to the understanding of nursing care of ICU patients who became confused.

Member checking

Five months after the completion of fieldwork and immediately following the completion of interviews I gave the ethnographic account to key informants and any interested nurses who were working in the ICU at that time, regardless of whether they participated in the fieldwork phase of the study. In doing so I sought feedback from the members of the culture and conducted what is referred to as member checking. I sought feedback (Appendix C) because I believed that the nurses in this story had a right to have access to what was said about them in it. I felt I had an obligation to let them know how I was representing them.

I sought clarification of whether I had understood their culture as they understood it (comparison of outside and inside view). At no point did I believe that our perceptions

would coincide specifically. My story, the ethnographic account, was a synthesis of multiple realities (Sandelowski, 1993) and for this reason could not exactly reflect any individual member of that culture. In a sense the member checking was used as one aspect of establishing truth and relevance of the ethnographic account.

The member checking met with a number of difficulties. By the time I conducted it, there had been a significant turnover in the nurses working on the unit. Only 4 of the 12 nurses I had interviewed were still working there. So, the nurses who read my story were not the same nurses around whom the story was constructed. I was aware of this at the time, however I reasoned that the culture would endure beyond individual members who were no longer there. If I had captured the culture in my story then it would be recognisable to those currently present in the setting. However, locating nurses willing to read the story and offer feedback proved difficult. I had the feeling that the nurses who agreed to read the account and who returned it to me did so in an effort to 'please me' and to be seen as nice, cooperative people.

In general, feedback from these nurses was either neutral or negative. Neutral comments were that I had captured the culture. Almost all of the negative comments from the nurses were focused on one aspect of the ethnographic account, that of interactions with the doctors. Those who disagreed claimed that the ICU doctors consulted the nursing staff in making treatment decisions about patient care. Comments such as these, that members claim that it "didn't happen that way to me suggests investment in own experiences" and that "difficulty in recognising others' experiences [is because they are]

... part of a larger abstraction" (Sandelowski, 1993:5). Also differing views about what is a fair account could reflect differing goals (Sandelowski, 1993).

Sandelowski's insights offer possible explanations, and I knew I had to give serious consideration to my handling of this response. Lather (1986) offers another insight in relation to critical ethnography in suggesting that ethnographers cannot limit their interpretations to participants' perceptions as the latter can obscure false consciousness.

I turned to my key informants for advice and direction in relation to the meaning of the data and my interpretation. My questions to them centred on whether they thought that I had 'made up' the story. They assured that this was not their view. Rather I had hit a 'raw nerve' in relation to how ICU nurses and ICU doctors view their relationship to each other.

I was faced with choices. Should I change the ethnographic account to reflect the nurses' feedback? Could I treat as data and analyse it as part of the study? Would I simply note its existence but place it to one side? Could the feedback serve as an addendum to the ethnographic account (Ch. 2)? Should I negotiate another account? I chose to analyse the feedback as additional data.

My account of the culture of this ICU expresses my experience, as a nurse and as a researcher, and serves as evidence that I 'was there' in an ethnographic sense. In sharing this account with others in the environment I was attempting to establish if my interpretation 'rang true' to others in the environment. However the fieldwork methods

also included continual attempts on my part to clarify what the nurses told me and to create mutual understanding and in this sense the process of member checking continued throughout the field study. I did not function like a sponge, simply absorbing the environment in order to wring it out later. The story of this ICU was not 'out there' awaiting discovery. Through interaction I constructed meaning with the aid of those in the setting who were the primary participants.

Dialogue with the Literature: Comparisons

Analysis occurred inductively, that is, no *a priori* theoretical frameworks were imposed on the data. However the analysis of the data pertaining specifically to the clinical assessment and nursing care of confused ICU patient included comparison to existing theory. While these theoretical understandings were not used as "a container into which all data must be poured" (Lather, 1991:62) they did provide constructs and concepts useful to understanding nursing care. For example, four categories were gleaned from the literature on care of the confused hospitalised patients: reduction of the incidence of confusion through prevention, identification and treatment of the underlying causes, prevention of complications of confusion, and management of its symptoms. This served as a useful schema in analysing data about nursing care and revealed that most efforts were aimed at managing the behaviour of confusion

Culture and Nursing Practice: Synthesis

The final level of analysis highlights epistemological issues of how ethnographic research links to theory (Clifford & Marcus, 1986; Marcus & Fischer, 1986; Hammersley, 1992). There are an infinite number of possibilities and theoretical propositions so must decide

which factors come to bear. I have settled for the notions that theoretical propositions are used to refine, develop and/or reject understandings. For example, I used theoretical constructs about technology and its impact in ICU nursing care in exploring the culture of ICU and comparing these constructs to the findings in the study.

CHAPTER CONCLUSION

The conduct of the study and its analysis are depicted in Diagram 3.2. This diagram highlights the experience of being in the field as central to this study. The diagram and this chapter also demonstrate the many forms of data collection in the study and how these data were used for comparison. The levels of analysis, although continuous, reached higher levels of abstraction in the development of the thesis.

Chapter 4

An Ethnographic Account of an ICU: *"A hell of place for a sick person"*

INTRODUCTION

Hospitals are places which house human drama and human trauma. They provide space for the health care of the ill and the suffering, as well as those undergoing major life transitions such as becoming a parent. An intensive care unit (ICU), a place within a hospital setting, offers health care for some of a hospital's acutely ill people. This is the story of one Intensive Care Unit, housed within the confines of a large metropolitan teaching hospital.

The drama inherent in life and death is heightened by many factors within the ICU setting: sophisticated machinery and state-of-art technology, whose functioning is crucial to the care of patients; unstable situations, people with acute illnesses whose outcome is not only unpredictable but dependent on the people who care for them and operate the machinery; and highly trained members of a health care team, whose knowledge and clinical decision making is constantly challenged and who must be able to respond quickly to frequent and sometimes rapid changes in patients' health status.

Upon entering the Intensive Care Unit the uninitiated are struck by the sights of technologically sophisticated health care, but the foreign sounds are even more striking. Most of the noise is generated by technology and equipment in the environment. The rhythmic hissing patterns of numerous breathing machines are interspersed with the

cacophony of bleeps and alarms. The background conversations of the people who work there is audible but often not decipherable from a distance. There is much activity as staff carry out monitoring and treatment activities.

Once past the noise, hospital beds are noticed, each surrounded by its own sea of equipment and health care personnel. It actually takes a few minutes to realise that in these beds are living humans, acutely ill, in need of extensive life support, and dependent on the machinery that surrounds them. Their addition to the sounds of the unit does not emanate from their voices. Their voices are silenced by their breathing tubes, their clinical conditions and treatments. Their noise generates from the equipment to which they are attached. They are male and female, young and old; all unable to meet their own basic human needs for survival.

The ICU staff members are a team of highly skilled health care workers. There are nurses, doctors, physiotherapists, social workers who carry out the 'hands on', direct patient care, making clinical decisions about how best to care for the patients and their families. In addition there are a host of ancillary personnel, such as patient care assistants, who come and go in support of the major medical and nursing activities that fill the days and nights in an ICU.

Despite working under such dramatic circumstances the staff of an ICU keep drama at bay. Not only do they go about their work in a cool, calm and collected fashion, but any overt display of dramatic excitement is met with disdain. Part of their work is to keep the unit together through efficient and effective thinking and decision-making. The

emotional drama that surrounds the circumstances of ICU is not permitted to intrude in the minds of its clinicians. If it seeps in, it is not to be shown in their behaviour. There is enough drama inherent in the setting itself.

THE SETTING

In this general ICU there are a total of 17 beds: six in a room on one side of a corridor; another six in a room across the hallway; two 'side' rooms, each with a bed; and a fourth room further down the corridor that has three beds. The 'side' rooms and the one down the hallway are used for patients requiring isolation or protective isolation due to infectious diseases, compromised immune systems and serious burns.

An initial impression that each room/area is a separate unit is formed because each is not only geographically separate and but also has its own unit number. However, all together these four areas comprise a single general intensive care unit. The two largest rooms/areas, with open plans for six beds each, are the main units and were used for this study (Diagram 4.1).

There are other critical care areas, that are specialist in nature, within this hospital: one specifically for patients with neurological conditions, one for those with acute coronary conditions and another specifically devoted to patients who have undergone major cardiac surgery. The 'general' unit is considered such because its patients, who are in need of intensive care, do not 'fit into' the specialist units.

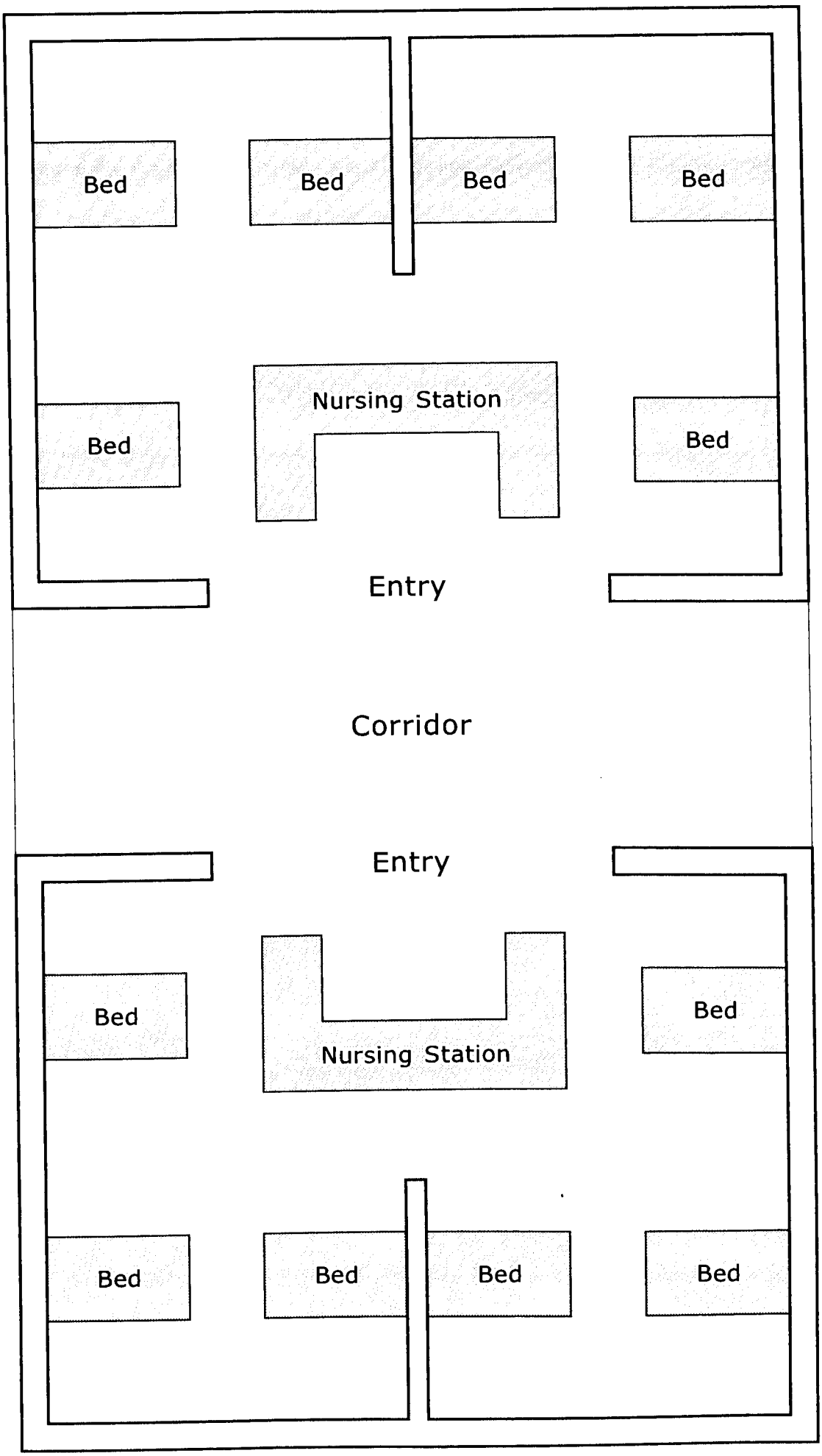


Diagram 4.1 FLOORPLAN OF MAIN ROOMS OF UNIT

The general nature of the ICU means that the staff who work there are not specialists with one body system (eg, cardio-vascular) or one type of treatment (eg, surgical intervention). The eclectic nature of the care was cited by some of the nurses as an impetus to work there. Dealing with the challenges of complex multi-system patient problems and a variety of treatment approaches generated and sustained their interest in general ICU nursing care.

ICU CARE

ICU care, as described by the nurses in this study, is a place for *"full on care"* of *"really sick patients"*, whose condition is unstable and who are in need close monitoring with sophisticated equipment. The care is characterised by *"support (for the patient) in every way"*, physiological (through technology), social (through support of their families), emotional and psychological. ICU care is designed to be *"quick treatment ... then [the patients] move on"*. The nurses often do not know the eventual outcome of treatment, unless patients die shortly after leaving the unit, return to the unit 'to visit', or there is contact made through their relatives.

While ICU care enables patients to survive a very acute phase of an illness and/or trauma an outcome of survival was not described by the nurses in this study to be the only focus of ICU care. They discussed care as providing an *"opportunity"* for the patient (that would not exist without the ICU). It *"opens a window"* for the body to respond. While the goal is to *"return the patient to a state of reasonable functioning"*, nurses in this study accepted that sometimes the body does not respond to the chances it is offered. The eventuality of death was accepted by these ICU nurses, as long as they knew, with

certainty, that the patient *"had a chance that would not exist in the absence of ICU care". "Living or dying is not the only issue; the opportunity was there."*

One of the nurses in this study alluded to the many ethical dilemmas that ICU care creates when she stated that, *"[in ICU] we do all we can without going too far".* Another nurse captured such dilemmas with an acute awareness that *"...[we] can prolong life or [we] can prolong death...in ICU the barriers between them [life and death] come down and the distinction is blurred".* While patients are offered *"every chance [to survive] ... sometimes all we do is prolong life when the quality of life is poor".*

THE PEOPLE

While a host of others come and go in ICU it is the patients, the doctors and the nurses who are always present.

The Patients

Patients are considered in need of intensive care when their condition is severe and moment-to-moment care, including monitoring and observing, is critical to their survival. They often have multiple systems failure and continuous monitoring with technological equipment is required. Their conditions are rapidly changing, the outcome may be grave, and is often unpredictable. As a general rule, patients require intensive care when their health condition is serious enough to warrant the use of a mechanical ventilator, with breathing assisted by a mechanical ventilator connected by an endotracheal (ET) tube in

their mouth. One nurse in this study aptly described being a patient in intensive care as *"a walk on the edge"*.

The Doctors

There are a team of six consultant intensivists who comprise the permanent staff of this ICU. One of these six is in charge of the entire critical care services, the general and specialist intensive care units. Each of these consultants rotates as 'in charge' of the ICU for a week at time, with Friday the designated changeover day. They are doctors with extensive advanced education and experience in critical care medicine.

This team is assisted by a host of 'junior' doctors at various stages in their specialist training. The most advanced of this group are the senior registrars, who remain in training in the hospital's critical care services for one year. Other registrars rotate through the general ICU, usually three weeks at a time throughout their training. While these doctors are undergoing their specialist training, they are fully qualified medical practitioners with a variety of previous medical and surgical experiences.

The doctors operated within an obvious hierarchical system, with chief consultant in charge of the entire operation (including management authority over the nursing staff). Next in order are the other consultant intensivists, with seniority determining the hierarchal order. The senior registrars are next in line, with all other registrars and junior resident medical staff deferring to them.

The Nurses

At the time of the field study there were sixty full time equivalent registered nurses on the staff roster of this ICU. Most of them had specialist training in ICU and varying lengths of experience both as a registered nurse and in critical care nursing. Some were recently qualified as registered nurses, while others had worked in intensive care for 15 years

Why Nurses Work in ICU

Nurses who choose to become specialised in critical care are sometimes stereotyped as doing so because they are fascinated with technology and enjoy operating machines. Nurses in this study did not confirm these stereotypes. In fact, the technology was not mentioned when these nurses discussed their reasons for working in ICU.

Some of the nurses have individual reasons (not mentioned by others), such as *"working closely with families"*, *"working closely with a team of specialists"*, *liking the "adrenalin rush of emergencies"*, *"working closely with the medical team"*, *and "knowing [I could] make a difference" and having "influence [over] patient care"*. However, the majority of ICU nurses in this study stated that they choose this type of nursing because it is stimulating and challenging.

The dynamic nature of really sick, unstable patients poses an interesting undertaking as the nurses work through the complexity of the patients' conditions and treatments. The unpredictable, ever-changing nature of the work forces nurses to constantly think and this provides both stimulation and satisfaction. One nurse captured this allure of the

dynamic when she said *"...[I like ICU because] you anticipate one thing and another happens"*.

Any boredom that is perceived to come with routine is avoided in ICU by continuous changes within patients' conditions, daily changes in patient allocations, and movement of patients in and out of the unit. These changes typify another reason the majority of nurses in this study choose ICU nursing. The constant change *"makes my mind work"* and it means that *"...[I use] different skills each day"*, *and that "[I] learn something new each day"*. As one nurse said; *"[my] brain is ticking over...all the time thinking...changing...putting together what is happening...[thinking] what does this mean in correlation to that."* The excitement of change that these nurses described is primarily cognitive in nature, that is, their knowledge and clinical decision-making is challenged constantly.

In addition to attraction of constant change there is agreement among the nurses in this study about another reason for choosing ICU. One of the other attractions and rewards of working in ICU is being able to *"concentrate on one person"*, and to *"get in and know your patient"*. The one-to-one system of allocating patients to nurses facilitates total patient care, and enables nurses *to "take time to do nursing care (even 'basics' such as sponging) properly"*. ICU nurses perceive advantages in being with one patient and *"doing everything for that patient"*. Some of the nurses mentioned the enjoyment of working alone, but most commented that the one-to-one nature of patient care is satisfying because of the totality and depth of focus that is possible.

Most nurses in this study spontaneously compared ICU to a general medical surgical ward when they were asked about why they choose ICU. Ward work was perceived to be routine (and therefore less stimulating), and more specialised on one body system and/or one type of treatment. These ICU nurses also commented that *"on the wards [you get] pulled in many directions"* by many patients and are therefore unable to provide the totality of care that is possible in ICU.

A 'REAL ICU'

The reasons nurses gave for choosing to work in ICU are directly related to their description of a *"real ICU patient"*. This term, first heard and explored during the fieldwork phase of the study, was further clarified during the nurse interviews. While a few of the nurses in this study expressed dismay that patients were categorised in such a way, there was unanimous agreement about the meaning of the term *"a real ICU patient"*.

A *'real ICU patient'* has complicated multiple systems involvement that require nurses to be *"astute to changes...aware of potential [physiological] complications and interactions"*. Their health conditions are highly unstable and *"[they] could go off at any minute"*. These patients have to be *"monitored carefully"* so that the nurse is *"prepared to respond to changes"*. A real ICU patient needs observation so constant that the nurse is *"afraid to leave the bedside"*.

One nurse in this study used the terms *"tubed and wired"* to describe a 'real ICU patient'. Such patients have *"at least a ventilator, an ET tube, maybe an Swan Ganz*

catheter, multiple inatropes, unstable BP [blood pressure] and heart rate, arrhythmias...multi-system failure", and are *"so sick that they will generally be sedated and in need of maximum ventilation"*. There is *"a lot happening"* with a *'real ICU patient'*, who *"keeps you busy"* as you *"play around with drugs and ventilation"*. One nurse summarised *'a real ICU patient'* as *"very taxing, very exciting, and very satisfying"*.

Congruence emerges when the descriptions of *'real ICU patients'* are juxtaposed with the nurses' reasons for working in ICU. Real ICU patients are dynamic, challenging, require constant thinking and re-thinking. The care of real ICU patients is stimulating and mentally challenging, and these types of patients symbolise the rewards and expectations of nurses who work in this ICU.

Just as there are real ICU patients there is also something called a real ICU. Often when nurses arrived for their daily shift, they would walk into the unit and remark that *"it looks like a real ICU today"*. This description applied to the unit when there were numerous patients who were short-term, intubated, with complicated conditions. Often the *'real ICU'* was a buzz of activity. At times there are many as eight staff members, usually nurses and doctors, per patient in the unit. A quiet day was described as boring and the nurses had to find ways to fill in the time, hoping that they would not *'get pulled'* to another ward.

ICU NURSING CARE

The nursing care in the ICU is a one-to-one basis, one nurse looking after one patient. Unless the staffing situation warrants *'doubling up'* (two patients to one nurse), each patient is allocated to an individual nurse for each shift. After receiving a patient in the initial nursing handover, which includes all patients in that area/room, the nurse allocated to a specific patient reviews the care in detail with the nurse who has just cared for the patients and is now going off duty. Then the nurse looking after the patient for the oncoming shift *"sorts out the patient"*, that is he or she conducts all the routine assessments, reviews all the medications and treatments, inspects the patient history if it not known, and generally organises care for the shift.

While caring for patients, nurses in ICU remain by the patient's bedside and spend a great deal of time observing the patient. They study the monitoring equipment while keeping an ever-watchful eye over the patient. This constant vigil is primarily for the purpose of continuous assessment. Nurses are constantly evaluating the effects of various treatments and medications, and assessing the patient's response to various nursing activities, such as suctioning, as well as the current progress of their health condition. As they gaze at patients they are thinking through their care; the gaze has a thoughtful, contemplative quality to it.

In addition to the continuous monitoring , carrying out of various treatments and giving medications, nurses in this ICU spend time recording their observations and nursing care procedures in the patients' record. The records are kept by the patient's bedside on a table specific to this purpose. The nursing notes and observation charts are laid on the

table and only inserted into the complete patient record when they are complete (after a few days).

The agility with which experienced ICU nurses handle sophisticated machines and technological equipment is an outstanding feature of their care. Experienced and skilful ICU nurses handle equipment so adeptly that the machinery almost appears to be an extension of their hands. For example they suction patients so frequently that it appears effortless. Even in an emergency situation these nurses deal with equipment in an automatic and effortless manner, so adeptly that they appear not to be thinking. Such an approach also helps to minimise the drama of the situation.

The physical structure of the ICU offers little privacy for the nurses as they care for patients. Five of the six beds on each side are visible from the nurses station and a nurse at a patient's bedside has the full view of two other bed spaces and the patients and nurses in these spaces see Diagram 4.1). While this arrangement promotes a quick response when one of the nurses needs assistance or when an emergency arises, it offers little privacy for the patients as they interact with nurses in the ICU setting. Curtains are drawn around the beds whenever a patient is exposed, being examined and or having a procedure carried out, thus providing some degree of physical privacy. However any conversation between nurses, doctors and/or patients is in hearing distance of all that are in the surrounding area, unless it is conducted in a whisper. This may be one of the factors that limits verbal interaction between nurses and patients.

Interactions Between Patients and Nurses

Verbal interaction between patients and the nurses caring for them is limited further by a host of factors. Patients who are critically ill often are unable to provide meaningful verbalisation because they are unconscious, or heavily medicated with analgesics and/or sedatives. When they are intubated the endotracheal tube sits on their vocal cords, rendering speech impossible. Even when the ventilator is attached via a tracheostomy tube, verbalisation is impossible, although moving of the lips is easier than when this is attempted around the ET tube.

ICU nurses overcome such impediments to usual conversation through a variety of means: lip-reading, use of aids such as alphabet boards, writing with pen and paper, use of picture cards and erasable magnetic boards like those used by children as drawing toys. Whenever the patient is unable to respond verbally nurses sometimes rely on physiological indicators for feedback, for example, an increase in heart rate could indicate anxiety. However, each of these methods is also restricted.

The use of aids is limited by the patients ability to concentrate. While spelling out words can be useful, the amount of sustained concentration required to achieve this is often seriously compromised due to the patient's condition and medications such as morphine that they have *'on board'*. Nurses observed that patients' frustration can be heightened if they write something that makes sense to the patient but doesn't make sense to the nurse. Some of the nurses in this study went so far to say that the mechanical devices developed specifically for ICU patients (eg., picture care) were a *"waste of time"*, creating rather than solving problems.

Most nurses in this study preferred lip-reading to other methods, despite the frustration when it didn't result in mutual understanding. However, the success of lip-reading is dependent on the nurses ability to understand a patient's (sometimes) idiosyncratic way of expression. Some nurses are better lip-readers than others and none of the nurses I spoke with and interviewed remembered being taught how to lip read. They learnt the skills of lip-reading through experience.

As a result verbal interaction is minimal between nurses and patients in the ICU. In fact a few of the nurses in this study jokingly remarked to me that *"it wasn't right"* when patients were talking to them. They claimed not to know what to say because a two-way verbal conversation was *"so odd"* to them. (I recall being a bit startled the first time I actually heard the voice of an ICU patient during this study!)

Despite these hindrances most nurses converse with patients as they care for them, even in the absence of a verbal response from the patient. The nurses introduce procedures, say what they are about to do, and often talk the patients through the procedures, for example the frequent act of suctioning through the ET tube. They also attempt to reassure patients and promote comfort through requesting that they *"relax"* and *"ignore all the noise"*, or by quietly speaking to them close to their ear saying things like *"You have a tube in your mouth that is helping you to breathe."*

There is often enormous frustration for both nurse and patient whenever patients' endeavours to initiate communication are unsuccessful. Often patients' attempts to mouth words or even write what they want cannot be deciphered by the nurses. If this

happens nurses often blame themselves, for example stating, *"I'm hopeless"*. When attempts to communicate meet with continuous failure, patients often 'give up' and withdraw any further attempts. One of the nurses in this study told me she believed patients *"gave up"* trying to communicate complex ideas and would only attempt to relay the most basic and simple of messages because anything beyond that was all *"too hard"*. And this nurse was observed to be one of the most skilled lip-readers on the unit.

In an effort to overcome these limitations and frustration most ICU nurses develop a system that they employ for understanding what patients are attempting to communicate. From experience these nurses have learned to anticipate what the patient might want and are able to work through a standard list of topics. This system, widely used by the nurses in this study, is based on the nurses doing the talking and the patient indicating yes or no. Through the use of closed questions nurses anticipate the most frequent topics of patient-initiated communication, for example, pain, dry mouth, or re-positioning in bed. As one nurse told me, *"You know, for example when patients first wake up their mouth will be dry"*. Once the topic is established there is further exploration through systematic use of yes/no questions. For example, if the topic is pain, the nurse further explores this by asking, *"Is it in the upper half of your body?"*, and then asking about other parts of the body in an attempt to locate the pain.

Although verbal interaction is limited, patients are able to express emotions through non-verbal means, customary outside of the ICU setting. However interpretation of non-verbal cues such as facial expressions, eye contact and intonation, and even hand

gestures is problematic, due to idiosyncrasies and cultural differences. One patient's expression of pain could be another's expression of fear.

When nurses thought they saw fear in patients eyes they expressed frustration in not knowing how to respond helpfully. When patients appeared anxious the response was often to medicate them for anxiety. At other times patients' moods were met with everyday responses, such as saying to a patient who acknowledged feeling depressed "You look marvellous", in an attempt to cheer her up. When patients had been on the unit for a protracted period of time, nurses often interpreted their facial expression as one of boredom and they attempt to relieve this through some form of diversion, such as a trip to the outside courtyard (no mean feat when the patient was intubated).

DAILY PATTERNS AND ROUTINES

Although individual patients' conditions and treatments dictate most of the rhythm of the day, there are some standard events that occur, such as evening washes and regular arrival of the Patient Services Assistants, who help turn patients, move them out of bed and assist in getting them back to bed. Physiotherapists regularly attend to respiratory therapy throughout the day and evening.

The rhythm and daily patterns of the ICU do not reflect those of the outside world as day and night blend into one another and meld into sameness. This would be more true for the patients than staff or families. Sleep-wake cycles are interrupted to the extent that it might be difficult for patients to distinguish day from night. Activity patterns and the

number of people in the environment may decrease with the night but not significantly enough to create the stillness, darkness and quiet usually associated with night time.

One area of nursing care that is particularly relevant and particularly frustrating for the nurses is the promotion of sleep and rest in the ICU. Patients in ICU often do not get enough opportunity for uninterrupted sleep. Nurses and doctors often recognise this, mention it during rounds, and relate it to confused states. However, when nurses try to prevent staff members from entering the patients bedside, by closing the curtains and even pinning a 'do not disturb' sign on it, it often was not successful. Visiting staff members peered behind the curtains and interacted with the patient, claiming that she or he was awake anyway, obviously ignoring the fact that rest can occur in the absence of deep sleep. One time when this happened the nurse looking after patient who had been disturbed while resting turned to me and said *"They just cannot help themselves"*.

Patient Admissions

The decision to admit a patient to this ICU is made by the medical staff, the consultant intensivists and/or the senior registrars. They must 'accept' the patient for admission, and do so either by visiting the patient if he or she is elsewhere in the hospital or by telephone arrangement if the patient is in another health care facility. Some patients who undergo extensive surgical procedures, are admitted post-operatively as a matter of course.

The availability of appropriately prepared nursing staff is taken into consideration when decisions are made to admit patients, therefore involving the nurse in charge. The

number of available beds is regularly monitored through a system of *"bed status checks"*. This is ascertained on a routine basis by air ambulance services outside of the hospital and a section referred to as *"bed allocations"* within the hospital.

Controversy can surround an admission if any of the staff question the admission. When this occurs it is for the reasons of whether the unit can handle the admission, rather than whether the patient was suitable for intensive care. For example, sometimes surgeons begin procedures that will automatically warrant a stay in ICU without alerting the ICU staff during a time when there are inadequate numbers of nurses to care for the patients..

Nursing Handover Reports

At each change of shift nurses conduct their handover reports in the form of nursing rounds at the bedside of each patient. Every nurse on that *'side'* (in that six bed room) listens to a general report on each patient in the room at the time. The nurse who cared for the patient during the outgoing shift discusses the patient's condition and what has been happening over the previous shift. After the general handover, the nurse assigned to the patient for the oncoming shift discusses the care of his or her individual patient with the nurse going off duty. This is a more detailed report than the one that involves all of the oncoming nurses.

At the time of the field study the practice of all oncoming nurses receiving individual patient reports by each outgoing nurse (thereby knowing something about each patient in the room) had recently been instituted. There were complaints, expressed overtly in staff meeting and in the communication book and covertly under the breath, about this new

system. The major objection was the amount of time being consumed in handover reporting. For example, the off going nurses from the day shift went to lunch following the report and any delays interfered with well-deserved lunch breaks; and the nurses off going from the night shift were anxious to get home and into bed before they collapsed from the exhaustion of being awake all night. The oncoming shift of nurses were anxious to begin their care and get their patient *'sorted out'*, conducting initial clinical assessments and reviewing medications, treatments and planning through anticipation the routine of care for the next shift. Lengthy handover report interfered with *'getting on'* with the next phase of the day, be it going to lunch or assessing and planning care for a patient.

Patient Allocations

Central to the organisation of nursing care is the allocation of patients for the upcoming shift. Patient allocations on this unit rotate from shift to shift, nurse to nurse and day to day. The nurse in charge of the previous shift allocates patients to nurses for the oncoming shift. Patients are usually allocated to a single nurse, with the care being one-to-one, although sometimes there was a need to 'double-up', depending on the clinical conditions of the patients and the skill mix of the nurses. Sometimes patients are moved from one bed space to another because of the allocation demands.

Clinical conditions and skill mix are the main guiding criteria for patient allocation, although a nurse's recent allocations are also taken into account. If she or he has been allocated difficult or particularly trying patients recently then a *'decent'* patient is sought for the upcoming shift. *'Decent'* patients in this context are similar to *'real ICU*

patients', described earlier. Patients who are difficult or trying are usually those: who are long term in ICU, with complicated treatments such as lengthy burns dressing, isolated in the side rooms, with demanding relatives, and/or for whom withdrawal of treatment is being considered. A *'shocking run'* for a nurse is a series of patients such as these and this is not considered desirable for the nurse.

Ward Rounds

Another daily routine in the ICU is the conducting of ward rounds, which occur each morning with all medical staff; the consultant intensivist, all registrars, residents, interns and medical students. The nurse in charge of the unit always attends rounds, along with the social worker (if available), students of nursing and other health care professionals. In addition to the daily ward rounds there are Grand Rounds every Friday in the late morning, during which one intensivist hands over the care of the patients and the unit to the intensivist in charge for the upcoming week.

These daily rounds are predominantly medical in their orientation. Signs, symptoms, diseases, medications and other treatments are discussed as an aid to making decisions about the medical care of the patients. The nurse allocated to a patient stands at that patient's bedside while the medical staff review the patient's condition and treatment but usually does not get directly involved in the discussions.

The consultant intensivist in charge usually asks for a 'review' of what is happening with a patient as she or her stands by that patient's bed. The doctor in charge often begins the discussion by asking *"What's going on?"* or *"Who is going to tell be about this*

patient?" In asking this the consultant wants to hear a concise review of the medical condition and progress of ICU treatment as well as a clearly articulated medical plan. As a general rule these are offered by the Senior Registrar. Uncertainty or lack of specific details on the part of the Registrar will be met with disapproval of the consultant who will ask for specifics and confident decision making (*"I need exact, precise information, not a 'little"*). Expressed hesitation on the part of the registrar such as *"um"*, *"ah"*, *'sort of"*, *or "maybe"* is *"not good enough"* according to the consultant and the registrar will be pressed for detailed descriptions and specific action plans.

Questions about how to proceed with treatment and considerations about a change in treatment direction are discussed during the rounds. The consultant intensivist will make the final clinical decisions but will ask the registrar's medical opinion prior to making these decisions. In keeping with the norm it is the consultant intensivist who adjudicates any differences of medical opinion, be it between them and consultants on another service (whose patients have been admitted to ICU), between the ICU nurses and the other doctors or between members of the ICU medical staff.

The nurse in charge actively participates in the ward rounds, offering information to the medical staff, in addition to prompting and probing the nurses at the bedside to contribute information and clinical observations. She or he maintains a ward rounds book with pertinent decisions and treatment for each of the patients present on the ward. Aside from the charge nurse the other nurses' participation in the ward rounds is predominantly passive. They usually stand by the bed of their allocated patient and observe the rounds with interest, almost as if watching an interesting play or movie. The

charge nurse may prompt the bedside nurse to say something that he or she considers relevant, after they confer quietly in a side conversation. Occasionally a nurse will speak up and provide information, especially when she or he is asked, but this is not the norm.

Nurses sometimes await rounds when they want a treatment decision sorted out, such as, the need to sedate patients, restrain them, or to let them wake up. The nurses also use the ward round times to draw the doctors attention to a pressing matter. When this happens the nurses wait to see if the consultants and other doctors are aware of and agree with what is happening with the patient. Under these circumstances they will ask questions such as: *"Are you happy with this level of agitation?"*, or *"Is this what you want?"* (in reference to the patient's condition). When nurses do this they are dependent on whether the patient will demonstrate the relevant symptoms, such as pulling at tubes and attempting to get out of bed, while the doctors are present on the rounds. The nurse becomes frustrated when the patient fails to demonstrate what the nurse wishes to draw to the doctors' attention. These highlight and reinforce interaction patterns between nurses and doctors that are described more fully elsewhere in this story.

During rounds the junior doctors and medical students sometimes will be asked for input into the discussion and this often sought as a form of 'pop quiz' to see if they understand what is happening. Other times the consultant will explain complicated and/or unusual medical situations to them in the form of an impromptu bedside tutorial.

Some of the nurses in this study said that they were reluctant to participate in the ward rounds in any form because they found them intimidating. The pattern of 'tell me about

this patient' with an accompanying expectation of knowing details and specifics is not one used by the nurses themselves when they conduct their nursing handover rounds. In contrast medical students are socialised into this way of behaving from the moment they observe colleagues' behaviours during medical rounds in any clinical setting.

NURSES' COPING

The ICU environment has long been recognised as stressful. Its constant care demands placed on the staff are often compounded by the dramatic nature of the patients' situations. One of the nurses in this study remarked to me that if she came into the unit in street clothes on one of her days off that she would just look at equipment and think "I can't do this". For her, donning her uniform enables her to assume her role and cope with the demands of the situation.

It is more than handling sophisticated equipment that place demands on nurses in ICU. At any given moment nurses in this ICU could be dealing with: a 40 year old business man who fell from a friend's balcony and may be paraplegic as a result; a 30 year old rugby player whose spinal injury has resulted in quadriplegia; a 60 year old woman whose longstanding medical problems are no longer treatable and whose death is imminent; a 70 year old woman with chronic pulmonary problems who is agitated, confused and unable to be weaned from the ventilator; and a 16 year old high school student whose suicide attempt resulted in serious neurological damage. These examples typify situations that ICU nurses cope with on an daily basis. They must provide the needed nursing care while managing any emotional responses that these situations may trigger within them

A major stress on these ICU nurses is expressed by a few of them who said: *"You never get away"*, *"You're here the whole time"*, *"You can't leave."* This sentiment was repeated on numerous occasions. The constancy of the care was compounded by the emotional demands of trying situations. Part of the ethos of the unit is to keep drama and expressed emotion to a minimum; when nurses 'broke down' and cried this was viewed as a failure if it occurred within the confines of the unit.

The fear of being in a situation that threatened a nurses ability to cope was expressed by one of the nurses in this study. She was referring to a young man who had been a driver in a motor vehicle accident in which his girlfriend, a passenger in his car, had been killed. He was unconscious at the time and unaware of his friend's death. It was customary to break bad news such as this *"whenever the patient asks"* and this nurse was *"praying that it is not me"* who would be at the receiving end of such a question. She was not certain of her ability to cope. When this patient did awake and inquired about his friend one of the other nurses remarked that *"thankfully"* it was a registrar who was in the position to answer the patient's question.

Leaving the unit, getting away, and being escorted off by another nurse were other ways that nurses coped with their responses when emotions threatened to overtake them. In this way they dealt with one cause of their stress, the continuous nature of their presence when on duty, in a direct manner, removing themselves from the source of the stress. There were times, for obvious patient safety reasons, when nurses could not physically remove themselves from the unit. When this happened they often would 'shut down'

emotionally and 'switch off' psychologically, limiting interaction with other staff to a minimum.

The system of allocating patients was a way of taking turns and thereby reducing stress on individual nurses. It is used as a way for nurses to cope with particularly trying and/or emotionally draining situations or when they felt low on their own resources. For example, one of the nurses expressed her frustration at being assigned a *'heavy'* patient. After being off sick for a few days she expected to *"get an easy patient"*. One of the nurses expressed a dislike of the *"chopping and changing"* of patients in the allocation system. She preferred staying with the same patients and was one of the few that requested to be allocated to specific patients.

Another example of a demanding situation occurred with a patient who sustained third degree burns over more than 50% of her body. When she was admitted one of the nurse told me that she finds the *"the anatomy and physiology interesting, but if I thought about it long term, I couldn't cope"*. Patients whose prognosis was good, for example those with Guillain-Barre Syndrome, while demanding in terms of their care, were *"easier"* for the nurses to cope with. The teenager who attempted suicide was particularly draining for the nurses as they watched his family come to grips with a harsh reality of the likelihood of a brain-damaged child. One of the senior charge nurses noted that the nurses *"never got ratty"* despite it being *"really hard on them"*. She saw this as an example of their compassion for the situation. This compassion assisted their coping.

The patient with the major burns was eventually cared for in one of the side rooms, in isolation, and dressing changes could take up to 5 hours on any given shift. The demands of this situation and the emotional responses it created were discussed in a case conference when it was decided that the load should be shared, for example not completing all the dressings on one shift and leaving some for the oncoming shift.

Situations such as those described above were discussed in case presentations as a form of 'de-briefing' for the nurses. The discussion at the case conference at which this 'burns patient' was the focus was lead by the consultant intensivist who was in charge that week. He was assisted by the unit's social worker. The tone of the conference was warm, accepting and friendly, with the consultant acknowledging the nurses perceptions and feelings about the care of this patient. He reassured them that their responses were 'normal' and practical solutions were discussed and implemented, such as 'sharing the load'.

Aside from these specific case conferences there were no regular sessions in which nurses could discuss their responses and feelings towards their work. The nurses said that the that younger nurses needed de-briefing sessions as a way of learning how to cope. The majority of those who attended at the case conferences were younger, less experienced nurses, because *"the older nurses had their own way of coping"*. The need for de-briefing particularly arose and was a topic for discussion (eg., at the ward meeting) whenever the unit had been busy or when a number of unexpected and/or traumatic deaths had occurred. The possibility of holding regular de-briefing sessions was being discussed at the time of the fieldwork.

ETHICAL DILEMMAS

Another aspect of ICU that placed particular stress on the nurses centres around ethical questions about: proceeding with treatment when the chance of meaningful recovery is slim, referred to as *"going too far"*; and not hearing clearly enough *"what the patient wants"*.

The commencement of ICU treatment is a commitment to the use of technology and what some refer to as 'aggressive medicine' used legitimately in the care of patients who are critically ill. Sometimes the chances of patients making meaningful recovery are so slim that a decision is made to stop moving forward in treatment. These decisions are not taken lightly and are based on a host of factors and considerations. Some of these include: the probability of recovery that will offer quality of life (in relation to the patient's previous quality of life), the patient's wishes (if these are known and understood) and the view of family members.

Such decisions are ultimately made by the consultant intensivists. The situations are discussed with families (most often in a Family Conference), however, the intensivists are clear that their role is to present the family with solutions and not more problems. Once it is clear, for example that a patient cannot be weaned from mechanical ventilation, has suffered with a chronic progressive illness and does not desire any further treatment, the nurses assist and comfort patients and their families towards a peaceful death. There are even times when the nurses consider these deaths quite *'beautiful'*.

However, nurses do become distressed about 'heroic measures' and fearful about the absence of the patient's voice in ICU. They ask themselves *"what are we doing here?"* and express concerns that patients in ICU *"have no choice"* about further and continuing treatment. The nurses express fears that what the patient wants often *"gets forgotten around here"* or is dismissed, for example in the case of a patient who became clinically depressed while in ICU.

An illustration of this occurred during a 'trial of extubation' for a patient with a terminal illness. As the nurses watched this young woman struggle for each breath, the question arose, *"What does this patient want?"*. One of the nurses poignantly stated *"Well, I'm sure it's not this"* as they stood by and witnessed the patient's obvious distress. When situations like this are occurring nurses state that if they were in a similar situation they would *"want to be left alone"* to *"die in peace"*. When there are questions about continuing and further treatment another comment frequently heard from the nursing staff is, *'I wouldn't do this to my own mother/father'*.

Nurses' ethical concerns had no routine public airing other than comments such as these, whispered to other nurses at the foot of the patient's bed, and those expressed during nurses handover report. When decisions were being contemplated there was little consultation with the nurses, even when they thought they understood what the patient wanted (often through their interaction with family members).

NURSE-DOCTOR INTERACTION

Part of what helped nurses cope in the ICU was good working relationships with the medical staff. Nurses stated that they need doctors who were decisive in their medical actions and remained calm and cool (part of the ethos of the unit). When doctors were indecisive and/or 'dramatic' about their approach nurses felt increased stress. Nurses also experienced stress whenever working relationships between them and the doctors broke down or were strained. And this often occurred whenever there was a difference of opinion about patients, their families and their care.

Nurses and doctors work in closely in the ICU. Doctors are physically present in this unit most of the time and nurses need only to call out or walk up to a doctor when they need to speak with one of them. Despite the close proximity necessary for collaboration, mutual problem-solving was not as frequent as might be expected in such an environment. As described in the section on the ward rounds, nurses often stood and watched while doctors made decisions about what to do with patients. Some of the doctors invited nursing involvement in decision-making, and some of the nurses offered their opinions and ideas freely. However, most often the doctors requested information of the nurses, for example, observations and assessments, but the nurses' active involvement in decision-making was minimal.

While nurses did not question medical treatment and/or medical decisions overtly, they felt frustrated when their assessments of patients were dismissed and/or ignored by the medical staff. Differences of opinions were observed on numerous occasions during the course of the field study. Sometimes they related to differences in perceptions about

how patients and their families were responding, for example, how a family was coping with their relative's illness. The nurse's view was dismissed and the family was approached by the doctor on the basis of his judgment that the family was coping well. The nurse knew of the stress and strain they were experiencing both in hospital and at home and was frustrated that her views were dismissed, despite the fact that she had spent more time with the family than the doctor.

In another instance nurses knew of a patients' extreme fear of a certain diagnosis, as this had been relayed to them by family members. The family members and nurses connected this extreme fear with the patient's current condition and his response to treatment. This patient's fears were relayed and discussed during the nurses' handover reports as they considered the link important. When one of the nurses reported this during ward rounds the doctors responded by saying that the patient's fears and the patient's current medical condition were entirely coincidental and there was no 'scientific basis' for the connection between extreme fears and medical conditions.

While these two illustrations did not have a direct impact on the care of the patient, other disagreements between doctors and nurses did. There were instances when having their view dismissed or ignored resulted in what nurses considered inadequate treatment, especially medication orders. Suspected patient confusion and agitation often served as an impetus for these differences of opinion and these cases serve as a good illustration of what happened when disagreements occurred between nurses and doctors.

Nurses felt frustrated when they spent up to eight hours with a patient and had assessed the patient as confused, only to have a doctor enter the patient's bed space, spend two or three minutes assessing the patient, and determine that the patient was not confused. The reverse also happened as highlighted by the time the nurse had determined that a patient was not confused but rather disoriented because *"she (the patient) is out of her element (familiar surroundings)"*. When this patient was unable to correctly answer the doctors questions pertaining to orientation (eg., *"Where are you?"*) he concluded that she was confused. This scenario was enacted numerous times during the fieldwork, with nurses complaining, *"How do they know?"*, *"How long did they spend with the patient?"*, and *"They come in, ask the patient a few questions, and make a judgement, when they have not seen much of the patient."* and *"They don't see that patient when he/she goes crackers."*

When nurses assessed a patient as confused and doctors did not, the doctors would not order the medications the nurses requested for settling the patient and promoting rest and sleep. This was viewed by the nurses as a lack of support for them, as illustrated by one of the nurses when she stated, *"I am not getting the back-up that I need"*. Sometimes nurses acted on their frustration by subverting the system and bending the rules. when they evaluated sedation orders to be inadequate. At times they were tempted to sedate patients more than was ordered. Other times they were forced to play the registrar off the consultant in order to obtain adequate sedation for a patient. In one instance a nurse contacted the doctor in charge to request sedation for a patient and was told by the consultant to *"Kiss the patient"*. Undeterred, this nurse then went straight to a more junior registrar and relayed that the doctor in charge said to order medication. The

orders were written and the patient obtained relief from escalating agitation. While the nurses were aware that this was a 'game' they knew they played it only for the benefit of the patient.

There were times when the consultants thought the nurses sedated patients for their own convenience, rather than for the patient's sake. This only added fuel to the disagreements and highlighted the fact that the nurses were dependent on the doctors for medication orders. One of the doctors suggested that I should study the differences in individual nurses use of sedation as he thought this was more often a matter of personal preference and/or inability to care for a confused and or agitated patient than an 'objective' clinical judgement.

INTERACTIONS WITH PATIENTS' FAMILIES AND FRIENDS

The family and friends of these patients spend endless hours in the 'waiting room': waiting for an opportunity to see their loved ones, waiting for news of progress, waiting for the results of the latest clinical test, waiting for an update on situations that sometimes change from moment to moment, waiting to know the outcome of the most recent treatment approach, waiting to hear how their lives might be altered, and just waiting.

The waiting room was a place for family and friends to maintain a vigil when their loved one was newly admitted or unstable. Their requests to visit, made from a telephone linking the waiting room to the nurses station, were denied only when nurses and doctors

were 'busy' with their relative, when major procedures were performed on the unit, and when ward rounds were in progress.

Visiting Patients

The relatively unrestricted nature of the visiting times created a calm atmosphere for the relatives and friends visiting the ICU. This relaxed feeling about visiting helped to offset the anxiety that was inherent in the situation and visible on many of the visitors' faces. As they approached their loved one there was often a hesitancy, especially when visiting for the first time or after a change in her or his condition. The visitors would verbalise their reluctance to touch anything including the patient and they sought permission from the nurse at the bedside, seeking guidance as they approached the patient. Their questions often began with *"Can she (the patient) hear me?"* and *"Is it okay to touch him?"*. While this hesitation was more marked early in the patient's ICU stay, new equipment, a change in the patient's condition, or even a change in the patient's position in bed might trigger permission seeking questions, which usually began with *'Can I...?'*.

The patients' visitors looked to the nurses at the bedside for answers and cues about what was happening. Often nurses would initiate the interaction with family visitors by offering direction and guidance, for example, saying *"Go on, talk to him, tell him you are here and that you love him and support him"*. In one instance there were family members who were concerned that their presence was adding to the patient's agitation. When the nurse at the bedside explained that physical touch was observed to increase agitation in this patient, the family members were reassured that it was not their presence alone. It was the nurse who reassured this family with concrete information. It was

often the nurse at the bedside who informed family members of changes in the patient's condition and treatment by freely answering questions asked by the visitors.

These bedside chats with nurses sometimes prompted family members to express frustration at not being told enough about the patient's status. When family members became upset about not receiving enough information, they would tell the nurses at the bedside who would then relay the message to the medical staff. Medical staff were solicited to provide information when families were uneasy and requested it

In addition to offering information to family members, visits provided opportunities for nurses to glean information about how the family is responding to the situation and to increase their understanding of the patient as a person. During these visits nurses often overheard what family members were saying to the patient and this provided a rich source of information. For example: a family member perceives that their loved one does not recognise them and states *"It's me, Clare, Mum. You are in hospital"*; or when their response provides insight into what the patient is thinking, such as, *"No, sorry Dad, we can't take you home just yet"*.

The visits also provide clues about how families might be responding. For example, friends of a patient with Guillain-Barre Syndrome were told by the patient's wife that he had suffered 'a stroke'. The nurse looking after this patient wondered if it meant the patient's wife did not understand his condition and made a mental note to assess her understanding the next time she visited. These pieces of information, proved by

observations of and interactions during visits provide rich cues to aid the nurse's understanding of patients and their families.

Nurses often seized opportunities to find out about the patient from those who visited her or him. Questions such as *"What's she usually like?"* brought awareness of the patient's personality and increase understanding of how she or he might be responding. Questions such as *"How well was he functioning at home?"* would yield insight into previous quality of life and possible expectations of what recovery might mean to this patient.

Family Conferences

A 'family conference' was a formally scheduled event, usually convened by the consultant intensivist on duty that week, held for the purpose of updating family members. In addition to family members and the consultant intensivist, the social worker of the unit and the nurse caring for the patient at the time of the conference attended the meeting. Because conferences were frequently scheduled to occur at 2 pm the nurse caring for the patient at the time had just commenced his or her shift. This often left the nurse feeling like 'being thrown in at the deep end' if she or he had recently been on 'days off' and did not know the patient or had not caught up to date on the situation.

Family conferences were convened to discuss changes in the patient's condition, for example, suspected complications, especially if this signalled consideration of a different treatment approach. They were also held to discuss patient deterioration, especially if a less aggressive treatment was being considered. Discussion about patient progress and

any indication of further assessment and diagnosis were also topics at family conferences. Most often they were held when 'news was bad', the prognosis was poor, hope for a meaningful recovery was diminishing, and withdrawal of aggressive treatment was being considered.

Troublesome Families

At times family members can pose problems for the ICU staff. In one instance the doctors and nurses were concerned about a son who was *"spending too much time"* with his father. The son lived out of town and was staying on the grounds of the hospital. The doctors and nurses perceived him to be *"too involved"* with his father, at the exclusion of anything else. The consultant-intensivist 'ordered' a limit on the visiting of this family member and expected the nurses to carry out this order. The nurses looking after this patient had *"no idea"* how they could impose such restrictions on his visiting. Likewise family members may request that another member of the family circle not be permitted visiting rights. Again nurses are expected to meet this request but confessed that they did not perceive that they *"had the right"* to restrict visitors for this reason.

Other problems occur when a family member became too *'demanding'*. For example, one patient's relatives were calling the unit to request updates "too often". This happened because of a blended family situation and the nursing and medical staff were unable to ascertain which of the offspring were blood related and who was related through marriage. This differentiation seemed significant to the consultant who asked

the social worker to *'sort it out'* and identify the family spokesperson who could function as the conduit of information for the others.

The social worker was also consulted whenever families were in need of extra assistance, be it practical support like temporary housing and financial assistance or emotional support such as an understanding ear and a shoulder to lean on. Information support was predominantly provided by doctors in the first instance with required translations provided by nurses often at the request by the social worker.

DEATH IN ICU

Death is commonplace in ICU and its constant presence must be dealt with by all the staff. The staff response to death ranges from satisfaction at being able to assist in a peaceful, unpreventable death to overt distress when *"it wasn't expected"*. A common response to death was *"We don't talk about it"*, at least not at the time it occurs. Whenever a death has just occurred or a patient is in the process of dying, for example when treatment has ceased, the curtains onto the unit always are drawn. This is a signal to all who wish to enter the environment that they need to consider the necessity of their entrance at this time.

Death is dealt with in the same calm manner that is used for general care. However, *"Some deaths get to you"* as I was told. The types of deaths that 'got to' people were often tragic, such as a young adults who died (before they had a full chance to live) of a disease that should have been treatable. Others left the staff wondering if they had treated the patient properly--had they gone too far or not far enough? The death of a

chronically ill, young man left one of the nurse upset because his life, full of hospitals and clinics, had been the centre of his parents existence for twenty years. This nurse wondered what these parents would do now and she worried about their ability to adjust to daily living without a sick child. The death of a 'major burns' patient after discharge from ICU met with mixed responses from *"After all we did, can you believe it?"* to *"It is a blessing, what kind of life could she have?"*.

All deaths that occurred in the ICU and within three months of discharge from it were reviewed at regular monthly meetings. It is during these clinical meetings that doctors and nursing staff discuss what was done for a patient and what, if anything, could have been approached differently. If a death was particularly difficult, for example early in the course of ICU with a patient who was *"expected to live"* the case is picked apart and evidence is sought that will help to explain what happened.

IN CONCLUSION

An intensive care unit can be a dramatic and frightening place. To the patients who are helped there it is a haven, a place of rescue from traumatic injury, a place of recovery from serious illness, and a place that reduces threats to life or to die. To the families and friends of these patients it is a place of waiting, of hoping, of bracing, and of coping with potential and real losses. To the staff who work there it is a familiar place of employment, sometimes frustrating, always challenging and often rewarding. Most importantly it is a place of health care, where people help other people with the assistance of sophisticated technology.

While the treatment in an intensive care unit is sometimes considered to be aggressive, the people who work there are not. Nor are they heroes, although what they do is sometimes considered heroic. They are not miracle workers, although miraculous events do occur; they are not gods, but are sometimes accused of playing the Almighty. The staff of this ICU are humane, gentle people who are dedicated to using their clinical expertise and the very latest technology to save human lives. However, ICU care is not 'life at any cost' and the people who work there are able to facilitate a peaceful death when it is inevitable.

Chapter 5

Nursing Assessment of Patient Confusion: *"There's confusion, then there's confusion"*

INTRODUCTION

Nurses in this study recognise that patient confusion is a common occurrence in ICU; in fact, they anticipate patient confusion as an expected state in certain clinical situations. As one of the nurses said, *"There are real reasons people are confused. Someone who has been sedated for a long period, or maybe been anaesthetised, has been really sick and had a variety of experiences; lots of drugs, hypoxia, maybe toxicity, electrolyte imbalances ... coming through all that can be when confusion is most acute"*. Just as patients are *"trying to unravel"* what is happening with them, to them, and around them, so must nurses ascertain what is occurring, experientially, with patients in ICU. Such are the challenges in the clinical assessment of patient confusion.

This chapter begins with a discussion of theoretical considerations in the assessment of confusion that are described in the literature. The discussion includes recommended assessment criteria and diagnostic decision-making processes, as well as documented problems in the clinical assessment of patient confusion in the hospitalised population. The section that follows explores how the ICU context exacerbates some of these difficulties. Analysis of the findings of this study, presented next, reveals decision-making processes used by nurses and explains the various types of patient confusion that nurses describe in the ICU. Problematic areas such as the complexity of the clinical picture and lack of established frameworks are uncovered and discussed next. The

chapter concludes with a discussion of strengths in the ways that nurses in this study assess patient confusion.

LITERATURE RELATED TO CLINICAL ASSESSMENT OF CONFUSION

A substantial amount of the research into clinical assessment of acute confusion has been conducted in relation to hospitalised elderly patients (eg., Albert, Levkoff, Reilly, Liptzin, Pilgrim, Cleary, et al., 1992; Foreman, 1989; Inouye, 1994; Johnson, Gottleib, Sullivan, Wanich, Kinosian Forciea, et al., 1990; Mentes, 1995; Morency, Levkoff & Dick, 1994; Nagley, 1986; Palmateer & McCartney, 1985; Vermeersch, 1990b; Williams, Ward & Campbell, 1988; Yeaw & Abbate, 1993). While an ICU context, the setting for this study, poses added challenges, the body of research into assessment of acute confusion in elderly patients is applicable and informative.

The literature related to the clinical assessment of patient confusion reflects research efforts to develop methods for gathering clinical data and to refine diagnostic criteria on which to base clinical judgements. The methods are the processes of clinical assessment and the diagnostic criteria are the content of assessment. That is, recommended systems for clinical judgement about patient confusion include both process and content regions of assessment.

Clinical Indicators of Confusion: Content of Assessment

Acute confusion is an alteration of cognitive information processing that is manifested through behaviour. Inattention, characterised by an inability to shift or sustain focus and therefore to make sense of what is happening, is considered to be the hallmark sign of

acute confusion and therefore its primary feature (Foreman & Grabowski, 1992; Johnson, et al., 1990; Levkoff, Cleary, Liptzin & Evans, 1991; Morency, et al., 1994; Rasin, 1990). The visually descriptive phrase, "clouding of consciousness" (Lipowski, 1967), captures this lack of ability to attend to the external environment, as it presents an image of a metaphorical haze descending around the cognitive awareness of a confused person.

The phrase "clouding of consciousness" appeared in the initial diagnostic criteria for this clinical syndrome, published by American Psychiatric Association (APA) in 1980 in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM III). These criteria established delirium as an organic mental disorders and made explicit the diagnostic criteria (Lipowski, 1990). In the DSM III criteria "clouding of consciousness" refers to diminished awareness, distractibility and poor following of commands (Francis & Kapoor, 1990). However, the phrase "clouding of consciousness" proved to be too vague a description to be used reliably by clinicians. In the subsequent edition of the APA criteria (DSM III-R, 1987) the term is revised to mean "reduced ability to maintain attention and shift attention". The clarification of this term led some authors to claim that confusion was re-conceptualised as a disorder of attention (Johnson et al., 1990), while others maintain that it is characterised by alterations in level of consciousness (Liptzin, Levkoff, Cleary, Pilgrim, Reilly, Albert, Wetle, 1991).

In the latest edition of the APA manual, DSM IV (1994), an essential criterion for the diagnosis of delirium is disturbed consciousness which is manifested by reduced clarity of awareness to the environment, thus further clarifying the original criterion of "clouding

of consciousness". Other criteria outlined in the DSM IV (1994) are: changes in cognition (memory, disorientation or language disturbance) or the development of perceptual disturbances; development of symptoms over a short period of time and diurnal fluctuations. Associated features include: sleep-wake cycle disturbances, disturbed psychomotor activity, impaired judgement, and emotional disturbances such as anxiety, fear and depression.

Although DSM criteria are used for clinical and research purposes they do attract some criticism. Revisions (such as those chronicled above) for the DSMs are not based on clinical research or field testing, but rather extensive consultation and discussion (Liptzin, 1991). Inouye's (1994) claim that the diagnostic criteria for delirium are not yet stabilised is supported by the lack of agreement over which criteria are essential to the diagnosis and which are associated features. The use of DSM criteria is limited as delirium can go undetected because patients may not manifest all symptoms consistently (Levkoff, Liptzin, Cleary Reilly & Evans, 1991). In one study (Liptzin, et al., 1991), patients who were confused did not meet DSM III-R criteria because their sparse speech made it impossible for clinicians to determine disorganised thinking, an essential criterion. The DSM criteria are also criticised from a nursing perspective because nurses think holistically rather than in discreet entities (Morency, et al., 1994; Vermeersch, 1990b; Vermeersch & Henley, 1997).

Despite these cited shortcomings the DSM diagnostic criteria are used extensively in investigations into clinical assessment of confusion (eg., Albert, et al., 1992; Foreman, 1987; Inouye, van Dyck, Alessi, Balkin, Siegal & Horowitz., 1990; Johnson, et al., 1990;

Levkoff, et al., 1992; Liptzin & Levkoff, 1992; Morency, et al., 1994; Neelon & Champagne, 1996; Williams, et al., 1988). Typically, criteria are applied to clinical data that have been gathered during clinical interviews, which include observation of the patient. Interviewing patients is the most frequently used method of assessment in these studies.

Assessment Methods

Although acute confusion is a cognitive alteration its clinical assessment encompasses more than cognitive parameters (Foreman, 1991; Palmateer & McCartney, 1985; Williams, Holloway, Winn, Wolanin, Lawler, Westwick & Chin, 1979; Wolanin & Phillips, 1981; Yeaw & Abbate, 1993). Clinical assessment of acute confusion is based on a combination of two processes: evaluation of cognitive functioning and observation of behavioural manifestations (Foreman, 1989; Vermeersch, 1990b). The usual way to assess cognitive functioning is through a mental status examination, which relies on patient verbalisation during a clinical interview. Behavioural manifestations of acute confusion are assessed through clinical observation, which relies on perceptual cues interpreted by the clinician. Mental status examinations are usually more formalised than behavioural observation. These two assessment processes are needed in combination. That is, behavioural observation provides data indicative of potential confusion, while a patient interview provides access to cognitive functioning and data that confirms or disconfirms the presence of confusion.

Some formal methods to conduct mental status examinations test cognitive functioning from a global view while others focus specifically on delirium. Examples of those that

test general cognitive functioning include the Mini Mental Status Examination (MMSE) (Folstein, Folstein & McHugh, 1975) and the Short Portable Mental Status Questionnaire (SPMSQ) (Pfeiffer, 1975). These tests require verbal responses and rely on patient understanding and cooperation. They yield an assessment data about global cognitive impairment (Francis Martin & Kapoor, 1990; Nelson, Fogel & Faust, 1986; Vermeersch, 1990b). Therefore global assessment methods (MMSE, SPMSQ) are effective in screening for the presence or absence of dementia and delirium but are not specific to either (Anthony, Le Resche, Niaz, Von Korff & Folstein., 1982). These types of screening tools are useful for comparison purposes in research studies (eg., Foreman, 1989; Foreman & Grabowski, 1992; Williams, et al., 1988).

Two recent examples of validated assessment tools developed specifically to detect delirium are: Confusion Assessment Method (CAM) (Inouye, et al., 1990) and the Delirium Symptom Interview (DSI) (Albert, et al., 1992). Unlike the general screening methods these tools are specifically based on DSM diagnostic criteria for delirium. Like global screening tools, these assessment instruments rely on patient participation in and cooperation with a clinical interview. Although developed by medical practitioners all of these tools can be used by any clinician.

Assessment methods and instruments developed by nurses are more behavioural and symptom-based than standard mental status examinations developed by medical practitioners. Nurses' assessment tools are observational because nurses have been shown to assess confusion through general observation (Wolanin & Phillips, 1981; Vermeersch, 1990b) and conversations with patients during routine care (Inaba-Roland

& Maricle, 1992). Although criticised because they do not include all DSM diagnostic criteria (Levkoff, Liptzin, et al., 1991), assessment instruments developed by nurses are inclusive of behaviours that nurses consider when assessing patient confusion. The tools take into account how nurses recognise and perceive confusion, unlike mental status examinations, which focus on general cognitive functioning (Vermeersch, 1990b).

Examples of instruments developed by nurses include a confusion rating scale (Williams, et al., 1988), an observation checklist, entitled Clinical Assessment of Confusion (CAC-A) (Vermeersch, 1990), a visual analog scale (VAS-C) (Nagley, 1986), and a bedside assessment instrument based on routine nursing observation (NEECHAM) (Neelon & Champagne, 1996). Each of these includes behavioural observations.

Validation of these instruments involves correlation to other methods. Vermeersch compared her CAC-A to Nagley's VAS-C and found concurrent validity Verneersch & Henley, 1997). Nagley (1984) and Williams, et al. (1988) compared their methods, VAS-C and Confusion Rating Scales, respectively, to Pfeiffer's SPMSQ (1975) and demonstrated positive correlation. Neelon & Champagne (1996) compared the NEECHAM scale to the MMSE (Folstein, et al., 1975) and DSM III-R (1987) criteria and established concurrent validity.

Nursing Perspective on Assessment

Nurses play a vital role in the identification of confusion in hospitalised patients; their skilled observation of patients and informal questioning yield valuable data about cognitive functioning (Williams, et al., 1988). Because they spend extended periods of

time with patients, nurses are often the first to notice subtle cognitive changes (Eden & Foreman, 1996; Inaba-Roland & Maricle, 1992; Lipowski, 1990; Mentes, 1995; Rasin, 1990). The amount of time spent with a patient has been shown to influence assessment of cognitive status (Vermeersch, 1990b). Interaction with the environment is significant as a diagnostic indicator and nurses are in a position to observe patient interaction within this context. They are able to observe behavioural changes over time and therefore are in a prime position to notice fluctuations, an expected aspect of acute confusion and one of its DSM diagnostic criteria.

Nurses notice disturbances in patient consciousness and are good at detecting orientation (Morency, et al., 1994). In fact, they rely on patient alertness and orientation in the assessment of cognitive functioning (Eden & Foreman, 1996, Palmateer & McCartney, 1985; Morency, et al., 1994; Wolanin & Phillips, 1981). At times they confine their assessment to orientation alone and this may reflect an inadequate understanding of cognitive disorders (Inaba-Roland & Maricle, 1992; Williams, et al., 1988; Yeaw & Abbate, 1993); however research findings also raise questions about valid measures of complex clinical realities such as confusion (Nagley, 1986).

In their assessment of patients' cognitive functioning, nurses include social attributes of the patient (Williams, et al., 1988) and social interaction (Nagley & Dever, 1988; Palmateer & McCartney, 1985; Vermeersch, 1990b; Williams et al., 1979; Wolanin & Phillips, 1981). Conversely, Armstrong-Esther & Browne (1986) demonstrate that social interaction is diminished when patients are considered to be confused. In addition, clinical assessment based on observational and behavioural data within the context of

interaction with the environment can lead nurses to an erroneous conclusion that patients with good social skills have full cognitive capacity as well (Palmateer & McCartney, 1985).

Documented Problems in Assessment:

Inadequate assessment and poor understanding of acute patient confusion spurs much of the research in the area. The most frequently cited difficulty in relation to the clinical assessment and diagnosis of confusion in hospitalised patients is an under-recognition; patient confusion often goes undetected, overlooked and therefore untreated (Foreman, 1991; Inaba-Roland & Maricle, 1992; Inouye, 1994; Knights & Folstein, 1977; Liptzin, et al., 1991; Neelon, et al., 1996; Palmateer & McCartney, 1985; Williams, et al., 1988). Some of the reasons that are offered for this lack of detection of confusion include: lack of established systems for assessment, unstable diagnostic criteria, inadequate conceptual clarity, fluctuating clinical picture and general hospital clinical staff's lack of understanding about organic cognitive disorders.

Some experts (eg., Levkoff, Cleary et al., 1991) cite a lack of agreement about the clinical signs and symptoms of delirium as contributing to ongoing diagnostic problems. Even with specific diagnostic criteria for delirium, the clinical assessment of confusion is hindered by a lack of conceptual clarity (Albert, et al., 1992; Eden & Foreman, 1996; Inouye, 1994; Liptzin, et al., 1991; Morency, et al., 1994; Shedd, et al., 1995; Vermeersch, 1990b; Williams, et al., 1988). In addition to poor understanding of the content region of assessment, there is also a lack of systematic and regular observation and assessment methods for detecting cognitive functioning in hospitalised patients

(Eden & Foreman, 1996; Inouye, 1994; Neelon & Champagne., 1996; Palmateer & McCartney, 1985).

The difficulties associated with detecting delirium are also related to the clinical picture of acute confusion, in particular the fluctuating nature of signs and symptoms (Inouye, 1994; Levkoff, Liptzin, et al., 1991; Mentes, 1995; Morency, 1990; Neelon & Champagne, 1996; Vermeersch & Henley, 1997). Because of these fluctuations clinical assessments, completed at one point in time are likely to yield results which will change a few hours or even a few minutes later.

Recognition of patient confusion is further limited by the variety and variability of its signs and symptoms. Patients who are confused do not display all the symptomsof confusion at all times. Often symptoms are only recognised when they become bothersome to staff (Morency, et al., 1994). That is, confusion is conceptualised in relation to how it interferes with staff functioning rather than how a patient is functioning (Foreman, 1991; Wolanin, 1977; Wolanin & Phillips, 1981; Yeaw & Abbate, 1993).

Procedures for assessing cognitive functioning rely on patients sharing their thoughts. They may be reluctant to share confused thoughts out of embarrassment or fear of appearing crazy (Morency, et al., 1994). The reticence is validated by former patients when they discuss their ICU experiences (Anderson, 1982; Laitenen, 1996).

Another aspect of its clinical picture that contributes to difficulties in identifying confusion is its multicausality (Foreman, 1986; Inouye, 1994, Mentes, 1995). In

hospitalised elderly populations, where acute confusion is a significant clinical problem, the main differential diagnosis is dementia (Foreman, 1992; Foreman, 1991). This is particularly true with elderly patients when confusion related to dementia is assumed and therefore acute conditions such as delirium are overlooked. With this population there is a tendency to equate cognitive impairment with ageing process, further compounding the problems in recognition of acute confusion in elderly patients.

Clinicians think patients who are confused must be agitated as well (Inouye, 1994). Agitation may be the cause of patient confusion (Crippen, 1990; Foreman, 1991), however it is just as likely that agitation reflects the patients inability to understand what is occurring, that is a consequence of confusion.

ADDED CHALLENGES OF ICU CONTEXT

In one of the few studies on assessment of confusion in the ICU setting (Scherubel & Tess, 1994) three instruments, the MMSE (Folstein, et al., 1975), CAC-A (Vermeersch, 1990b) and VAS-C (Nagley, 1986), proved useful in ascertaining which patients were confused. These measures are easily administered, non-intrusive to patients and staff, and independently produced valid results. They also correlated well with each other with the highest level of agreement between CAC-A and the MMSE (Scherubel & Tess, 1994). However, patients who were intubated were excluded from this study. Therefore the most challenging aspect in ICUs, assessing patient cognitive functioning in the absence of patient speech, was not addressed in this study. Impaired cognitive functioning, a central feature of confusion, is difficult to assess in the absence of speech.

Because confusion is associated with acuity of physical illness, patients in a general ICU who are likely to become confused are also likely to be intubated.

Limited Verbalisation

ICU nurses cannot conduct clinical interviews with patients in traditional ways because patients in ICU often cannot speak. Under the circumstances interactions between patients and nurses are often superficial because patients are limited to answering closed questions with head nodding or other non-verbal gestures. Superficial interactions may lead to the erroneous conclusions, for example, that a patient is intact cognitively (Palmateer & McCartney, 1985). This restricts construction of meaning through dialogue and the mutual development of shared understanding.

Formal mental status assessment relies heavily on verbal interaction and therefore of limited use in ICU. While it is possible to check mental status through a series of closed yes/ no questions this approach has limited value (Chatham, 1978). Nurses are unable to reliably report patient confusion, they can only confirm it, therefore it must be observed (Vermeersch, 1990b). Skilled observations, based on perceptions and inferences are as effective as formal testing (Williams, Campbell, Raynor, Musholt & Crane 1985), and clinicians have a higher accuracy at predicting confusion than models because clinicians considered factors not included in the models (Williams, et al., 1988). In critical care, observation is considered to be the best tool in assessing patient confusion (Geary, 1994).

Limited verbalisation by patients due to intubation and mechanical ventilation also leads to lack of understanding of patient intention. For example, in a study on the subjective

experience of mechanical ventilation (Jablonski, 1994), former ICU patients described their frustration when they attempted to move their endotracheal tube to a more comfortable position. Nurses interpreted their actions as attempts to remove the tube, chastised the patients, and even threatened them with physical restraints. Similar experiences of feeling misunderstood are relayed in first-person accounts of being a patient in intensive care (Heath, 1989). Without familiar processes of verbal communication, nurses and patients are unable to achieve shared understandings. This is especially true when the patient's behaviour is suggestive of cognitive alterations, such as confusion.

Numerous Possible Causes

The clinical situation of confusion is exacerbated by the severity and complexity of the patients' illness in ICU. The number and variety of factors that are implicated as contributing to acute confusion are extensive; sedation, hypoxia, electrolyte imbalances, sensory overload and sleep deprivation are just a few. In the general ICU patient population, most of the factors contributing to acute confusion are present, for example, sleep deprivation and anticholinergic medications. Fluctuating level of consciousness makes diagnostic assessment difficult in all cases of acute confusion, but compounded by 'usual' levels of consciousness in ICU patients. Nurses may think it is almost impossible to sort through all the potential contributing factors.

Establishing causes-effect relationships in acute confusion is complex and perplexing due to the interplay of factors (see Ch. 2). In ICU the situation is often more complex. A good example in the ICU environment is sleep deprivation. It has been implicated as a

cause of ICU syndrome. Furthermore, disturbance in sleep-wake cycle has long been associated (since the time of Hippocrates, Lipowski, 1990) as symptomatic of acute delirium. To further compound the situation, ICU patients have their sleep disrupted by sedatives and analgesics, to name just a few of the medication classifications that ICU patients receive on a regular basis. Sleep disturbance can simultaneously be an expected aspect of being a patient in ICU, a symptom of acute confusion, and a cause of acute confusion. This highlights the complexity of cause-effect relationships in the understanding of acute confusion in ICU.

As Rasmussen and Creason (1991) and Williams, et al.(1979) point out, a variety of variables, predisposing and causing acute confusion have been implicated, but the relative influence of each of these is unclear. Likewise, questions that are difficult to answer are: what are causes, what are effects and what are just correlations. Foreman (1989) reinforces the difficulty in answering these question in his discussion of the psychophysiological variables shown to be significantly associated with the onset of confusion. In developing a profile of the confused elderly patient he states that it is impossible to conclude whether variables such as hyperglycaemia, and reduced interactions with significant others were causes, effects or simply correlates of confusion.

ICU NURSES ASSESS PATIENT CONFUSION: FINDINGS OF THE STUDY

During the fieldwork phase of the study the clinical assessment of patient confusion appeared to be haphazard and random, full of contradictions and disagreements. The same patient exhibiting similar behaviour could be assessed differently by each nurse caring for him or her. Various and even contradictory clinical judgements were made

simultaneously. The situation of one patient, Maude, stands out as a good illustration of the difficulties observed and analysed throughout the study.

Maude

The nurses could see that Maude did not want to be in ICU at the time of her admission. They noted her emotional distress, along with her restlessness and disorientation. The inconsistent way in which she obeyed commands and followed directions led some nurses to believe that she was hypoxic. She did have a diagnosed chronic pulmonary disease. Most nurses, however, thought Maude was intentionally uncooperative because she did want to be in ICU in the first place. They perceived her to be a strong-willed person who did not like the situation..

I spent a great deal of time at Maude's bedside. As one of the nurses said, *"she's a good case for your study"*. I was there often enough for her to show signs of recognition. After I introduced myself and the purpose for my being at her bedside her eyes grew wide as she tried to communicate something that seemed urgent and important to her. She did this on more than one occasion. She would grab my arm, pull me close toward her and mouth words in an obvious attempt to tell me something. My own frustration mounted when I could not understand. She looked frustrated as well. None of us around her bed could work out what she way trying to communicate. Nothing could be deciphered. She could not get through to any of us, but her attempts to do so were clear. When her efforts to communicate did not meet with success she would lie back, look defeated and close her eyes in retreat. She simply give up the struggle.

But Maude did not always show signs of being *"with us"*. There were times when everybody thought that Maude was confused. At these times she became increasingly restless, thrashing around in the bed and picking and pulling at anything within reach. At these times she did not even attempt to

communicate or interact with those of us in the environment. It was times like this that Maude created the most challenges for the nurses caring for her.

Each nurse developed a different assessment and these views were expressed at various times, sometimes contradicting each other within the space of a few minutes. *"She's being naughty', "She let's you know what she wants", "She wants control", "She only cooperates when she feels like it", "She's uncomfortable in bed", "She doesn't want to be here", "She's sick of all of this", "She's stubborn and wants her own way", "She's angry", "She's frustrated", "She's scared", "She's afraid", "She's just a cantankerous old lady", "She's confused", "She's not with us".* Although there was much speculation, nobody really knew what was happening with Maude. Not only were there numerous conclusions as the reasons for her behaviour, but also there were questions about whether she was even confused. Unfortunately none of us will never know because Maude died before leaving the ICU.

Decision-making processes

The nurses considered various factors in making their judgements and deciding whether Maude was confused. The factors that are critical to the decision-making process were not always obvious during the field study. However, during the interviews ICU nurses were able to describe important variables in their decision-making. Embedded into these variables are the pivotal points around which nurses turned their decision-making and upon which they eventually rested their clinical assessment of patient confusion. Further analysis of the field data, along with examination of interview data reveal identifiable patterns in the nurses' decision-making processes. These decision-making processes are depicted on Diagram 5.1.

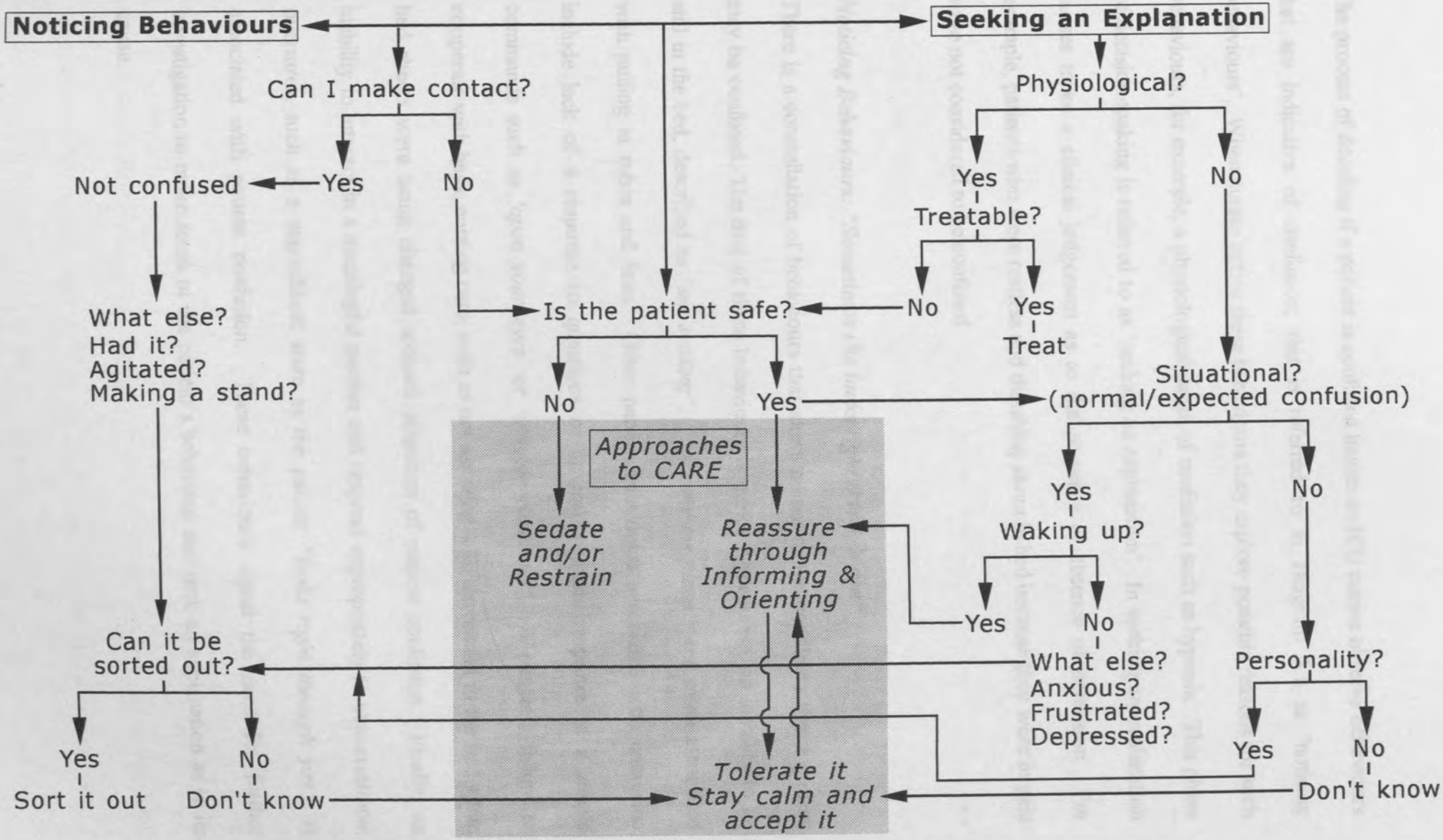


Diagram 5.1 NURSING CLINICAL ASSESSMENT OF PATIENT CONFUSION

The process of deciding if a patient is confused begins as ICU nurses observe behaviours that are indicative of confusion; this is referred to in Diagram 5.1 as 'noticing behaviours'. When nurses notice these behaviours they explore possible reasons for such behaviours, for example, a physiological cause of confusion such as hypoxia. This phase of decision-making is referred to as 'seeking an explanation'. In seeking an explanation nurses make a clinical judgement as to the presence or absence of confusion. For example, patients who were restless and thrashing about in bed because they were in pain were not considered to be confused.

Noticing Behaviours: "Sometimes she looks right through you"

There is a constellation of behaviours that alerts nurses to the possibility that a patient may be confused. The first of these behaviours is motor restlessness, an inability to lie still in the bed, described as *"not settling"*, *" all over the place"*, and often associated with pulling at tubes and lines. Other patient behaviours associated with confusion include lack of a response to questions or an inappropriate response to a simple commands such as *'open your eyes'* or *'wriggle your toes'*. A patient's failure to cooperate with basic nursing care, such as not assisting with movement in the bed while bed sheets were being changed aroused suspicion of patient confusion. Finally, an inability to interact in a meaningful manner and respond appropriately to conversational overtures, such as a vague/blank stare as the patient *"looks right through you"*, is associated with patient confusion. These behaviours signal the need for further investigation to make sense of the patient's behaviour and seek an explanation as to its cause.

Seeking an Explanation: "Some people say she's confused"

Once nurses notice behaviour associated with confusion, they look for explanations as to the cause(s) of the behaviour, regardless of whether they are still speculating about the presence or absence of confusion or searching for alternative explanations. In doing so the nurses attempt to differentiate confusion from other clinical problems such as anxiety, agitation and fear. The following factors are relevant in determining the underlying cause(s) of the behaviours associated with confusion: physiological signs and changes, attribution of patient intention, patient personality, and emotional states. Situational factors related to clinical context are also taken into consideration by nurses as they assess confusion. These include circumstances in which patient confusion is anticipated and therefore 'usual' for the context, for example, when patients who wake up after being unconscious, anaesthetised, and/or heavily sedated.

Physiological Explanations

There are a number of physiological factors that nurses considered when they notice behaviours indicating a patient might be confused. These include: evidence of hypoxia and respiratory distress; notation of cardiac changes, such as arrhythmias; observed signs of sepsis; electrolyte imbalances; medication regimes, especially polypharmacy; the potential for withdrawal states, for example, from alcohol; and disruptions in the patient's sleep-wake cycle.

Whenever there is an identifiable physiological explanation for the behaviour, such as, the *"metabolic confusion that occurs with end-stage liver failure"*, nurses did not consider the patients to be *"purely confused"* because the behaviour fits into an anticipated clinical

picture. For example, during the field study there was a patient who had been confused at home prior to admission to hospital. It was accepted that his confusion was a result of metabolic imbalances related to his medical diagnosis. In cases such as *"metabolic confusion"* nurses would ascertain physiological causes for behaviour by looking for accompanying signs, such as *"the numbers* [laboratory results] *are all wrong"*. When patients' behaviour could be explained neurologically, for example, following a serious head injury, it was not considered confusion but rather the patient was referred to as *"knocked off"*. Sleep deprivation is another common physical reason for confused behaviour and nurses often were overheard saying, *"He really needs a rest"* and *"She's not slept"*.

Physical pain that results in obvious discomfort and/or emotional distress is also considered by nurses as they seek an explanation for the behaviours associated with confusion. *"She's just moving around in the bed to try and get comfortable"*. Patients' response to nurses attempts to comfort them helped to determine whether the patient is confused. Patients who responded by relaxing or settling are considered to be *"with it"* and therefore not confused.

Patient Intentions

When seeking an explanation for behaviour associated with confusion, nurses evaluate and speculate about patient intentions. Comments which revealed this way of thinking include: *"She's having a bit of fun pulling at her tubes"; "She's not motivated to do anything"; "He's uncooperative"; "He's trying to get out of bed so he can walk around"; "He talks to himself because he lives alone"; "He's being naughty"; and*

"She's putting it on for her family". In ascribing motivation for the patient's behaviour nurses often consider the degree to which the patient willingly cooperates with nursing care, that is, how the patient's behaviour fits within the context interacting with them.

Nurses also consider the rationality of the patient's behaviour in deciding whether the patient is confused. They often assume that a 'rational person' would not pull at tubes and lines, especially once the need for the equipment has been explained. However, this assumption is based on the nurse's evaluation of the patient's intentions. For example, a patient who is considered deliberately un-cooperative, and pulling at tubes may *"want out"* of ICU because she has *"had it.* This is not considered to be confusion even though her behaviour might been considered irrational (ie, not cooperating with people who are trying to help).

At other times nurses use their evaluation of the patient's personality characteristics to explain behaviour indicative of confusion. Comments about individual patient's personalities were provided by nurses to offer insight into the behaviour. *"She's stubborn and wants her own way"; "He is feisty and spirited"; "She's sweet, so its not like her to hit people"; "He's just an obnoxious old man';* and *"His son says he fights with everyone"* are a few examples of nurses attempts to explain patient behaviour through personality traits. A patient's personality is taken into account especially when there are signs of agitation.

Emotional States

Nurses would ascribe emotional states as the reason for behaviours associated with confusion, especially when the patient's behaviour indicates agitation and restlessness. Common emotions associated with agitated (and potentially confused) behaviour were fear and anxiety. Nurses were heard to say: *"He looks frightened to me"; "She looks scared to death"; "She's really anxious, you can see it in her eyes";* and; *"She does not like that tube in her mouth".*

When patients are not settled and therefore exhibit behaviours associated with confusion some nurses assess that they are not confused but rather irritated about something. This is referred to as *"pure agitation"*. Reasons for such agitation that are considered by nurses include: frustration at the inability to speak because of an ET tube; discomfort because of positioning in bed (eg., lying too long on one side); distressed (but not confused). In differentiating *"pure agitation"* from *"true confusion"* one nurse explained that with agitation *"you could usually sort something out"* by talking to the patients and finding out why they are perturbed.

A good example of this occurred when a patient, with both arms and one leg in plaster casts and intubated, hit a nurse when she failed to understand what he was trying to communicate to her. This nurse had worked through her standard list of topics in an attempt to ascertain what this young man was trying to get across to her; however, this approach proved unsuccessful. Her own bafflement was met by his mounting frustration. Finally, in exasperation, he hit her in the chest with one of his plastered arms. His somewhat shocking action took her by surprise but met with success when she realised

that he wanted her to leave the bedside. His girlfriend had just arrived and he wanted some time alone with her. When the nurse asked if that was what he meant his frantic affirmative nodding indicated that she had finally understood. His agitated behaviour made sense; it communicated 'go away'. And this nurse finally understood.

Sometimes nurses ascribed exasperation as the reason for a patient's refusal to cooperate with nursing care. Patients who were exasperated and uncooperative are considered to be *"making a stand"*. For example, patients who did not open their eyes or wriggle their toes when requested to do so during routine neurological observations were sometimes viewed as *"asserting control in the only way possible"*. The ICU nurses perceived such behaviour as a way for patients to communicate that they: *"had a gutful"*, *"don't want to be here"*, and *"don't want you doing this to me any more"*.

This intention was especially ascribed after patients had been in the ICU for an extended period (ie., longer that about a week). Usually they were also intubated during the time. Nurses thought that these patients simply became fed up with being *"prodded, poked and awakened continuously"*. This behaviour had a rational basis, that is, *"every time the patient moves there's something pulling and he gets sick of it"*, nurses differentiate it from true confusion. Because this agitated response was understandable nurses try to sort something out with the patient, or just accept it without judgement, unless the patient is at risk of harming self.

Types of Confusion: *"What you call confusion may not be what I call confusion"*

What nurses refer to as confusion takes many forms and is manifested in several ways. As one nurse put it, *"We use the title of confusion and put patients in that category, but*

there are really so many kinds." While not always apparent during the fieldwork phase of this study the different types of confusion were clarified in the interviews. During the interviews nurses differentiated various types of confusion by describing manifestations of each type. There is a similarity in the manner in which nurses describe each type, although they may refer to the type using different titles. For example, *"badly confused"* manifests itself similar to " *very confused"* and *"wildly confused"*.

Expected Cognitive Alterations: "Normal Confusion"

"There's a degree of confusion in most ICU patients." This assessment fits with the understanding of what could be called the natural confusion of being in ICU, *"a semi-dreamlike state in which normal processes of reasoning and orientation are severely compromised"* by *"overwhelming stress on the body and being fiddled around with so much"*. Under such circumstances a certain degree of mental cloudiness is bound to be present and ICU nurses learn, through experience, to anticipate and expect behaviours associated with confusion. In fact some of them consider it a *"bonus"* when there is no patient confusion.

Patients who are critically ill and in an environment as strange as an intensive care unit are likely to experience a sense of *"being lost"* and in need of direction. This encapsulates what ICU nurses recognise through experience as 'normal'. Patients experiencing normal confusion are considered by nurses to be in need of some rules and guidance to help them through the maze of serious illness and ICU. Without a frame of reference or road map for understanding what was occurring both with them and in their

environment, patients often experience mental cloudiness, along with disorientation and fear.

But nurses in this study do not consider patients in this state to be confused because *"They know who they are and recognise their wife but not where they are or what is happening"* and *"If you take them off the morphine and take out the tube they will clear"*. That is, nurses could perceive when patients are oriented yet not entirely in touch with their immediate situation. Under these circumstances patients need someone to *"sit down and talk to them so that they can get their bearings and alleviate their fears."* Nurses consider patients experiencing this normal/expected state to be *"retrievable"*, that is, the nurses could establish interpersonal contact.

Waking Up

Frequently ICU patients have been sedated for a long period of time, have been anaesthetised (eg., to perform a surgical procedure either in the ICU or in the operating theatre), or have been comatose after major trauma such as a motor vehicle accident. When they 'wake up' ICU nurses anticipate a degree of mental cloudiness. As patients in these circumstances become aware of their surroundings, ICU nurses provide continuous re-orienting information in an effort to establish interpersonal contact and connections to the external environment. In doing so, nurses recognise that the patient is *"re-gaining, re-orienting* [to] *and re-entering"* the outside world. During these periods behaviours associated with confusion are often observed and noted, but nurses assess the underlying cause as expected anxiety and disorientation, and do not consider this state true confusion.

When a patient wakes up *"with a start"* an experienced ICU nurse recognises a natural reaction if this patient then attempts to pull out the ET tube. Such a patient reaction is not associated with confusion because the patient behaviour is understandable, that is the nurse could perceive the logic of wanting to remove something as uncomfortable as an ET tube. Patients who exhibit such behavioural responses to 'waking up', although similar to those associated with confusion, are not considered to be confused because nurses understand the patient's reaction (albeit troublesome and dangerous) of wanting to get out of bed, or attempting to remove uncomfortable lines and tubes.

Mildly Confused

Patients are considered mildly confused whenever there is no motor restlessness associated with their mental state. Mildly confused patients are *" a bit vague"*, *"a little off beat"*, and *"just purely disoriented"*. Mild confusion is often transient and the patient is able to be reoriented through *"a talk and a touch"*. A picture of a mildly confused patient is seen as she falls asleep, wakes up, looks perplexed, takes a while to recognise what is going on, closes her eyes and then repeats the cycle over and over again. In many respects mild confusion is similar to the normal/expected confusion of being a patient in ICU.

Pleasantly Confused

Patients who are considered pleasantly confused are *"in their own little world"* but not aggressive or agitated; there is *"calmness in their confusion"*. They cause no harm to themselves and are friendly and calm, although *"not with us"*. They *"look at you strangely"*, may not recognise where they are or who the nurses are, but display no signs

of fear or anxiety. These patients *"pluck, but don't pull"*. A distinguishing feature of patients who are pleasantly confused is that they remain polite and mannerly, maintaining social rules about public behaviour.

Full-on Confusion

Sometimes referred to *as "very confused", "wildly confused"* or *"badly confused"* this level of confusion is always associated with agitation and motor restlessness. Patients experiencing full-on confusion often appear to be hallucinating, looking at and responding to things unseen by others. These are the patients who are "*completely off the air", "not interacting with the environment on any level"* and are considered to be *"on a different parallel"*. As such they are not *"retrievable"* through talking and touching and often pose extreme safety risks.

Patients with full-on confusion are extremely agitated and physically aggressive. They often attempt to sit up and get out of bed, and dangerously pull at lines and tubes. Their motor restlessness is extreme and they are noisy, even *"boisterous"* in their presentation. *"They struggle but appear not the know what they are doing and then get more and more angry and frustrated"*. They appear to be literally *"fighting for their life"*. Usually the ICU nurses agree on this type of confusion. In fact, almost any clinician who sees a patient in this state considers it to be confusion.

Critical Variables in Assessing Patient Confusion

Nurses consider some factors as more critical than others when differentiating types of confusion in ICU. Three considerations stand out as pivotal in decision-making and

therefore more significant than others. Assessments of patient confusion depends on: whether an explanation can be found, whether a patient is safe and whether a patient is contactable on an interpersonal level. Table 5.1 depicts how these factors apply to various types of patient confusion in ICU.

Table 5.1: Differentiating Types of Confusion

Type	Description	Differentiating Factors
Normal/ expected	*"waking up and being lost"* *"in need of direction"*	Explanation: Yes At risk: Maybe Contactable: Yes
Mildly confused	*"a bit vague"* *"purely disoriented"*	Explanation: Yes or No At risk: No Contactable: Yes
Pleasantly confused	*"in their own world"* *"not with us"*	Explanation: Yes or No At risk: No Contactable: No
Full-on confusion	*"completely off the air"* *"on a different parallel"*	Explanation: Usually No At risk: Yes Contactable: No

Is There an Explanation?

The issue of whether or not the patient is confused minimises in the presence of an identifiable cause and valid explanation. Patients whose behaviour suggests confusion and whose clinical circumstances are clear are more easily assessed than those whose picture is unclear. For example a patient who has had *"two weeks of full on drugs"* for sedation is not expected to be *"with it"*. Such a state is not considered to be true confusion but rather a normal or expected state of affairs. In this sense, identifying a cause relates to normal/expected confusion. Once an explanation is confirmed, for example, emotional distress, anxiety, hypoxia, metabolic states, and post-sedation states, the situation is controllable (a central issue in nursing care, see Ch. 6) and the patient is not necessarily considered to be confused.

In addition to clinical situations and physiological explanations nurses also consider the personality of the patient when determining the cause of behaviour and deciding if a patient's behaviour is indicative of confusion. Sometimes personality factors ascribed to patients are based on stereotypes such as *"nasty old lady who wants her own way"*. However, most nurses in the study recognise that they could not really know much about the personality of patients and therefore only cautiously ascribe motivation to them.

Is the Patient Safe?

The main issue with safety and confusion occurs when patients become aggressive and agitated, behaviour that usually takes the form of pulling at tubes and lines. This behaviour is central in nurses' decision-making about what to do because of safety risks posed by such behaviour. ICU nurses determine the dangerousness of the situation. When patients become aggressive they are haemodynamically unstable and they pull out tubes and lines. Under these circumstances patients seem to be *"Fighting with you"*. Nurses also recognise that *"Patient frustration and anger might be part of being confused, as patients are really ill and in a very strange environment"*. Regardless of explanation, risks to patient safety assume priority and nurses usually sedate and/or restrain patients under these circumstances (fully explained in Ch. 6)

Can I Get Through to this Patient?

In deciding if patients were confused nurses would ask *"Can I get through to this patient?"* Patients are not considered to be confused when the nurses could *"get through"* to them, and reassure them through information and orientation. In this sense patients are not considered confused when they were *"retrievable"*, and the nurses

"could sort something out through a talk and a touch". Behaviourally, they present similar patterns, but their interpersonal interactions and their connections to the external environment are critical deciding points. Most nurses in this study mention the importance of using such interactive data, for example: *"[it depends on] their response to you"*, *"it depends whether you can talk to them and find out what is going"*, and *"I know patients are not confused when I can make contact with them"*.

Problematic Areas: *"Sometimes you just don't know"*

The difficulties in assessing patient confusion are related to expected fluctuations in level of consciousness and diurnal variations in acute confusion, both of which are part of its clinical picture. In addition the clinical picture of acute confusion is complex. However, the lack of established assessment methods also contributes to the difficulties in assessment and lack of agreement both among nurses and between doctors and nurses. These difficulties are problematic because they led to lack of follow-through in planning, implementing and evaluating care for patients who were confused. Changing assessments results in variability of treatment and approaches to care, which could easily exacerbate the patient confusion, creating a vicious cycle leading nowhere.

Complexity of the Clinical Picture

The clinical picture of confusion is quite complex. No single behaviour or dimension is sufficient for the diagnosis and there is marked variability in how it is manifested. For example, confusion is manifested through both increased and decreased motor activity, somnolence and sleeplessness, possibly within the same patient throughout the same clinical episode. Also, as mentioned previously, the symptoms of acute confusion

fluctuate as part of the clinical picture, creating a need to track patterns across various dimensions of behaviour (Vermeersch, 1990b). Given this complexity it is not surprising that each clinician assessing the patient could arrive at a different conclusion, not just because assessment methods are inadequate, but because the patient's mental state is fluctuating.

Another aspect of the clinical picture of confusion is the presence of agitated behaviour. Whether a patient becomes agitated and therefore poses risks is an important considerations when nurses assess confusion. Agitation is characterised by excessive purposeless activity and internal tension (Harvey 1996a); and pain and discomfort are almost always contributing factors to agitation (Harvey, 1996b). Agitated behaviour also may be a function of the cause of confusion (eg, associated with hypoxia) (Foreman, 1991). This adds to the problems of sorting through the complex clinical dynamics of agitation and confusion.

Patients not wanting to be in ICU are often restless and agitated. Agitation had many potential causes and confusion is only one; it may also be a symptom of delirium (Bizek, 1995; Tesar & Stern, 1986). Agitation is frequently used/cited as a sign of a confused state of mind, however it can be both a cause of confusion or a response to it. That is, when patients are unable to work out what is occurring around them, becoming agitated in response to this is understandable. The nurses in this study differentiated *'pure agitation'* from confusion on the basis of whether the patient is contactable. With pure agitation something could be sorted out, whereas with confusion nurses were unable to get to the bottom of it.

Inadequate Systems for Clinical Assessment of Confusion

Clinical assessment is complex and decisions are often based on differing data sources, but in ICU there are numerous mechanical monitoring systems in place to assist nurses and doctors in making diagnoses. No such mechanical systems exists for the diagnosis of patient confusion. ICU nurses must base their decisions on less than adequate data with no established regularity for determining the diagnosis.

In exploring causes of patient behaviour that indicate confusion, ICU nurses in this study rely on their usual systems of assessment, head to toe pain check, for example. They did not ask specifically if patients were experiencing difficulty keeping their thoughts straight, or having trouble working out what was going on around them. Perhaps this is because they did not want to embarrass the patient or did not realise that patients could answer such direct questions about their state of mind.

The Glasgow Coma Scale (GCS) is used for determining level of consciousness and used by doctors in the ICU to assess patient confusion. The GCS was originally developed as a measure of neurological function after brain trauma and commonly used to measure level of sedation, although not designed for this purpose (Hooper & George-Gay, 1997). It is inadequate as a measure of confusion because it relies on patient cooperation and failure to follow commands during testing can be due to decreased level of consciousness (as is assumed in the GCS) or other factors, for example, "giving up syndrome" (Bergbom-Engberg, 1991; Engel, 1968). Of note is an example that comes from a participant in a study into former patients' experiences of ICU (DeMeyer, 1967) who

stated that she could not understand why she needed to squeeze the nurses' hands (an aspect of the GCS assessment) when everything else was being done for her.

Nurses in this study do not rely on the GCS as much as the medical staff. When the medical staff were asked about patient confusion, they used the 'quick check' of mental status of the GCS because it yields immediate data (albeit not entirely reliable given the fluctuating nature of acute confusion). Nurses have longer periods of time in which to assess patient mental status. This enables them to weave assessment into other activities, for example, asking patient to roll over in bed as bed linen was being changed, and place patient behaviour in the immediate context. In this study medical staff were observed to enter the patient's bedside, examine and assess what is occurring and make decisions on the basis of clinical data in the present moment. They did not place their observations within a context of patient behaviour nor consider changes over time.

Nurses most often sought explanations about the behaviour associated with confusion, not necessarily what they thought was causing the behaviour. Often the doctors pursued causes of confusion which not only provided an explanation, but could point to treatment of the confusion especially if the underlying cause was reversible and/or treatable. This could be because nurses and doctors conceptualise confusion differently (Simpson, 1984; Vermeersch, 1990a). Doctors rely on the results of a quick check of mental status, specifically orientation, as part of neurological assessment, while nurses use interactive data, such as how the patients is responding to them, in making their clinical decisions about confusion.

Some medical experts stress the notion of an objective assessment of delirium (eg., Levkoff, Liptzin, et al., 1991), suggesting that interview bias must be avoided at least, or at best be controlled. Because of this doctors often rely on formalised mental status examinations (Wolanin & Phillips, 1981). However, MSEs rely on patient cooperation and the amount of cooperation may reflect relational aspects of the interview, as well as the interviewer's skill and ability to recognise and evaluate cognitive deficits. Nurses in this study used relational and interactive data and the ability of the patient to respond to their overtures.

STRENGTHS OF THE APPROACH USED BY NURSES IN THIS STUDY

In the absence of access to the patient's thought processes and thought content through verbal interaction, nurses in this study used an alternative dimension in the assessment of confusion. Nurses used their ability to make contact with the patient, thus determining if the patient is 'with it' by being 'with us'. Patients exhibiting behaviour indicative of confusion were not considered confused if the nurses could reach them through interpersonal interaction. The use of patient-nurse interactive data to determine both presence and degree of confusion places the assessment within the social context of the immediate situation.

Nurses use of interactive data presents an opportunity for on-going assessment that constructs a moving picture, rather than a snapshot photograph obtained with a quick, one-off check of mental status. Tools and instruments may capture a snapshot but the entire length of the moving picture is necessary to determine the presence and extent of patient confusion.

A key aspect of the moving picture is how patients attend to their environment and the interactive data nurses use provide relevant information about such attentiveness. By considering whether the patient was 'contactable' on an interpersonal, interactive level the ICU nurses were assessing the patient's ability to attend to the external environment, a hallmark sign of delirium and is a valid indicator of confusion. An advantage of using clinical data related to the patient's ability to respond is that relevant information can be sought as ICU nurses go about their usual nursing activities.

Interacting with patients as a process for assessing confusion is based on a dimension of intellectual functioning termed "social accessibility" by Fisher & Pierce (1967). This aspect of mental functioning refers to a person's ability to respond appropriately and interact effectively with others. A response that fits the occasion is indicative of the patient's ability to work out what is happening around him or her, that is to be accessible socially. Social accessibility is related to another intellectual dimension, cognitive accessibility (Fisher & Pierce, 1967). Cognitive accessibility refers to orientation, level of consciousness and intellectual alertness.

In her study of nurses' assessment of patient confusion Wolanin (1977) used the negative form of these concepts, that is, "social inaccessibility" and "cognitive inaccessibility" to express how nurses described confusion. Wolanin & Phillips (1981) describe cognitive inaccessibility as "not with us" and social inaccessibility as "un-cooperative". In comparing doctors and nurses descriptions of confusion physicians described cognitive inaccessibility while nurses describe social inaccessibility (Wolanin & Phillips, 1981). In

this study nurses used both cognitive and social accessibility in assessing patient confusion.

The use of interactive data has been noted in other studies investigating patient confusion. Yeaw & Abbate (1993) found that nurses rate patient response as the third most significant factor, after disorientation and inappropriate verbalisation, in their conceptualisation of patient confusion. In Palmateer & McCartney's study (1985), cooperation was considered a sign of patient orientation and social interaction was used to determine confusion. In a study aimed at identifying nursing actions in response to confusion, nurses used interactive measures to assess patient confusion (Williams, et al., 1979). In evaluating screening tests for delirium Anthony, Von Korff, Niaz & Folstein (1985) found that accessibility, that is, how the patient engaged with the interviewer, demonstrated sensitivity and specificity in detecting delirium.

CHAPTER CONCLUSION

The differentiation between confusion/delirium and normal/expected cloudiness of most ICU patients is subtle. Patients who have been heavily sedated or anaesthetised are expected to be confused as they awaken and establish contact with the outside world and ICU nurses frequently reach out and help the person find him/herself. When they cannot contact the person they consider that the patient is confused.

The difficulties with assessment of confusion that are documented in the literature are demonstrated in this study. Poor conceptualisation of confusion, lack of established systems for clinical assessment of confusion and a fluctuating clinical picture all

contribute to difficulties in clinical assessment. Clinical realities in ICU compound the difficulties as patients are intubated and unable to speak.

However, nurses in this study demonstrate ways to address issues, overcome difficulties and meet challenges of clinical assessment of patient confusion. Through the use of interaction with the patient the ICU nurses demonstrate a process for assessment in ICU based on valid content regions, that is, the use of attentiveness to the environment as a clinical sign of confusion.

Chapter 6

Nursing Care of ICU Patients Who Are Confused: *"Trying to keep the situation calm and controllable"*

INTRODUCTION

For the purpose of clarity in presenting the results of this study, nursing assessment and nursing care have been divided. This separation is somewhat artificial because nurses in this study addressed clinical problems associated with confusion while they were attempting to determine whether the observed patient behaviour meant that the patient was, in fact, confused. For example, nurses attempts to decrease risks to patient safety posed by agitated, restless behaviour could not be delayed until a full appraisal of the clinical problem was undertaken. While observing at the bedside during the field study the differentiation between assessment and care was not clearly discernible. However, during the interviews, when asked to reflect on nursing care, these nurses were able to discuss patient assessment and nursing care independently. The approaches to nursing care that were observed during the fieldwork were further elaborated during the interviews.

The chapter begins with an overview of the literature about the care of hospitalised patients who develop acute confusion. This care includes both prevention of confusion and management of its symptoms and consequences. The findings of this study are presented next, followed by a discussion of how these findings relate to the literature on the care of confused patients. The final section of the chapter concludes that ICU nurses in this study were most concerned with maintaining control of the situation when patients

exhibited behaviours indicative of acute confusion, including the prevention of potential complications. Attempts to prevent confusion, as suggested in the literature, and tested through available research, are limited in this ICU setting.

LITERATURE ON TREATMENT AND CARE

The literature related to the care of confused patients is summarised around four major goals: the reduction of occurrence through prevention of acute confusion; an identification and treatment (if possible) of the underlying cause/s of confusion; the management of symptoms of confusion; and the prevention of its consequences, such as falls and involuntary extubation. This schema not only provides a useful way to present the literature but also is a practical way to compare the results of the study to the existing literature.

Research on nursing care of confused hospitalised patients is limited (Cronin-Stubbs, 1996) and most of what has been reported relates to elderly patients. These studies are included as they pertain to the findings of this study. However, little research has been focused specifically on the actual care of confused patients in an ICU environment. Therefore, the recommended nursing interventions about how to care for people in this clinical situation are largely untested.

Reducing Incidence through Prevention

Ideally, patient confusion could be prevented in hospitalised patients. In fact some experts assume that acute confusion is predictable and preventable (Wolonin and Phillips, 1981), as well as controllable and reversible (Bone, Hayde, Levine, McCartney, Barkin,

Clark, et al., 1995). Prevention of acute confusion rests on an ability to identify and control its predisposing and contributing factors. Awareness of these factors leads to minimising their impact (Geary, 1994; Hansell, 1974; Kornfeld, 1969b; McKegney, 1966; Tess, 1991). Once identified these risk factors could be assessed and controlled, if possible. For example, in the critical care context preparation of the patient for the ICU experience, where possible, is recommended as a way to decrease the development of confusion (Eisendrath, 1980; MacKellaig, 1987; Taylor, 1971).

Prevention is challenging because factors which predispose patients to confusion are numerous and their relative influence and combination remains unclear (Rasmussen & Creason, 1991; Williams, et al., 1979;). Also, some factors that correlate to the development of confusion are not amenable to change through intervention, for example increased age and gender, easily identifiable, but not able to be altered. Nevertheless identification of hospitalised patients who are most vulnerable would be helpful to staff caring for them by alerting them to the increased potential for confusion.

Studies aimed at such identification, for example, Gustafson, et al., 1991; Williams, Campbell, Raynor, Musholt, et al., 1985b, are able to highlight risk factors, thus enabling a risk factor assessment. This research has been conducted with elderly patients with hip fractures who are hospitalised for surgical repair of the fracture. While no reliable predictors were found there were identifiable predisposing factors, such as pre-existing conditions of cerebrovascular disorders, increased age, urinary problems, and mobility prior to and following surgery, (Gustafson, et al., 1991; Williams, et al., 1985b). Gustafson, et al's (1991) attempts to reduce the incidence of patient confusion by

increased brain oxygenation did not result in a significant decrease in confusion. They concluded that the most vulnerable patients would develop confusion irrespective of attempts to prevent it.

Controlled studies specific to intensive care have attempted to reduce the incidence of post-cardiotomy delirium by preparing patients as to what mental changes they can expect post operatively (Owens & Hutelmyer, 1982), by instructing family members to orient patients during the post-operative period (Chatham, 1978) and through a planned reorientation program (Budd & Brown, 1974). The reorientation program resulted in a lower incidence of delirium. Neither of the other two studies resulted in a significant change in mental status, although patients who were informed of what to expect felt in more control (Owens & Hutelmyer, 1982). Patients oriented by their family (Chatham, 1978) experienced less confusion, but were no more alert or less agitated than the control group during the post operative period. The results of these controlled trials are inconclusive due to differing research goals, small sample sizes and contradictory results. Although prevention of confusion may not be possible, identification of those patients most at risk may be worthwhile.

Identifying and Treating Underlying Cause(s)

By definition acute confusional states, or delirium, have underlying causes, usually physiological, and an aetiology should be sought as soon as confusion is diagnosed (Adams, 1984; Geary, 1994; Kornfeld, 1971; Lipowski, 1990; Tesar & Stern, 1986). There are numerous possible causes of confusion in hospitalised patients, and usually a combination of more than one factor is implicated. Possible causes include: medications,

especially polypharmacy, infections, fluid and electrolyte imbalances, metabolic disorders, anxiety, pain and environmental factors. In ICU these factors are exacerbated by serious illness, an alien environment full of noises and lights, and active medical intervention including the use of pharmacological agents that are known to contribute to confusion (eg., anticholinergic medications).

Patient agitation often accompanies confusion, either as a cause (Crippen, 1990; Foreman, 1991) or as a symptom. In discussing patient agitation in ICU, Harvey (1996b) warns that the identification of cause is vital; for example, if a patient is agitated due to hypoxia then sedation may make him or her worse. Likewise Reigle (1996) warns carers that inadequate pain management could precipitate agitation and/or confusion in ICU patients. These serve as good examples of the need for vigorous exploration and investigation into the cause of patient confusion and the behaviours associated with it.

Preventing Consequences

Acute confusion is associated with longer hospital stays (Fulop, et al., 1987; Thomas, et al., 1988; Shedd, et al., 1995) as well as higher morbidity and mortality rates than hospitalised, non-confused patients (Lipowski, 1983; Tess, 1991; Weddingtom, 1982). However, it should be noted that increased hospital stays, morbidity and mortality may be higher in patients with confusion because its presence indicates significant underlying medical problems (Francis, et al., 1990).

Regardless of longer term effects, the immediate consequences of acute confusion in the hospitalised patient are related to threats to patient safety and nurses identify that they

respond to confusion with increased surveillance (Williams, et al., 1979). When ICU patients are confused and unable to make meaningful contact with the external environment their natural instincts can take over, such as pulling at a line or attempting to get out of bed. Confused and agitated patients who are mechanically ventilated are at risk of unintentional extubation (Coppolo & May, 1990; Pesiri, Stewart, Kobe & Stewart, 1990; Tess, 1991).

The primary means by which the consequences of confusion are prevented is behavioural control through medications (Crippen & Ermakov, 1992; Fish, 1991; Geary, 1994; Kleck, 1984; Kornfeld, 1980; McCartney & Boland, 1993; Nadelson, 1976; Weber, et al., 1987; Westcott, 1995) and through the use of mechanical restraints (Harvey, 1996b). Adequate sedation of ICU patients is a vital aspect of proper medical management and nursing care for reasons of patient comfort and carrying out treatments. Sedation may be the only effective option for ICU patients' safety when they are delirious and agitated (Ziehm, 1991). The use of mechanical restraints is accepted practice for the protection of ICU patients who are distressed, delirious and/or at risk for self-extubation. (Mion, 1996; Ortiz-Pruitt, 1995; Reigle, 1996).

Behavioural control through sedation is accepted as standard practice in ICU and its patterns of administration have changed from complete to partial sedation in response to changing technology in mechanical ventilation (Westcott, 1995). However behavioural control through mechanical restraints, although accepted practice in ICU, is controversial because restraints are recognised as increasing agitation (Fletcher, 1996; Mion, 1996; Nadelson, 1976; Reigle, 1996; Sullivan-Marx, 1994).

Managing Symptoms

The symptoms of confusion are related primarily to attention and disorientation. Therefore one way of helping confused patients is to orient them with an adequate flow of information which is personally meaningful to them (Budd & Brown, 1974; Lipowski, 1990). Not only does such information reassure confused patients but it also assists them in interpreting their environment (McCartney & Boland, 1993; Nadelson, 1976; Nagley & Dever, 1988). Explanations, directions and reassurance are identified by nurses as prime therapeutic activities when patients are confused (Williams, et al., 1979) and these activities are also perceived by nurses as least difficult to enact (Williams, Campbell, Raynor, Musholt, et al., 1985). Other activities identified as helping in addressing problems of confusion are continuity of care (Fisher & Moxham, 1984; Hansell, 1984; Taylor, 1971), although this was identified by nurses as more difficult to accomplish (Williams, Campbell, Raynor, Mlynarczyk, et al., 1985). Environmental manipulation, especially the reduction of environmental stress, alsois identified as helpful to confused patients (Eisendrath, 1980; Lipowski, 1990; McCartney & Boland, 1993; Nadelson, 1976). Explanations and reassurance to family members, as well as involving family members in the patient's care are also recommended (Kleck, 1984; Lipowski, 1990; Weber, et al., 1985), but considered by nurses as difficult to carry out (Williams, Campbell, Raynor, Mlynarczyk, et al., 1985).

NURSING CARE: FINDINGS OF THIS STUDY

The ICU nursing care of patients who are confused that was observed in this study through fieldwork and discussed in the interviews centred around two major approaches: controlling the situation, which ranged from verbal directions to mechanical restraints;

and calming the patient. Both approaches involved being with the patient at the bedside, the standard manner of nursing care in the unit. The choice of one type of approach over another depends on patient degree of responsiveness, which connects to the notion of social accessibility, discussed in the previous chapter.

Controlling the Situation: ***"A firm hand and a firm voice"***

Patients who were pleasantly confused and/or quietly confused are less problematic for nurses because they are more quiet in their behaviour than those who are physically active/agitated. In order to maintain patient safety nurses need to regain and maintain control of the situation so that patients would be safe; patient safety is always of foremost concern to the nurses. In keeping with the ethos of the unit this control is best achieved when done in a calm, matter-of-fact manner. Nurses need to maintain their composure in caring for confused patients. Doing so means that they have a better chance of controlling the situation.

Taking Charge: "Giving them directions"

Confused patients sometimes seem to be working against the nurses who are caring for them. When patients are pulling on tubes and are not listening they seem to be "*fighting you*", as succinctly expressed by one of the nurses. While nurses in this study recognise that patient behaviour that was 'at odds' with their care is not necessarily intentional ('intentional behaviour' often is not judged as confusion, see Ch. 5), they did seek ways of getting the patient's attention so that they could work together. These ways of getting the patient's attention are quite directive and prescriptive and aim at taking charge and gaining control of the situation.

When nurses take charge they would say to patients *"I'm trying to help you and I'm not getting anywhere"* because *"we are not working together"*. *"I'm doing this and you are doing that and all we are doing is wearing each other out"*. In being instructive and directive like this nurses are attempting to help patients understand what was happening, in an effort to connect patients with the environment and prevent them from harming themselves. The nurses are providing the patient with a frame of reference, explaining what was happening and getting their attention in order to gain control over the situation.

In taking charge nurses use a *"firm hand and a firm voice"* as they instruct patients to *'put your hand down'* and *'don't pull on that tube'*. On the surface this behaviour of taking control is quite instrumental and counter to expressive notions of caring, that of being the 'nice, kind' nurse. However, the nurses in this study describe such behaviour as a way of getting a patient's attention in order to get him or her to work with them. That is, nurses use taking charge as a way of establishing contact and building a relationship based on cooperation.

This approach is effective whenever interpersonal contact could be established providing a connection/link between them and making the patient responsive to the nurse. The patient would respond by paying attention and beginning to work cooperatively with the nurse. In this way *'taking charge'* is a means of establishing the relationship built on the notion of working together and is linked to the patient's cognitive and social accessibility.

Sometimes the approach of 'taking charge' came in the form of a firm instruction to a patient to *"stop that straight away."* If this met with success in establishing contact and gaining the patient's attention the nurse would temper the firmness in his or her voice, the partnership having been established. But if the patient did not respond then it is considered best not to try this approach again immediately. It is a 'one chance' tactic.

Keeping Them Safe: "My main goal is that they don't hurt themselves"

The safety of patients is always important to nurses when caring for patients in any setting. ICU care and critical illness often increases risks to patient safety because of instability of patients' physiological status and clinical situations that rapidly change. When compounded by patient confusion threats to patient safety may reach dangerous levels. Confused patients are at risk physiologically because their confused state is often accompanied by hypoxia, arrhythmias and metabolic imbalances. Nurses in this study are acutely aware of this and kept patient safety uppermost in their minds at all times.

In addition patient confusion often results in the potentially dangerous behaviour of pulling at tubes and lines. When this happens prevention of such actions takes precedence over all other concerns and nurses look for ways to protect the patient from harm. Sometimes the only available means of doing so is to restrict patient movement, either through pharmacological means with sedation or mechanically with physical restraints.

Sedating: "Bombing out" or "Wiping out"

Sedation of patients in ICU is commonplace and not simply reserved for those patients who are at risk of harming themselves due to agitation and/or confusion. However the

sedation of patients who are confused is a option for the nurses whenever *"talking doesn't work and you need drugs to settle them down"*. Sedation with drugs can help patients *"get through the fogginess"* of confusion.

Nurses recognise that sedating a confused patient has potential difficulties associated with it. It could compound the confusion because ICU patients already have so many *"drugs on board"* which may be contributing to the confusion in the first place. If the confusion is associated with a neurological condition then sedation may alter results from neurological observations and assessment and therefore not help the situation.

Some nurses and doctors in the study believe that nurses sedate confused patients *"for their* [the nurses] *own sake*", for example, because *"the patient can't be all over the place"* or the nurse cannot tolerate the patients' confused behaviour because of the risks it poses. However, most nurses agreed that sedation is used when the patients were compromised physiologically and/or hurting themselves. When there is a risk of injury, obstruction and involuntary extubation, nurses would consider using sedation as a means of controlling the situation. Also, whenever that patient is in need of a rest sedation is considered an option in the care of confusion.

The decision to use sedation to control a confused patient is dependent on adequate medical orders for the medications and disagreements between doctors and nurses could ensue (This is introduced in Ch. 4, the ethnographic account, and further explained in Ch. 7, cultural practices).

Restraining: "If the patient is pulling at tubes, you can't allow it"

Mechanical restraints were used with confused patients during the field study and they were discussed in detail with each of the nurses who were interviewed. During fieldwork the use of restraints had the potential to cause friction between staff within the unit, usually between someone in authority and the nurse looking after the patient. Frequently, someone in authority, for example, the intensivist or the nurse in charge, would instruct the nurse at the bedside to remove restraints because he or she did not *"like them"* or did not *"believe in them"*.

The notion that the use of restraints is a matter of faith, that is, believing/not believing in them and agreeing/not agreeing with them, was reinforced during the interviews when nurses declared their position as being in the camp of nurses who *"use them"*, therefore believing in restraints. All nurses who were interviewed share this belief and each discussed reasons for the use of restraints, despite *"hating them* (restraints)" or being *"upset"* by having to use them.

ICU nurses use mechanical restraints on patients, usually on their wrists, to stop them pulling at tubes and equipment in order to maintain safety of patients. As one nurse put it *"one involuntary extubation is one too many"*. Whenever patients are pulling at lines and tubes and the nurse caring for them cannot be at the bedside, restraint of the patients' hands is considered to be the best option. When patients are pulling at tubes, are physiologically unstable and/or have line access difficulties, restraints are considered the way to maintain their safety.

Mechanical restraints are used most often when the unit is very busy or patients are "doubled-up" (two patients to one nurse), either for the entire shift or because of nurses' meal breaks. The use of restraints enables nurses to *"get the work done"* which cannot wait for the cooperation of the patient. When the patient is physically restrained nurses are freer to *"look at other issues"* and perform basic ICU care such as suctioning patients.

Calming the Patient: ***"The soothing hand in the dark that helps them find their way through themselves"***

Another way of working with patients who are categorised as confused are approaches aimed at calming down patients and helping them regain control within and of themselves. These approaches help patients to relax and support them through the confusion in a comforting, consoling manner.

Reassuring: "A touch and a talk"

This way of approaching patients who are confused is comforting through 'being with' the patient, that is, being present. Characteristically this approach involves sitting and talking with the patient, holding his or her hand and speaking softly and soothingly in an attempt to *"settle him down"*. Reminding patients that they are not alone and the nurse is continuously present and there to assist them serves to calm patients. Orienting patients to the circumstances and explaining the environment and what is happening are other common ways in which nurses reassure patients. Nurses do this by continuously talking to patients, telling patients what is happening and expressing confidence that all is going well and encouraging with phrases such as *"you will get through this"*.

This approach was especially helpful when patients' confusion is in the form of being lost and in need of direction. Explaining that *"this is what happens"* (ie., what is usual for ICU) helped to give the patient a *"frame of reference in which to operate"* and helped to allay their fears about what was happening to and around them. Although this approach was described eloquently in the interviews, ICU nurses were not often observed sitting at patient's bedside talking to them. In fact sitting by the bedside could *"prevent you from getting your work done"*.

Acting as if the patient is not confused: "Going along with it"

Nurses remind themselves that there is a functional, rational person underneath the confusion and sometimes they simply behave 'as if' patients are not confused even when they judge suspect that they might be. When successful this approach helps to calm down patients. This method is taken when no solution to the confusion could be found and is based on the nurses' acceptance that *"sometimes your don't need to solve it"*. *"When patients are in a world all their own why try to orient them?"* Sometimes ignoring it would take the form of providing a distraction for patients, such as giving the patient something 'safe' to occupy their hands, but this was not usual practice.

Getting the family to help: "They can talk about normal things"

Some nurses recognise that the presence of friends and relatives are soothing and therefore helpful in calming down patients who are confused. Family members, and others who know the patient well, are familiar; their voices are known to the patient and they can sooth her or him through their reassuring presence.

Although mentioned in the interviews and witnessed occasionally during field study, this approach was not used very often because nurses were mindful that family members are coping with a loved one who is critically ill and are facing the uncertainty that such circumstances create. Some of the nurses feel that family members would be burdened by an active involvement in the patient's care and therefore would assess their ability to cope before asking them to become involved. When family members were judged as coping with the situation, were prepared to sit by the bed (and even rotate visiting hours so someone was always there) and were assertive enough to get help when needed, then the nurses would consider using them in the care of confused patients. However, this was the exception rather than the rule.

PROBLEMATIC AREAS

A number of issues are raised by the data on nursing care in this study. Some are documented in the literature, for example the use of mechanical restraints, while others are implied.

"Confused patients are so frustrating"

From the beginning of this study, even before fieldwork commenced, the ICU nurses in the unit talked about their frustration when dealing with patient confusion. They were hopeful that the research would reveal some insight into what they perceived to be a challenging and difficult area of their practice.

During the fieldwork it became evident just why ICU patients who are confused are so challenging to the nurses caring for them. Some of the frustration is related to the

difficulties encountered in the clinical assessment of confusion and in particular its lack of a systematic way of judging patient confusion (Ch. 5). In assessing and caring for confused patients there are not *"physiological or technical skills that can be manipulated"*.

The anxiety felt by nurses when they did not know what to do for a confused person was evident during observations, and confirmed by interactions during the fieldwork and interviews. The nurses own perceived deficiency of skills for managing patients who were confused contributed to their anxiety and frustration. These patients placed demands on and exhausted their resources quickly, leaving them feeling helpless and emotionally drained.

Other aspects about caring for confused patients that frustrated nurses are that these patients *"don't behave controllably"* and *"they control you; you don't control them"*. Their behaviour is unpredictable and therefore less manageable. They are untidy, restless and *"all over the place"*.

The incessant need to control and calm confused patients also frustrates ICU nurses. They felt that they need a great deal of patience because nursing care approaches such as re-orientation and verbal reminders (eg., to not 'pull at tubes') must be done repeatedly if they are to meet with success. ICU nurses like the challenge of change and the repetition of caring for confused patients can become monotonous and uninteresting. Likewise confused patients are *"time-consuming because you had to always keep an eye on them*

so that they don't pull something out". If nurses are feeling a bit drained of personal resources, then confused patients would wear them out even faster.

The challenges of this care are exacerbated when no progress was made, that is, if the patient continued to pull at tubes and remained restless. The defeated feeling of *"getting nowhere"* was reiterated frequently by the nurses in the study, expressed in phrases such as, *"I've failed them and failed myself"*, *"nothing changes"*, *"we're getting nowhere"*, and *"not making any progress"*. Nurses were heard saying *"I just can't get him right"*, meaning the patient is all over the bed, restless and unable to be calmed, and the nurse caring for the patient literally *"can't get near him"*. The sense of frustration and failure is best expressed by the nurse who said, *"I just can't give the kind of care I want"*.

Maintaining Composure

Because of the frustration of dealing with confused patients nurses were conscious of the need to remain calm and composed when caring for them. However sometimes *'Taking control'* degenerated into constant shouting at patients to *"stop that right now"*, *"I am getting really cross at you"* and *"you are being naughty"*. At times the shouts took the form of threats such as *"Touch that again and I'll tie your hands down"*. The nurses who behaved in this way were violating one of the norms of the unit, that is, they were are at risk of losing their composure.

In the interviews nurses expressed recognition that a nurse who was heard shouting at patients was *"losing it"*, yet during fieldwork no action was observed that offered support for the nurse. In the interviews nurses said they did not intervene to offer

support for nurses who were *'losing it'*, by shouting at patients, because that was not 'their' patient and they feared doing so may further upset that nurse.

"Restraints don't work ... but we use them anyway"

All of the nurses interviewed in this study commented that mechanical restraints make patients worse because restraints add to their agitation. This sets up a vicious cycle as patients who become agitated when confused are the ones that need to be restrained and restraints then exacerbate their agitation. Nurses realise that they are creating as many problems as they are solving when they applied mechanical restraints; *"It's a disaster...like putting an epileptic in a straight jacket"*.

However the responsibility that ICU nurses bear in relation to safety of their patients overrode their 'common sense' that tying down an agitated, anxious person is not going to help him or her to relax. The safety of patients was potentially compromised when the unit was very busy, patients were *"doubled up"* or when nurses had to leave the unit, for example for a meal break.

The manner in which the nurses discussed the use of mechanical restraints and the controversy created by their use reflects similar controversy in the literature. During the field study it was common to hear someone in authority instruct a nurse looking after a patient to remove the restraints. Interestingly, there is no research evidence to demonstrate that restraints offer protection and prevention from injuries, thus making questionable any claims about their therapeutic value (Ortiz-Pruitt, 1995; Reigle, 1996) There are documented consequences in the use of restraints, the most common being

that their use increases patient agitation (Fletcher, 1996; Reigle, 1996; Sullivan-Marx & Strumpf, 1996). In addition, unplanned self-extubation, the very event nurses are trying to prevent with the use of mechanical restraints, occurs even with their use (Coppolo & May, 1990; Grap, Glass & Lindawood, 1995; Mion, 1996). These paradoxes, documented in the literature, are acknowledged by the nurses in the study. However, awareness of the issues did not deter the ICU nurses use of restraints.

Limited Ways to Monitor Patient Response

Many nurses could not gauge if what they were doing in attempting to care for confused patients made any difference. Unless the patient could make an interpersonal connection and respond on that level, nurses were left wondering. There was little or no reinforcement for what they are doing, unless they could establish contact with the patient.

CHAPTER CONCLUSION

The standard "textbook" descriptions of how to care for an acutely confused person, such as those found in the nursing literature, may not be practicable in the ICU environment. For example, nursing interventions suggested in the literature, such as speaking in a low-pitched voice and providing meaningful stimuli (Geary, 1994; Kelly, 1996; Foreman, 1984), may be difficult if not impossible to enact in an environment such as ICU. Thus the recommended nursing care for people who are confused is problematic, given the nature of an ICU.

When the nursing care of confused patients as revealed in the study is placed within the schema of the four goals cited previously in the chapter it becomes evident that the main concern of the nurses in the study is the prevention of consequences of confusion. Threats to patient safety such as pulling at lines take precedence over other concerns. An exacerbation of physiological instability that occurrs as a result of agitated, restless behaviour has to be controlled. In fact, control was the primary issue of the nursing care of confused patients in ICU. This control could be interpersonal (*'taking charge'*) or mechanical (physical restraints).

In relation to the goal of preventing patient confusion nurses in the study demonstrate awareness of factors which precipitated confusion. A good example of this is sleep deprivation. Although nurses recognise that patients were at risk of exhaustion from lack of sleep and that such a scenario contributed to confusion there was uneven effort placed on promoting sleep. This is noteworthy because ICU nurses are accustomed to orienting their care toward the prevention of iatrogenic complications of ICU treatment. However, prevention of acute confusion did not feature as a priority in their care. Their priority is to *'keep patients alive'*.

Closely associated to prevention is the identification of underlying causes(s) of confusion, another goal of treatment, because prevention is aimed at control of factors which contribute to confusion, such as hypoxia. Once it is established that the patient is confused, identification of the cause/s of confusion is no simple matter. There are usually a combination of factors. Identification of them is hampered by a lack of complete history of the patients. For example, with one patient in the study it was

suspected that she might be withdrawing from an addictive substance, yet this hunch could not be confirmed or denied because there was inadequate information about the patient's previous behaviour.

Managing the symptoms of acute confusion is attempted by nurses when they orient and reassure patients and help patients to interpret the environment. The approach of a calming voice and a soothing touch, as described by nurses and observed in the field study was aimed at reassuring patients and orienting them, thus managing the symptoms of confusion.

The general care of confused patients is aimed at controlling the situation either through their relationship or through mechanical means. When nurses do not evaluate and recognise the delirium, they are left to deal only with behaviours (Sullivan-Marx & Strumpf, 1996). When they did not understand what was happening to a patient, as was often the case in suspected confusion, control was the response.

Chapter 7

Cultural Practices and Nursing Care: *"It gets missed here"*

INTRODUCTION

The phrase *"it gets missed here"*, overheard on more than one occasion during the course of the field study, pertains to various aspects of patient treatment that had real or potential consequences but were overlooked, forgotten and sometimes dismissed as irrelevant by the ICU staff. Two occasions stand out in particular in illustrating and explaining just what gets missed in ICU.

Patricia

The first instance occurred during a trial of extubation with a young woman, Patricia, who was diagnosed with end-stage leukemia. She had been in this ICU earlier in the year, was intubated and treated aggressively, survived and returned home to be with her family for three months before becoming critically ill again. The current admission to ICU had been five days thus far. While not deteriorating rapidly, the intensivists judged that she was not progressing medically (*"she is going nowhere"*) and decided to trial her off the ventilator. There was fear that lung deterioration might leave her ventilator-dependent, a scenario best avoided because this usually resulted in a prolonged ICU stay and often ended with the death of the patient. The intensivist extubated her, instructed the nursing staff of the plan for a *"trial*

of extubation", wrote medical orders in the patient's record and then departed from her bedside.

In a short period of time Patricia became quite restless, agitated and combative. Her arms were flailing, she appeared to be hallucinating and her speech was garbled and incoherent. Her mouth was badly ulcerated from chemotherapy, thus rendering speech even more difficult. Her breathing became increasingly laboured, her oxygen saturations dropped and her distress mounted. Her looks of terror and pleading, along with her respiratory distress, were creating mounting concern for the nurse caring for her. Other nurses who were equally concerned came to her bedside in an attempt to comfort Patricia. Fortunately the unit was quiet, allowing a few nurses to be available. Another intubation seemed likely and would be not only a setback but also another trauma for Patricia. As they conferred about what to do, some of the nurses questioned what was going on and why Patricia had been extubated. In the midst of this agonising scene one of the nurses looked up and asked *"What does she want?"*, inquiring about Patricia's desire for continuing treatment. A quiet reply from another nurse at the bedside was simple and poignant. *"Surely, not this"*, was all she said.

A number of nurses knew that Patricia had discussed her wishes with her family following the previous admission to ICU. Her expressed desire was to not 'go through all of this again'. These nurses seemed to think that Patricia had specifically asked to be left in peace if she was ever to become

critically ill again. As the discussion ensued as to what Patricia did and did not want in the way of treatment, the team leader on duty looked at me sadly and said, *"It gets missed here"*, meaning the patient's wishes had not been taken into consideration.

Brenda

Another example occurred with patient, Brenda, who was becoming increasing restless throughout the morning. She was pulling at lines and tubes and appeared quite agitated, striking out and hitting one of the nurses across the chest. Because she was intubated she could not tell the nurses what was contributing to her obvious distress. One of the nurses commented that this patient's behaviour was out of character as she knew Brenda to be a *"sweet, gentle person"*.

It wasn't until the morning medical rounds that one of the doctors, concerned about Brenda's restlessness and agitation, checked her medical record and noticed that she had received no pain medication in the previous 24 hours. Within that time she had undergone major abdominal surgery and received minimal analgesia post-operatively. Again, the nurse looking after her looked at me and simply stated *"it gets missed here"*, this time meaning this patient's pain and discomfort. The nurses around Brenda's bed agreed that the absence of a continuous infusion of analgesia had played a part in the oversight. Once the patient received pain medications she settled and went off to sleep, her restlessness and agitation had abated.

These instances serve as illustrations of how the patterns and practices of this ICU shape the care of its patients. In the first scenario there was an absence of the patient's voice in continuing or stopping treatment, alluding to the numerous ethical dilemmas brought about by assertive treatment and technological care advances. The second situation highlights how nurses in ICU become accustomed to routine medications, usually through continuous infusion. In part because the patient did not have an analgesic infusion, almost standard practice in ICU, the nurses simply overlooked the level of pain expected in a post-operative situation. They were accustomed to having pain addressed. This is not a condemnation of these nurses and doctors, but rather some revealing evidence that attending to the routine can sometimes blind them to what is of importance to the whole clinical picture of the patient.

The chapter begins with a brief discussion of the ICU environment as stressful to both staff and patients. The technologically focused nature of the ICU environment is discussed next, with emphasis on the bedside nurse as the humaniser of the environment. The process of humanising the environment occurs through interpersonal interaction, although not necessarily through spoken communication between nurse and patient as this is compromised in the ICU setting. Such interaction holds promise for "knowing the patient" (Jenks, 1993; Jenny & Logan; 1992; Tanner, Benner, Chesla & Gordon, 1993) as a person and moves the relationship away from a distanced clinical level. However, the results of this study, presented next, demonstrate that knowing the patient can be mitigated by cultural practices. The nursing practices of patient allocation as well as intradisciplinary and interdisciplinary collaboration are used to illustrate the influence of the ICU culture on practice.

THE ICU ENVIRONMENT

The ICU environment has long been recognised as stressful to both patients and staff (DeMeyer, 1967; Gowan, 1979; Kornfeld, 1969a, to name a few early works). Patients in ICU are not only critically ill, extremely vulnerable and almost completely dependent on those caring for them, but also they are subjected to an overload of environmental stimuli (Felver, 1995).

For nurses, the stress of ICU is related to caring for dying patients, dealing with the patient's family, interpersonal relationships with colleagues, thephysical environment, and workload (Adomet & Killingworth, 1994; Crickmore, 1987; Schaefer & Peterson, 1992). Nursing care within the ICU environment is challenging because of lack of predicability of working with unstable patients (Bergbom-Engberg & Haljamae, 1993; Mitchell, Shannon, Cain & Hegyvary, 1996) and the need to remain in control in the face of such uncertainty (Leathart, 1994b). The environment attracts nurses who enjoy the variability of the work, are able to work competently with the technology and who enjoy one-to-one care with individual patients (Turnock, 1989).

Technological equipment dominates the ICU environment sometimes to the extent that it eclipses patients, who cannot be seen for the machines. In fact, technology is often considered to be an ICU's defining element (Shortell, Zimmerman, Rousseau, Gillies, Wagner, et al., 1994), that which distinguishes it from other health care settings. In the ICU environment technology helps to make what is unpredictable more controllable. Technology is perceived to be invulnerable, objective and detached, almost opposite to the vulnerable, subjective patients in ICU (Cooper, 1993). The extent to which

technology dominates ICU can be both dehumanising to patients, and distancing of nurses from patients. Assertive and invasive efforts to cure the patient in ICU may further isolate the patient by causing distress and pain.

The dehumanising aspects of ICUs have been discussed in the literature since their inception. In an early publication about the ICU environment Schroeder (1971) commented that he noticed that the "nurses were too busy to hold the patient's hand or to explain what was happening" (p. 35). More recently the American Association of Critical Care Medicine has recognised the need to make the ICU environment more humane primarily through personalising care for patients (Harvey, Ninos, Adler, Goodnough-Hanneman, Kaye & Nikas, 1993).

Nurses are central to humanising the ICU environment (Cooper, 1993; Ray, 1987; Stanton, 1991; Urban, 1993). Although ICU nurses may identify with the powerful, invulnerable technology rather than the powerless vulnerable patient, they are challenged to make manifest the subjective, involved nature of caring while maintaining technological competence. Nurses are morally obliged to maintain care in the face of these circumstances (Gadow, 1988). In this sense ICU nurses confront the dehumanising aspects of ICU through blending technological competence with human care (Benner, Tanner, & Chesla, 1992; Cooper, 1993; Ray, 1987).

Such a blend requires engaging with the patients, acknowledging a shared humanity and mediating between technology and patient personal needs. "Technological care" (Ray, 1987) involves an identification with human frailty in an environment which attempts to

overcome it. It is challenging for ICU nurses to maintain a connection with the patient under such circumstances. Identification with the patient and knowing the patient may leave nurses feeling vulnerable, yet the technology remains invincible. A patient's mental confusion adds to the challenge in ICU because it further sequesters the patient, rendering her or him inaccessible to the outside world.

How can ICU nurses meet such challenges and obligations? Personalising nursing care and meeting patients' personal needs are accomplished through interpersonal interaction between nurses and patients. Engagement with ICU patients requires nurses to interact under circumstances where usual modes of communication are seriously compromised.

There is a tendency for ICU nurses to keep interactions brief, and focused on procedures and oriented toward what they were doing and not necessarily toward what the patient is experiencing (Ashworth, 1980; Leathart, 1994a). Similar findings, that is, short interaction time and emphasis on physical care rather than psychological care, are reported in studies from other nursing care settings (eg., Macleod-Clark, 1984; Armstrong-Esther & Browne, 1986).

Meaningful interaction between nurses and patients in ICU can be particularly difficult and frustrating (Ashworth, 1987) for example, the amount of interaction decreases when the patient is not responsive (Armstrong-Esther & Browne, 1986; Hall, 1996; Turnock, 1991). When they are unable to communicate with patients ICU nurses' frustration may lead to a preoccupation with physiological care rather than an attempt to balance this with psychological care (Bergbom-Engberg & Haljamae, 1993). In addition, patients

withdraw and retreat when they cannot be understood, making them even less responsive (Bergbom-Engberg, 1991). When there is also patient confusion, of any degree, the situation of interacting may become nearly impossible.

FINDINGS FROM THE STUDY

Knowing the patient both in terms of who she/he is as a person, personal habits and idiosyncrasies and the personal meaning of what is happening to her/him at the moment may have prevented the unfortunate scenarios presented in the introduction to this chapter. If nurses had 'known the patient' important and vital aspects of that patient's care would not be missed.

'Knowing the patient' becomes even more important when assessing and caring for people who become confused in ICU. Differentiating a patient's agitation, pain response, anxiety and/or need for orienting information, all possible explanations for the behaviour associated with confusion, is easier when nurses understand a patient's personal response to and meaning of the situation. Behaviour demonstrated during confusion "is not just coincidental but rather imbued with meaning for the patient" (Lipowski, 1990:20). Understanding this personal meaning would assist in both assessment and care for the patient who might be confused.

Knowing the Patient

During the study there were occasions when personal information about patients that was missed, overlooked or not passed on. A few examples other than those presented in the chapter introduction include: a patient's preference for sleeping in a chair, not a bed;

a patient's usual pattern of sleeping during the day because of working night shift for 25 years; family members comments that provided insight into the patient, for example, *"Mum's going to kill us when she wakes up"*; and finally a psychological approach to nursing care that was therapeutic yet didn't get handed over at change of shift report.

Most of the nurses in this study agreed that it was important to know the patient ;*"It helps to have an image of the patient"*. They noted that some patients can tolerate anything, *"let you do anything, whatever you want"* and this was perceived as a significant indicator for understanding the type of person who is the patient. Knowing the patient has bearing on the assessment of confusion (Ch. 5). When assessing behaviour indicative of confusion nurses do take into consideration both patient personality and patient intention. Nurses in this study also think that knowing the patient would help in caring for confused patients because *"it helps to orient you if you know something about them"*.

While a few of the nurses in the study did not place much importance on 'knowing the patient', the majority indicated that they think it important but not possible for them to know patients in ICU. *"You can't really know them"*, *"They are so sick that they revert to basic instincts and their nature is not really known"*. *"There is no room in the environment to consider individual desires"*. *"It's a nice thought but you don't know your patient in ICU"*. The nurses accepted that they could not know the patient because of the nature of the ICU setting and the patients cared for within it.

The nurses think that some aspects about the patients are more important to know than others. Among the most valuable to know are: an understanding of patients' current health history; what happened to bring them into ICU; how they become so ill; and their current medical diagnoses and treatments. Details of patients' ICU care, what has happened and is currently happening during their stay in ICU, are also quite significant. This last point is especially true with patients who are confused or suspected of being confused, as information about sedation and possible cerebral irritation is especially important to know. When ICU nurses talk about what is important to know they do not focus on personal, intimate knowledge of the person who is the patient. Personal factors about patients, such as what upsets them and what is normal for them, are helpful to know, but perceived to be less important than the medical/ health knowledge.

Processes Used to Know the Patient

In order to know the patient *"You need to be able to actually communicate with them"*, *"You are really only guessing, until they are able to tell you"*. When patients cannot speak there is a lack of access to their private subjective world that usually is known through shared language. The environment is so public that intimate conversations are nearly impossible. Family and relatives were often observed whispering in the ear of their loved ones, perhaps indicating the only way to be intimate and confidential in the environment.

Why it Gets missed: Practices and Norms

The lack of patient verbalisation is a definite barrier to knowing the patient in ICU, however there are cultural norms and patterns that contribute to nurses not knowing

individual patients. Lack of continuity of care as a result of the patient allocation system is one example. Also there were problems in the ways that nurses collaborated with each other as well as with doctors in ICU. Finally, patients' families would often give pertinent clues as to the personal nature of their loves ones although these pieces of information were not used in nursing care as a matter of routine.

"You can only pick up threads of personal bits, but these are very thin and very few". What nurses did learn about the patient as a person was passed on by word of mouth, which can quickly get forgotten, distorted or dismissed in the scheme of more important matters. Unlike physiological parameters, personal information about patients is not routinely recorded in ICU.

Continuity of Care

Decisions made in ICU are based on situations that are rapidly and constantly changing. In ICU patients' conditions alter from minute to minute necessitating continuous monitoring and re-assessment. In fact this is part of what makes an ICU what it is (see Ch. 4, a *'real ICU'*). Nurses expect and anticipate change in the ICU; continuity of any sort is not expected therefore not part of the accepted norm in the ICU environment.

Rapidly changing patient situations are not the only aspects of the ICU environment that contribute to a lack of continuity. The system for allocating patients to nurses each shift (explained in Ch. 4) and the manner in which information is transmitted from nurse to nurse and nurse to doctor also have the potential to disrupt continuity.

Allocation of patients: "Who's turn is it?"

Nurses in this ICU are allocated a different patient each time they are on duty. Special requests for a particular patient are accommodated unless there is good reason not to meet such a request (eg., when it is suspected that a nurse wants to be in an isolation room at night in order to sleep while on duty). The allocation system could result in a nurse being in one side of the unit one day and the other the next (see diagram 4.1). When this happens nurses not only do not know their allocated patient but also do not know any of the other patients in the area, except the extent to which they learned about them in the inter-shift handover report.

Allocation of patients to nurses is based on the needs of the patient in terms of matching nurse expertise to patient needs. The nurses support the system of allocating patients to a different nurse each shift and each day. They believe it is *"good to change patients"*, especially those patients who are considered difficult and demanding, such as confused patients. Changing patients is considered good for the nurses not only because they need a break from some patients, but also interesting patients, such as *'real ICU patients'* (Ch. 4) should be shared by all nursing staff. 'Turn taking' was considered an essential part of giving everybody a 'fair go' and is done for the needs of the group to share the load and spread the opportunities. Individual nurse's needs was another reason to change allocations on a shift by shift basis, for example, when a nurse *"needs a lighter patient"* because he or she *"had a shocking run"* and therefore in need of a break.

Although all nurses in this study supported the system of allocating patients, they did recognise that it had the potential to result in a lack of teamwork and follow-through.

Nursing care approaches, especially those used with confused patients, that were effective in calming that patient on one shift were not carried forward as a matter of routine when a new nurse took over the care. Some nurses even went so far as to say that they thought lack of continuity and the demands placed on patients to get to know new nurses each shift (a patient could have six different nurses within 48 hours) might prolong patient confusion.

The lack of continuity resulted in care that was not coordinated and this diminished some of the nurses motivation to get to know what is currently occurring and what has happened with an individual patient (ie., that which is considered important to know). As one nurse put it there is not the time nor the inclination to sift through pages of patient documentation when this patient might not be allocated to her again. Thus, the allocation system served as a disincentive for understanding even that which is considered important to know, such as circumstances prior to the ICU admission.

Nurse-nurse collaboration: "Always make your own assessment"

Each nurse looking after the patient conducted his or her own personal assessment of the patient and this could result in various and even contradictory assessments of the same patient exhibiting the same behaviour. The same patient could have three to four different clinical judgements made within the space of a few hours. For example, during the field study a patient who 'appeared' confused simultaneously was diagnosed as *"fed up"* with being in ICU, as *"putting it on for the relatives"*, as intentionally *"uncooperative"*, and in need of sleep. Each of these clinical judgements could be

relevant to the whole clinical picture. However individual nursing assessments were not combined but rather treated as separate.

Some of the nurses think the variability in assessment from nurse to nurse reflects the nature of nurses who choose to work in the ICU environment. They saw themselves as *"highly strung"*, *"individualistic"* and accustomed to making their own judgements about patients. *"Different people have different ways of doing things"*, *"every nurse has his or her own ideas"*, *"that's my assessment and how the patient responded to me"* and *"I'm not sure it is as you* [another nurse] *say it is"*. Each of these expressions uncovers a belief system in ICU about the individuality of nurses and their individual care of patients. *"Each nurse starts on square one"* so there is little or no incentive to follow through. Square one changes from hour to hour, even moment to moment in ICU. Because the *"previous nurse may not have spent enough time with the patient"* and what he or she reports in handover can *"cloud or aid your assessment"*.

ICU nurses care for their own patients and shoulder the responsibility for these patient independently. *"You are busy with your own patient"*, so nurses working in the ICU don't often interfere with another nurse's patient. *"It's my patient, so it's my problem"*. *"Other nurses won't look after my patient as well as me"*. They also do not offer suggestions to other nurses about caring for patients because they are reluctant to insinuate that the nurse looking after that patient is not capable of doing so. *"Other nurses get offended if I try to help"*.

At times individual responsibility for an individual patient broke down. For example another member of the clinical staff would come along to the patient's bedside and ...*"It's my patient until someone else comes along and...*

- *says I gave him Serenace and it settled him."*
- *talks to the patient and settles her."*
- *says I'd like it done this way."*
- *says, let's just see what this patient is doing, when I know because I've been here for eight hours."*
- *changes things, fiddles with your patient."*

These circumstances resulted in frustration for nurses as they felt unable to care for their allocated patient in their own way. They valued the individual way in which they worked in ICU.

Interdisciplinary Collaboration

While others in the environment come and go it is the nurses who remain by the bedside of patients in ICU. Their presence is most constant and one of the reasons that confused patients are difficult for nurses is that the behaviours associated with confusion cannot be ignored. The nurse cannot walk away or disengage, which is one of the literal and figurative ways in which ICU nurses cope with the stress of the environment (see Ch. 4). That is, their usual way of responding to stress is not an available option when patients are confused.

While this constant presence at the patient bedside may place ICU nurses in a better position to assess patient confusion, they are dependent on the doctors to order sedation

and restraints. When doctors do not evaluate patient confused behaviour in concordance with nurses, whether through not seeing it at all or not perceiving it to be a priority, nurses are left without adequate sedation and no medical orders for mechanical restraints if needed. Comments by the nurses include: *"Doctors have other priorities"*, *"difficulty getting doctors to order adequate sedation"*, *"can't get through to them"*, *"they don't understand"*, *"they put you off"*, *"they only stand by the bedside for 15 minutes"*, and *"they focus on what they know, hypothetical scenarios"*.

Missed Sources of Information about Patients: Family Input

How patients respond to their family and close friends is a useful source of information about mental state and cognitive functioning. Family members' evaluations of whether the patient is behaving like his or her self provide useful information about the person who is the patient. Furthermore a patient's ability to recognise family members is an indication of his or her mental state and could be put to good use in the assessment of cognitive functioning.

CULTURAL SHAPING OF NURSING CARE

The nursing care problems posed by patient confusion highlight a pitfall in the patient allocation system used in this ICU. An interpersonal connection between nurse and patient is established through the nurse's attempts to 'reach' the patient and is contingent on the patient's response. That response is critical in the clinical assessment of confusion. If the nurse reaches the patient there is a good possibility of differentiating confusion from other possibilities, and, if present, determining the extent of the confusion. When successful, reaching the patient offers possibilities for re-orienting

patients, bringing them back to the current situation, explaining what is happening and reassuring them with meaningful information. Clinical assessment and nursing care of confusion are contingent on the nurses being known to the patient as well as knowing the patient. However, the system of organising nursing care mitigates against such reciprocity.

The system of patient allocation, accepted and defended in this ICU, is based on matching patient needs to nurses' clinical skills and to nurses' needs (eg., for an interesting patient). Patient confusion is perceived as a burden to the nurses rather than a need of care for the patient. This is confirmed in other settings and studies in which nurses' perceive patient confusion as something that interferes with their work rather than a patient problem (Foreman, 1991; Wolanin, 1977; Wolanin & Phillips, 1981; Yeaw & Abbate, 1993). In one study in another ICU confused patients were considered to be burdensome and "heavy" (Strange, 1996). In this study the weight of caring for confused patients is borne by all the nurses because of the ethos of 'sharing the load'.

The allocation system prevents and disrupts the possibility of a reciprocated relationship between patient and nurse. This is interesting given that nurses chose ICU because they enjoy the one-to-one care of patients which offers opportunity for interpersonal engagement. There is a paradox in their expressed desire for holistic one-to-one care and acceptance of a system of allocation that prevents establishing a meaningful relationship with the patient. ICU nurses do not expect patient reciprocation. The *'real ICU patient'*, which is really the ideal ICU patient, cannot respond.

The focus on technology also contributes to the types of relationships ICU nurses come to expect. The machines are simultaneously an extension of the patient and an extension of the nurse, thus providing a common ground on which to meet. This common ground is not a human one, full of frailties, vulnerabilities and unpredictablilities, but rather one that is controlled, controlling and controllable. While ICU nurses both in this study and in others (eg., Benner, et al., 1992; Cooper, 1993; Ray, 1987) are able to blend human caring with technological competence, the dominance of the technology is a constant factor that ICU nurses address continuously.

The highly individualistic way ICU nurses handle their work and care for patients also presents a paradox in relation to collaboration with other nurses, thus affecting continuity of care. Reliance on individual clinical judgements and assessments mitigates against 'follow through' of an effective approach. This is not necessarily the case when it comes to dealing with the technology, the objective side of care. Settings on a ventilator can be established and agreed upon and changed through mutual problem-solving. This is not necessarily the case when dealing with the patients as a person, the subjective aspects of nursing care. While it is true that a patient-nurse relationship cannot be 'handed over' and, in an interpersonal sense, that is, nurses are not interchangeable items (Morse, 1991), the individual approaches to nursing care may not be able to be enacted by more than one nurse.

Collaboration with doctors in the ICU in another paradox. Observations of interactions between nurses and doctors during the field study highlighted a lack of collaboration when it came to confused patients, yet nurses in this study revealed, through feedback

about the ethnographic account, that they were satisfied with the level of collaboration. When patients were suspected of being confused, collaboration with medical staff was necessary as nurses needed medical orders when they assessed the need for patient sedation. However, when doctors disagreed in their assessments, sedation orders were not forthcoming.

The variance between clinical assessments made by doctors and those made by nurses in relation to patient confusion are a reflection of different modes of assessment. Nurses used observation as patients interacted with them and the environment. This took place over a period of time spent together. Doctors relied on a 'one-off' quick check, most frequently based on the Glasgow Coma Scale. Doctors often relied on this scale for assessment of confusion despite its being developed to assess levels of consciousness. The doctors did not consider that patients might not cooperate with the GCS assessment for reasons other than confusion. They performed the assessment as if patients would automatically cooperate with their requests, for example, to squeeze their hands. In doing so they assumed a working relationship with patients, whereas nurses used interpersonal interaction and the development of the relationship as a means of assessing confusion.

The variability in assessment between nurses and between doctors and nurses could reflect the clinical picture of delirium, that is, fluctuations are expected. The results of this study reveal that neither doctors nor nurses appreciate the expected fluctuations in patient mental status when confused. The medical opinion prevailed, despite no greater understanding of the clinical problem. Inouye (1993) discusses this as a myth of

delirium, that is, when doctors see that a patient who was reported as confused is now with it, they assume nothing is wrong.

Both nurses and doctors explored the possibility of a physiological basis for behaviour associated with confusion, but when none could be verified and there still was discrepancy between assessments made by doctor and nurse, then the medical view prevailed. This domination of medicine is exemplified by ordering or not ordering medication for sedation. The power of the medical staff in this instance rested in the legal bounds of medical and nursing practice.

CHAPTER CONCLUSION

A number of factors that are embedded into the culture of the ICU disrupt and interfere with care of confused patients. There is a potential to focus on technology, which does not assist in the assessment and care of confused patients unless a physiological reason is evident and treatable. Lack of continuity of care and collaboration prevented nurses from knowing the patients, although contacting the patient is shown as central to the assessment of confusion (Ch. 5). This points to a paradox in the findings of the study, that despite a culture that mitigates against it nurses still maintain meaningful interaction with ICU patients. This is discussed with in the final chapter.

Chapter 8

Conclusions and Implications:
"If we sat by the bed all night we couldn't get our work done."

THE STUDY IN PERSPECTIVE

The findings of this study demonstrate the importance of investigating nursing as it is practiced, thus the care of confused patients is preserved within the social context and natural setting of an ICU. Ethnographic methods situate practice within the socio-cultural world of nursing care, uncovering how cultural meanings are imbued in nursing practice. Consideration of the "social" is central to understanding nursing practice yet sometimes excluded in nursing field studies (Purkis, 1994a). As observed by (Zussman, 1993), the social worlds of patients and staff have lessened in importance when accounting for health outcomes, and this is especially true in speciality units like the ICU.

Other aspects that give strength to the research relate to the dependability and trustworthiness of the data collection and analysis and these are addressed throughout the study (outlined in Ch. 3). However the major potency of the study lies in the movement beyond a descriptive level of analysis to synthesis. This movement is captured in the theorising contained in this chapter as well as the previous one.

The findings from the study are based on one ICU and this runs the risk of being idiosyncratic to that setting during the time the study was conducted. While a single specimen can be treated as representative of its species (Germain, 1993), there is no attempt in this study to uncover generalised cultural meanings for all ICUs. Qualitative

studies become 'generalisable' at the theoretical level (Morse, 1994). Theoretical conclusions in this chapter generate from comparison of the findings of this study with published literature on related topics. These include: patient confusion, technology and ICU care, interdisciplinary collaboration, and aspects of clinical decision-making such as embodied knowing, intuition and knowing the patient. The theoretical constructions described in this chapter (and in the previous chapter) are not the only ones possible, however they reflect how I chose to conclude the study. The theorising holds promise for further testing and potential for refinement in other clinical ICU settings and nursing care contexts.

This chapter begins with a discussion of the faulty and inadequate conceptualisation of patient confusion in ICU. Some of these conceptual difficulties were forecasted in the review of the literature on patient confusion in ICU (Ch. 2) and discussed further in relation to clinical assessment of confusion (Ch. 5). This chapter moves beyond description and critique of the existing conceptualisation of patient confusion by offering an alternative view (confusion as express and confusion as experienced). This new conceptualisation, based on the results of this study, clarifies some of the conceptual muddle that surrounds patient confusion in ICU.

Cultural practices in ICU that affect and were affected by nursing care of confused patients are discussed next, with an emphasis on technology, continuity of care, and nurse-nurse and nurse-doctor collaboration. These are by no means the only practices that affected nursing care but are selected as most influential in the care of confused patients.

The relational process of *contacting the patient* is discussed next, as this process was pivotal to ICU nurses clinical assessment of confusion (as described in Ch. 5). This process is compared to related nursing concepts of presencing, knowing the patient and intuition. Finally, possibilities that emerged from the study are addressed with an emphasis on the therapeutic value of ICU nurses.

THE CLINICAL PROBLEM OF PATIENT CONFUSION

This study demonstrates difficulties with the way that patient confusion is conceptualised, both in the literature and in critical care clinical settings. First, there are difficulties with presenting patient confusion as a single entity, rather than a signal of a variety of clinical problems. Findings from this study offer insight into how confusion can be categorised, thus clarifying confusions as a heterogeneous group of clinical problems. Another implication of this study is a distinction between confusion as it expressed through observable behaviour and confusion as it is experienced by patients. This differentiation, developed through analysis of how ICU nurses assessed patient confusion, holds promise of promoting greater understanding of this complex clinical problem.

Poor Conceptualisation of Patient Confusion in ICU

The original use of the term "ICU syndrome" (McKegney, 1966), as a syndrome is technically correct, as there are characteristic symptoms whose constellation suggests a clinical problem, that is, patient confusion. While the original descriptions of the "ICU syndrome" are linked to the severity of a patient's illness there was no clear specification of its organic/physiological nature. Some of the earliest descriptions of psychiatric

complications in critical care (eg., Kornfeld, 1969a; 1969b; 1971) differentiate post-operative reactions (most notably following cardiac surgery) from organic brain syndromes (as they were called at the time). Various authors (Adams, 1984; Crippen & Ermakov, 1992; Easton & MacKenzie, 1988; Helton, et al., 1980; Holland, et al., 1973; Katz, et al., 1972; Tesar & Stern, 1986) specify cognitive changes as a signal of physiological rather than psychological problems, emphasising that acute confusion is a grave prognostic sign.

However, the distinction between various types of confusion is not always apparent in the literature. A good example is found in a recent review of the literature on "ICU syndrome", where all types and forms of confusion are treated as if "ICU syndrome" is homogenous (Grangberg, et al., 1996). The result is that "ICU syndrome" is discussed as a homogeneous clinical problem, and the term "ICU syndrome" is heard in the clinical setting as if its meaning is specific to a clinical condition. This study demonstrates that confusions are multiple, non-specific and heterogeneous.

Muddled conceptualisation not only leads to poor understanding of patient confusion in ICU, but also contributes to inappropriate care. Care suffers when there is no clear differentiation between patients who become confused as a result of environmental factors and those whose confusion may signal a worsening of their medical condition. In the former situations patient confusion can be alleviated through environmental and interpersonal therapeutic activities, nursing therapy. In the latter situations treatment should be geared toward prompt identification of underlying physiological cause(s).

Problems with conceptualisation of patient confusion in ICU are illustrated further in a study by Bay, Kupferschmidt, Opperwall & Speer (1988) evaluating the effects of family visits in ICU on changes to the patient's mental status. In discussing their findings, that family visits had no consistent impact on the patient's memory and mental status, the authors fail to mention that changes to mental status could be a result of a worsening medical condition. Their results demonstrate a significant relationship between mental status changes and the number of days in ICU, with mental status worsening as length of stay increased. Because length of stay in ICU indicates the current health status of patients, deterioration in mental functioning could, and probably does, reflect a downhill clinical course with less chance of recovery. However, Bay, et al. (1988) do not make these links in their analysis.

While "ICU syndrome" has behavioural and emotional manifestations, its conceptualisation as a psychological problem has not served well the patients who suffer from it. Implicating the environment that is responsible for saving the patient's life as the culprit of psychological problems renders impossible the obvious treatment of removing the patient from the environment (ie., eliminating the cause). Understanding the complexity of this clinical problem may also have been impeded by such simplistic notions. A simplistic cause-effect relationship between the ICU environment and patients' psychological responses is misleading and dangerous.

This study demonstrates that patient confusion in ICU is not a single entity, not a syndrome, but rather a clinical signal that has multiple potential meanings. Behaviours associated with clinical confusion can mean that a patient is agitated, in pain, frustrated,

or fed up to name a few possibilities. In ICU this signal must be differentiated from other possibilities and expected patient experiences, such as recovery from an anaesthetic. Once differentiated and established patient confusion can then be categorised because there various types of confusions possible in ICU.

Nurses in this study are able to articulate such categorisation (see Ch. 5). For example, they differentiated patient confusion in the following manner:

- Confusion as expected (eg., waking up post anaesthesia)
- Confusion with identifiable cause (eg., hypoxia)
- Confusion as a sign of a worsening health condition (eg., as a first sign of acute infection).

Recognising patient confusion

Difficulties associated with delirium and acute confusion are due to a lack of recognition of the syndrome (see Ch. 5). This lack of recognition is linked to a poor understanding of the clinical problem of impaired cognition. Similar problems with under-recognition are reported for pain and anxiety in the critically ill population (Harvey, 1996a), suggesting that subjectively experienced problems are difficult to recognise in a population of patients who are unable to speak and therefore describe their inner experiences.

This study demonstrates the complexity for nurses in relation to patient confusion relates more to lack of understanding than to lack of recognition. ICU nurses in this study acknowledge that acute confusion is commonplace in ICU; that is, they not only

recognise its occurrence but also they anticipated its frequency in the ICU patient population. Additionally, nurses in this study could not ignore behaviours indicating that patients might be confused (eg., pulling at tubes) because such behaviours require immediate attention. While the nurses are not able always to identify with certainty that these behaviours indicate confusion, and not frustration, anger and/or withdrawal, they do acknowledge that the patient's behaviour was posing problems.

The difficulty nurses experienced in relation to patient confusion was not as much lack of recognition as lack of ability to interpret the meaning of the patient's behaviour. Two major challenges in the interpretation are: differentiating patient confusion from other clinical situations manifested through similar behaviour, and categorising the type of confusion once it has been identified. This study reveals possible ways to meet these challenges, by recognising confusion as it is expressed in addition to understanding confusion as it is experienced.

Confusion as Expressed/ Confusion as Experienced

Confusion has been operationalised and conceptualised from the outside perspective (Foreman, 1991). Nurses and doctors describe patient confusion as it interferes with their ability to perform instrumental functions of patient care (Foreman, 1991; Yeaw & Abbate, 1993; Wolanin, 1977). This view is echoed in this study in the sentiment expressed by ICU nurses who said they are unable to *'get our work done'* when patients are confused.

Patient confusion is a cognitive experience that is manifested through behaviour. It is experienced through the patient's inner world and expressed through observable behaviour. In ICU outward behaviour is the primary point of access into understanding internal experiences of patients. There is limited access to cognitive processes that are reflected usually through language and conversations with patients. Thus, confusion as experienced from a patient's point of view is hidden and unknown, and ICU staff have become accustomed to confusion as manifested through behaviour.

ICU nurses in this study attempted to access the experience of confusion through gauging a patient's responsiveness to their attempts to connect on an interpersonal basis. Interpersonal connections such as these provide insight into the patients' cognitive processes, a window through which their inner experiences can be viewed. These connections are not necessarily emotionally empathic, but rather an attempt to establish interpersonal contact, to *"find the person in the fog"*. Therefore, making a connection with a patient is not simply for the purpose of humanising the ICU environment. In the case of patient confusion an interpersonal connection functions as an aid to nurses' clinical decision making.

Contacting the patient (ie., confusion as experienced) is a logical assessment of patient confusion because inattention is an important diagnostic criterion of delirium. The person who is confused is less accessible both socially and cognitively. ICU nurses in this study understand and appreciate the importance of a patient's ability to attend to the environment in a relational way. That is, a patient's response to a nurse's attempt to make an interpersonal contact serves as an indicator of confusion.

The Importance of Making Contact with the Patient

While 'contacting the patient' cannot reveal the entire clinical picture of patient confusion it is a pivotal cue used by nurses in their clinical decision-making. Table 8.1 depicts the relationship between contacting patients, assessing confusion and establishing appropriate nursing care. Patients with whom nurses were able to establish contact were not necessarily considered to be confused. When a patient's behaviour indicates that he or she might be confused and the nurse caring for him or her is able to establish contact, then the nurse has a means of working through what this behaviour might mean. For example, a patient who appears confused could be in pain or uncomfortable in the bed; these problems can be *'sorted out'* through nursing care. If the patient is 'contactable' and also assessed as confused nurses are able to help the patient work through the situation, for example, re-orienting a patient who is waking up after anaesthesia. When patients who display behaviour indicative of confusion are not contactable, action is taken by the nurses if this behaviour poses risks to patient safety. When the behaviour poses no immediate risks no action is deemed necessary. Patients who do not display signs of confusion and who are also not contactable are those who the nurses consider to be *'real ICU patients'* (see Ch. 4).

Table 8.1: The Importance of Contacting the Patient

Not confused	*'Sort it out'* explore patient intention, eg, in pain?	No action needed. The *'real ICU patient'*.
Confused	Help patient work through it, eg, waking up.	*'Don't know'* Sedate and/or restrain if at risk.
PATIENT	**Contactable**	**Not Contactable**

ICU CULTURAL PRACTICES

Sensing the patient through interpersonal means runs the risk of being dismissed as subjective and therefore irrelevant in ICU. Subjectively understanding how a patient is experiencing confusion, imbued with personal meaning, is not a dominant way of knowing in ICU, so it may become buried in nursing practices, hidden, not discussed openly and shared, yet tacitly understood among nurses. Additionally, and worse, is that some cultural practices actually interfered with this type of knowing.

Influence of Technology

Subjective understanding is uncertain and ambiguous and the significant presence of technology in ICU offers certainty and predicability. The ambiguity of not knowing is uncomfortable and out of place in a setting that relies on measuring responses through mechanical monitoring devices. The dominance of technology in ICU serves to constrain access to the patient, diverting the nurse's eye from the patient to the object (Sandelowski, 1996). The pull of technology in ICU can exert a force so strong that it becomes the focus of nursing care. Interestingly this has not always been the case.

In an historical study of the history of ICU nursing Fairman (1992) concludes that technology has not always dominated care in ICU. The original critical care units were an enactment of nurses' clinical decision-making abilities to judge which patients were most ill, and therefore needed to be kept nearby for constant nursing observations. "Watchful vigilance" (Fairman, 1992) epitomised nursing care in ICU long before technology provided a sophisticated means of monitoring patient responses. ICU nursing is fundamentally care, not technology (Pettigrew, 1990). However, currently,

ICUs are characterised by "the rapid and appropriate application of life-saving technology" (Shortell, et al., 1994:510).

The focus on technology contributes to the types of relationships with patients that ICU nurses come to expect. While ICU nurses in this study are able to blend human caring with technological competence, the dominance of the technology is a constant factor that must be addressed.

In this study ICU nurses, like their original predecessors, did not rely on technology when determining whether a patient was confused. In fact the equipment of technology was of little assistance in clinical decisions about patient confusion, except in situations when a monitor indicated a physiological change that could account for a patient's change in mental status. ICU nurses did not allow the technology to distract them in attempting to perceive the person who is the patient and this was particularly evident in the face of patient confusion. Therefore this study demonstrates that ICU nurses are able to retain their astute observational skills, independent of technology.

Continuity of Care

Patient confusion highlights the need for personalised care in ICU because the person who is confused is 'lost' in the fog and it is the nurses who are best placed to 'find' them. When an individual nurse begins to map the journey to the patient she/he could show the way to other nurses who are then able to help and/or take over the search. However, the disruption in continuity of patient care, evident throughout the study and linked to cultural norms, mitigates against such possibilities. The system of patient allocation

(described in Ch. 4 and analysed in Ch. 7) interfered with the nurses' ability to establish contact with patients, thus limiting this important piece of information into the patient's experience. The nursing care challenges posed by patient confusion highlight a pitfall in the system used for patient allocation.

An interpersonal connection between ICU nurse and patient is established through the nurse's attempts to 'reach the patient' and the patient's response to such an overture. As previously discussed that response is central to the clinical assessment of confusion. If the nurse 'reaches the patient' there is a good chance of differentiating confusion from related circumstances, such as anxiety and pain; also there is a way of determining the extent of the confusion. Reaching the patient offers possibility for re-orienting, bringing the person back and reducing the confusion. The clinical assessment and care are contingent on the nurse being known to the patient as well as knowing the patient, that is, the knowing is reciprocated.

The system of patient allocation, accepted and defended by the ICU nurses in this study is based on a patient's physiological needs, the dominant factor in the critical care setting. Patient confusion, although quite likely to be physiological, is perceived as a burden to the nurses, rather than needs of the patient. Therefore, during patient allocation, a confused patient, considered to be *'heavy'*, is shared because the ethos of the patient allocation system is based on sharing the load and therefore the weight of caring for confused patients is borne by all. The allocation system prevents and disrupts the possibility of a reciprocated relationship between patient and nurse.

This is interesting given that ICU nurses enjoy the one-to-one relationship with patients (Ch. 4). There is a paradox in their expressed desire for holistic on-to-one care and defence of a system of allocation that prevents establishing a meaningful relationship. Perhaps the one-to-one care that the ICU nurses cherish is not based on reciprocation, but rather the *'real ICU patient'* who is unable to respond.

Nurse-nurse Collaboration

The highly individualistic way that ICU nurses handle their work and care for patients presents a paradox in relation to collaboration with other nurses and affects continuity of care. In always relying their own clinical judgements and assessments they mitigate against follow through of an effective nursing care approach. This is not necessarily the case in handling the technology, the 'objective' side of care. It is the case when it comes to dealing with patients as the person, the 'subjective' aspects of nursing care.

While it is true that a patient-nurse relationship cannot be 'handed over' there are personalised approaches to care that could be attempted by more than one nurse. If a patient responds to one nurse, for whatever reason, then a similar approach may enable another nurse to get a meaningful response from the same patient.

Nurse-doctor Collaboration

The results of this study demonstrate that care of ICU patients who become confused is shared between doctors and nurses. Both nurses and doctors must embark on identification of an underlying physiological cause(s) when ICU patients become confused. While treatment to the underlying cause may rest with medical measures,

management of the symptoms of confusion and reduction of its consequences are within the nursing care domain. However achievement of these nursing care goals is bound by the legal requirement of medical orders for sedation and/or mechanical restraints. These orders depend on the doctors' assessment of patient confusion, either by agreeing with the nurses' judgements or assessing it themselves. Nurses in this study became frustrated when doctors failed to acknowledge their clinical skills in assessing patient confusion.

Nurses in this study who read the ethnographic account of their ICU reacted to comments about the lack of collaboration between doctors and nurses. Nurses' comments such as *"this is not my experience"* and *"I feel I am consulted by the doctors"* and *"this makes me sad to read this"* revealed their disquiet with my interpretations. When I checked back with them the nurses did not question the validity of my interpretations. Their negative reactions to my interpretation reflected the value they placed on teamwork in the ICU setting. Because I had raised questions about teamwork I had challenged a hallmark of ICU care. Interdisciplinary collaboration is a professional icon in ICU that is valued and revered.

Fairman (1992) suggests that critical care units equalised the professional relationship between nurses and doctors. Shortell, et al. (1994) claim that ICU is a prototype of highly interdependent team-oriented care. The focus on machines and technology in ICU not only fosters collegiality and collaboration between nurses and doctors but also "proved the value of nurses as watchful observers and nuturant comforters" (Sandelowski, 1997b:170). Technology highlights a dependence of doctors on nurses (Fairman, 1992), and paradoxically, expands the sphere of control of doctors over nurses

because doctors control access to technology and use nursing to achieve medical goals (Sandelowski, 1997a).

Interdisciplinary interdependence is central to critical care and its primacy is reflected in ICU nursing textbooks (eg., Kinney, Packa & Dunbar, 1993). Collaborative decision-making between doctors and nurses is considered to be crucial in improving patient outcomes in ICU (Baggs, 1989; Mitchell et al., 1996: Karlawish, 1996). There is research evidence (Baggs, Ryan, Phelps, Richeson & Johnson, 1992; Knaus, Draper, Wagner and Zimmerman, 1986; Mitchell, Armstrong, Simpson & Leents, 1989) to suggest that staff collaboration positively influences the effectiveness of ICU care when measured in patient outcomes of mortality and ICU re-admission. However, nurse-doctor collaboration is difficult to differentiate from other organisational factors in ICU (Mitchell, 1996; Shortell, et al., 1994). There is further evidence to suggest that collaboration between nurses and doctors is a significant component in nurse job satisfaction (Baggs & Ryan, 1990; Baggs, Schmitt, Mushlin, Eldredge, Oakes & Hutson, 1997; Shortell, et al., 1994). However satisfaction with decision-making does not predict nurse retention (Baggs, et al., 1997).

In this study the need for collaboration between nurses and doctors became crucial when nurses required medical orders for sedation and or mechanical restraints for patients whom they considered to be confused. Often teamwork between doctors and nurses broke down in the face of patient confusion because doctors and nurses could not agree on a clinical judgement as to whether the patient was actually confused. Baggs, et al. (1992) suggest that more complex clinical situations call for increasing collaboration.

ICU care is complex by nature; it is characterised by instability, uncertainty and variability (Mitchell, et al., 1996). When patient confusion is added to the situation, complexity mounts. This may explain why nurses in this study became frustrated by the lack of collaboration in the face of patient confusion.

When there was disagreement between nurses and doctors in this study, not only did collaboration suffer but the medical view dominated. The medical view often dominates because it is perceived as superior and more powerful in decision-making in ICU (Karlawish, 1996; Sandelowski, 1997a) and the interactive view of nurses is devalued (Anspach, 1987). In the technology-dominated environment of ICU there is an illusion of certainty and control; subjective ambiguous knowing (such as that used by nurses in the study) is easily dismissed.

An explanation for interdisciplinary disagreement is the difference in clinical perspective between doctors and nurses, that is nurses and doctors hold different points of view toward the same clinical problem (Chase, 1995; Shannon, 1997). In a study to explore the relationship between social context and the knowledge used for prognosticating about life and death, Anspach (1987) found that doctors and nurses arrive at conflicting conclusions about prognosis of babies in a neonatal ICU (NICU) because they use different data bases. Nurses use relational cues gleaned from social interaction with the babies, while doctors relied more on technological cues. These different ways of knowing, socially mediated by the NICU environment, were not valued equally, with nurses' interactive data being devalued in the social context. The findings are remarkably similar to those of this study. Although making decisions about different clinical

situations (prognosis of premature babies in NICU and confusion in adults in ICU) the processes for decision-making coincide. Anspach (1987) argues from a sociological perspective that the rise of technological data as superior to interactive and perceptual data is an historical evolution in health care, signalled by doctors' disengagement from the patient and the objectification of patients.

The disparate views between doctors and nurses, evident in this study are consistent also with research findings in other settings where doctors do not always support nurses' assessment of patient confusion (eg., Eden & Foreman, 1996; Palmateer & McCartney, 1985), often because nurses and doctors conceptualise confusion differently (Vermeersch, 1990b). Pyles and Stern (1983) report similar findings in their study of ICU nurses' detection of cardiogenic shock. Like confusion, patient outcome of cardiogenic shock is dependent in part on the nurses' ability to receive an appropriate response from doctors. Doctors often did not understand the nature of nurses' clinical decision-making about cardiogenic shock, which was both cognitive and intuitive (Pyles and Stern, 1983). The findings of Jenny & Logan (1992) echo similar circumstances. In their study doctors did not always agree with ICU nurses' clinical management of the weaning process because doctors relied on generalised knowledge and nurses relied on understanding that which was particular to the patient.

In this study the medical gaze was fixed on the manifestations of confusion, that is, confusion as expressed through outward behaviour. Nurses' gaze was based on attempts to enter the inner world of the patient, that is, confusion as experienced subjectively. Diagram 8.1 brings together the relationship of confusion as expressed and the traditional

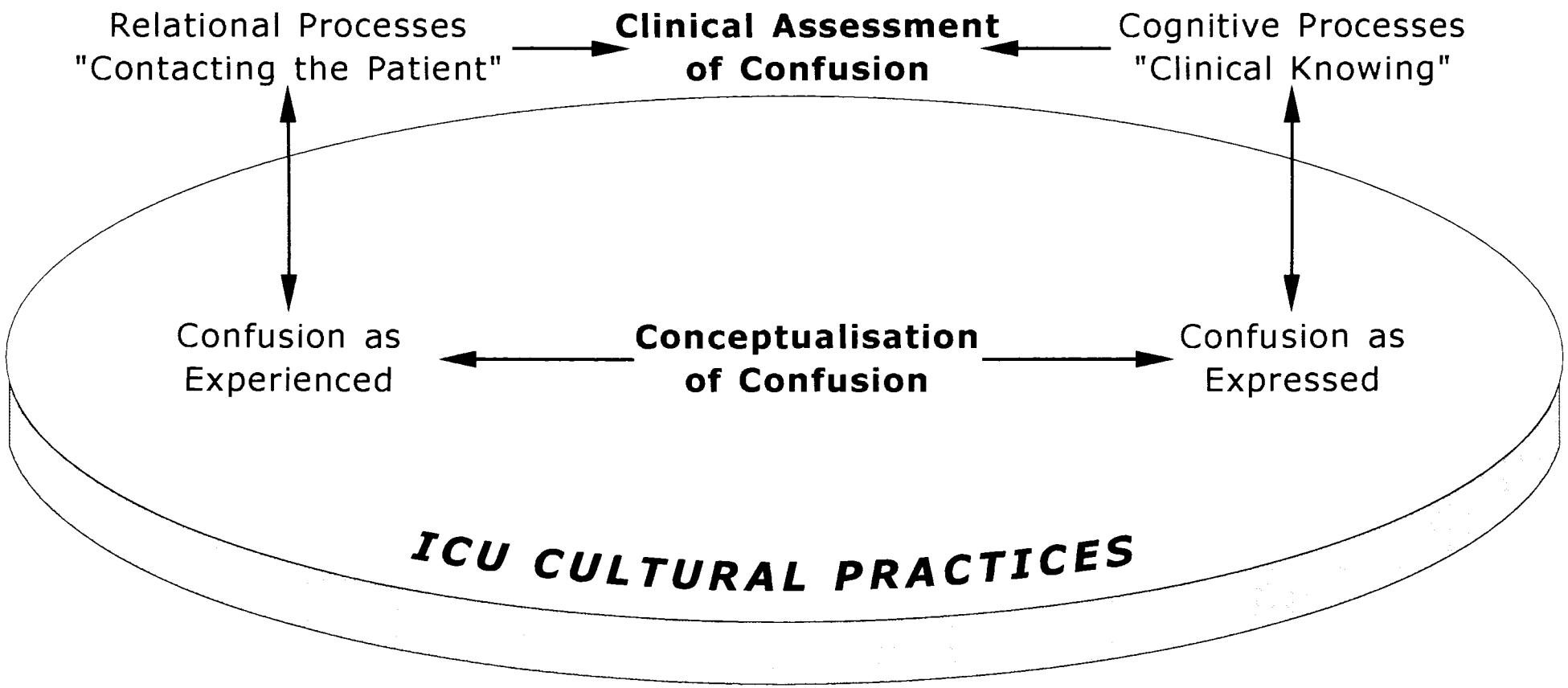


Diagram 8.1 ICU NURSING CARE OF PATIENT CONFUSION

cognitive processes involved in clinical decision-making, that is understanding diagnostic criteria and matching patient signs and symptoms to the criteria. The relational processes involved in contacting the patient are connected to conceptualisation of confusion as experienced. The impact of ICU cultural practices is depicted as influencing and affecting both conceptualisation and clinical assessment of patient confusion.

THE RELATIONAL PROCESS OF CONTACTING THE PATIENT

The complexity of the processes involved in "sensing" patient needs (Morse, Miles, Clark & Doberneck, 1994) is evident throughout this study. When faced with the behaviours of patient confusion nurses considered a variety of input and relied on more than one process in determining a patient's clinical situation and needs. Their nursing approach to clinical decision-making is distinctive in its orientation because it is based on information that is particular to a patient and is intrinsically and intimately linked to patient-nurse interactions and relationships.

In this study nurses' assessment of patient confusion involved the use of a relational process of contacting the patient in an attempt to understand confusion as it is experienced. The relational process of 'contacting the patient' is comparable to other clinical judgement processes described in the nursing literature. The processes that have most bearing on the results of this study are those of: embodied knowing and empathy (Gadow, 1989; Morse, Anderson, Bottorff, Yonge, O'Brien, Solberg, McIlveen, 1992; Radwin, 1995), presencing (Doona, Haggerty & Chase, 1997), personal knowing and knowing the patient (Jenny & Logan, 1992; Jenks, 1993; Radwin, 1995; Tanner, et al., 1993), and the Nursing Gestalt (Pyles & Stern, 1983).

Embodied Knowing and Empathy

Insight into the perceptual worlds of the patient in ICU enables nurses to better understand the various types of confusions. Viewing the ICU through the perceptual lens of another person, in this case a patient in ICU, would normally require interpersonal interaction. Verbal interaction provides access to thought patterns, however this is not possible when patients are intubated. Nurses and patients in ICU have limited verbal interaction. How are nurses to know when patients are literally silenced?

Gadow (1989) suggests an approach with people she refers to as "silent patients". Under these circumstances nurses cannot ask patients to reveal themselves. Gadow (1989) argues that nurses should become involved through embodied experiences, a time for physical involvement to discern subtle changes in the patient's comfort level, to sense feelings such as anxiety. Involvement in this manner offers an avenue through which nurses can experience the patient as a subjective being. Radwin (1995) describes a similar process "whereby nurses make therapeutic choices within a patient-nurse interaction context" (p. 365) through the use of imagining what the patient is experiencing.

Each of these processes bears similarities to emotional empathy, or the "ability to subjectively experience and share another's psychological state, emotions or intrinsic feelings" (Morse, Anderson, et al., 1992: 274). Embodied knowing (Gadow, 1989), and empathising (Morse, Anderson, et al., 1992; Radwin, 1995) enable nurses to understand the experiences of patients.

In this study nurses came to understand patient confusion through 'making contact with the patient'. The relational process of 'contacting the patient' is associated with embodied knowing and empathy but in a peripheral rather than direct sense. While contacting the patient is reliant on nurses' interactions with patient it is not necessarily emotionally-based. However, it is a means for nurses to 'sense' patient needs.

Presencing

In order to contact the patient nurses must first be disposed toward the patient, that is being present to the patient. Presence in nursing, first introduced in 1962 by Vaillot (Doona, et al., 1997) includes nurses knowing facts about patients' health problems, physical signs, social history and information related to health problems. However presencing also relates to nurses knowing patients as they are present to themselves, and, in doing so nurses must be present also to themselves, making self available and choosing to participate in care (Pettigrew, 1990). This requires that the patient reciprocates and the experience is shared (Locsin, 1995). The nurse participates at the invitation of the patient (Doona, et al., 1997; Gadow, 1989; Pettigrew, 1990).

In this study no such invitation could be assured, sensed or assumed as patients in ICU are often too ill to respond in usual social ways, heavily sedated (referred to as *"wiped out"*), comatose, or fluctuating in their levels of consciousness. Therefore the professional responsibility rests with the nurses in disposing themselves towards patient, tuning themselves into the patient's experience. Only when they are disposed in this way, that is capable of being with the patient and present to participate in the patients' world can they make use of the importance of contacting the patient.

Knowing the Patient/ Personal Knowing

The relational process of knowing the patient is discussed in the nursing literature not merely in terms of individualising patient care but also for its importance to clinical decision making (Jenks, 1993; Jenny & Logan, 1992; Stannard, Puntillo, Miaskowski, Gleeson, Kehrle & Nye, 1996; Radwin, 1995; Tanner, et al., 1993). This coincides with the findings of this study in that 'contacting the patient' was used for the purpose of *"sorting out"* the behaviours of confusion, for example, differentiating agitation from confusion is often based on understanding personal attributes of the patient. Like presencing, knowing the patient involves "getting situated and oriented to the patient in the situation" (Stannard, et al., 1996:438). Knowing the patient is achieved through interpersonal contact and understanding the patient as a person; it involves a familiarity with the patient (Radwin, 1995). In the absence of knowing the patient nurses feel unable to make good clinical decisions (Jenks, 1993).

In evaluating behavioural responses to the ICU experience it would be useful to know what is usual for the patient as a person in order that nurses can judge patient responses to the experience of being in ICU. However nurses in this study did not think that it was realistic that they could know a patient in such personal ways (Ch. 7). In this respect the ICU nurses did not confirm notions proposed by Tanner, et al., (1993) that knowing the patient relates to idiosyncratic aspects of individual patients, or Radwin's (1995) analysis that knowing the patient is to individualise patient care. Rather, nurses in this study used interpersonal interaction as a way of knowing the patient within the context of the immediate situation. This is more akin to Carper's (1978) original idea of personal knowing, that is knowing that generates from the relationship between nurse and patient.

Experiential Knowing

The involved and connected way that nurses in this study used interpersonal interaction to assess patient confusion is the hallmark of expert clinical practice in critical care (Benner, et al., 1992). In this study it was the more experienced nurses who best described and demonstrated the use of contacting the patient. Although the study did not seek to track or differentiate novice and expert nurses it was apparent in the interviews that nurses with extensive experience in ICU were better to describe the process of contacting the patient. In the field, the more experienced nurses used this process and trusted their perceptions of whether the patient was 'with it'. Therefore it is likely that the knowledge of contacting the patient is knowledge of experience, that is a linking of sensory-perceptual processes to experience and then to knowledge.

Nursing Gestalt and Intuition

The use of interactional data (ie., contacting the patient) is similar to intuition, which is the immediate awareness of situation without the conscious use of linear reasoning (Benner, et al., 1992; Miller & Rew, 1989; Pyles & Stern, 1983). The ability to establish contact with patients is not objectively observable and measurable; it is more than simply a gut feeling or an intuitive process. There is logic in using patient contact to understand confusion because acutely confused patients are socially and cognitively inaccessible.

In an investigation into nursing assessment of cardiac pain Jacavone & Dostal (1992) found that nurses considered patients' inward focusing and outward withdrawal as an effort to conserve energy when they are in pain. This process and the results of this study, 'contacting the patient' to assess confusion, are examples of decision-making that

is both rational and intuitive. Pyles & Stern (1983) refer to this synthesis of logic and intuition as the "Nursing Gestalt". This process links basic knowledge, knowledge of experience, patient cues and sensory-perceptual clues (sometimes referred to as intuition) to differentiate and categorise patient clinical conditions.

The use of interactive data as establishing contact with the patient creates a sense of mutual understanding that can be validated through interpersonal interaction (even in the absence of speech). It relates to, yet moves beyond a hunch or intuition. It is the process of experiential or personal knowing. It is "connected knowing" (Miller & Rew, 1989) which integrated subjective knowing with rational, logical thinking. It is the perceptual grasp (Crandall & Getchell-Reiter, 1993) of a situation that enable sound clinical decision-making to occur.

INSIGHTS AND POSSIBILITIES FOR PRACTICE

The implications of this study are multi-faceted. There are changes to care delivery practices (ie., allocation of patients) that managers could alter to promote greater continuity of care for confused patients. There are numerous educational strategies that could assist in greater understanding of patient confusion as a clinical condition in ICU. Differentiating types of confusions in ICU helps to clarify how the clinical problem of confusion is conceptualised. The importance of collaboration between doctors and nurses in the assessment, treatment and care of confused patients could be investigated with a view to linking collaborative practices to patient outcome. However, the most important aspect of this study is the illumination of the therapeutic value of nurses at the bedside of critically ill patients.

The position of nurses as primary in assessing and caring for patients who are confused in ICU is mitigated against by certain practices. Practices such as allocation of patients in ICU should take into account the clinical needs for continuity of carers when patients are confused. These needs are not used as a basis for patient allocation because physiological needs are of prime importance. That confusion can signal a physiological need needs to be better understood by ICU nurses.

While it is unlikely that patient confusion in ICU can be eliminated entirely or even controlled completely, differentiating types of confusion as described in this study provides helpful insights into the problem and poses practical implications for nursing care. While this study demonstrates that nursing care for acutely confused patients in ICU focused on preventing the consequences of confusion and managing its symptoms (both aimed at controlling it) there is scope for broadening the nursing care focus to include greater therapeutic effort at establishing contact with and finding the person in the confusion (so that something can be 'sorted out').

Despite the difficulties experienced in interpreting the patient's behaviour nurses in this study recognised the importance of contacting the patient and used interactional data to assess a patient's mental status. Although limited and constrained in ICU, interaction with the patient becomes central to assessing patient confusion and to caring for confused patients. Nurses are in the best position to establish the use of such interactional data. They provide the link between reality and the patient's experience of it.

The major role of ICU nurses includes: vigilant observation, accurate monitoring, early detection of changes and complications, and administration of treatments. The skills of observation and monitoring that were the hallmark of early critical care nursing have not always been dependent on technology. Nurses are in the best position to assess patient confusion because they are at the bedside and can observe patient behaviour over time thus tracking the expected fluctuations in clinical manifestation of acute confusion. Additionally nurses are in the best position to treat patients who are suspected of being confused or who are confused, because they can interact with patients in such a way that helps them to contact the person who is the patient. Rather than controlling the patient (eg., with mechanical restraints) they can use interaction with the patient as a way of controlling the situation.

Nurses' therapeutic value in ICU is generated in part by their skill in handling equipment and in using technology in observation of patients and early detection of changes in patient conditions. They are also the human face of therapy in ICU which has become dominated by technology. ICU nurses may re-consider their observational and assessment skills that are not entirely based on the use of technology in recognising and appreciating their role as therapists in ICU. This study highlights that nurses are the major aspect of the human face of ICU. Through interacting with and relating to patients as people, ICU nurses demonstrate clinical processes that are fundamental to nursing therapy.

"Some people don't understand the overwhelming stress on the body, to be so ill and out of balance ... then we fiddle around so much ... interfere so much. Confusion is bound to be there. You learn to expect it. It's a given. Patients are totally out of their norm ... how are they going to cope?... how would they understand what is going on? Without a road map to get from point A to point B they are bound to be confused and lost. It is like there is a glass wall though which a patient and nurse see each other, yet can't understand ... as if talking a different language. If you are able to get through... if you are able to connect ... then there is a stepping stone ... a pathway to help give the patient a frame of reference ... a way through the fog."

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APPENDIX B

XXXX Hospital
Consent to Participate in a Research Project
(Nurse)

I,_____(please print)
(name of participant)

of_____
(street) (suburb/town) (state & postcode)

have been invited to participate in a research project entitled:

Nursing care of ICU patients who are confused.

In relation to this project, I have read the information sheet entitled:

_____

and have been informed of the following points:

1. Approval has been given by the Medical Research Ethics Committee (MREC) of the XXXX Hospital.

2. The aim of the project is to understand nursing care of patients who experience acute confusion while being treated in an intensive care unit.

3. My involvement in this study includes a one and a half hour interview to be conducted by the researcher. This interview will take place at a time and location convenient to me. During this interview I will be asked to discuss observations made by the researcher during the fieldwork phase of this study. The interview will be audiotaped and transcribed word for word.

4. I can refuse to take part in this project or withdraw from it at any time without affecting my employment. If I choose, I can have any or all of my taped interview erased at any time.

Date: _____ **Witness:**_____
(please print name)

Signature: _____ **Signature:**_____
(of participant/volunteer) (of witness)

Investigator's Signature:_____

5. Should I develop a problem which I suspect may have resulted from my involvement in this project I am aware that I may contact: Jane Stein-Parbury on or Dr. XX.

Should I have any problems or queries about the way in which the study is being conducted I am aware that I may contact Ms X, Co-ordinator of Research Administration.

6. I will not be identified and my personal results will not be divulged in any report and/or publication of this study.

7. I am aware that I should retain a copy of this consent form, when completed, and the relevant Information Sheet.

8. I have had the project, as far as it affects me, fully explained to my satisfaction by the researcher. My consent is given freely.

After considering these points, I accept the invitation to participate in this project.

I also state that I have/have not participated in any other research project in the past three months.

If I have, the details are as follows:_____

Date: _____ **Witness:**_____
(please print name)

Signature: _____ **Signature:**_____
(of participant/volunteer) (of witness)

Investigator's Signature:_____

APPENDIX C

4 July, 1997

Dear colleague,
Thank you for agreeing to review this ethnographic account of an ICU. It is 'ethnographic' because I am aiming to capture the culture of the ICU, its patterns rhythms and shared belief systems. I am not trying to isolate factors, explore cause effect relationships or to represent individual perceptions and experiences. I am attempting to capture a collective view of the nurses who work in this ICU and in doing so have composed a story.

This story was written as a result of participant-observation fieldwork which occurred between July and November 1996. Over this period of time I spent the equivalent of 6 weeks full time 'work'(40 hours per week) in the ICU. This began with three weeks of five days each, and eight hour shifts per day, and was followed by regular visits of two to three times per week, averaging 5 hours per visit. Initial impressions and hunches gleaned during the fieldwork were further expanded and clarified during twelve in-depth interviews (from 40 to 90 minutes long) with individual nurses. These interviews began in December 1996 and completed in March/April 1997. My fieldwork notes and transcription of the interviews have been used to prepare this story.

Like any story it has the privilege of its author. The way the story unfolds reflects my interpretation of the environment in which I both observed and participated as a nurse and as a researcher. However, my interpretations are not entirely my own making. They are based on explanations provided by the nurses in this ICU. "My" story is an attempt to capture what the nurses working in this ICU have shared with me.

When I observed an activity or a conversation during the fieldwork I asked many questions in order to gain insight into what was going on. I attempted to understand the culture of this ICU, its norms, values and belief systems. In this story I have attempted to hold true to those I want to represent accurately. However, I do not claim to speak on behalf of others. The voice of the story is mine. I am both its author and its signatory.

This account does not have depth of analysis about the nursing care of confused patients, the ultimate aim of the overall study. Analysis of this care will comprise the bulk of the thesis and this narrative is its beginning. If the story is accurate, if it rings true for those who know the environment, then the conclusions about how the rhythm, patterns and culture of ICU affect nursing care of confused patients, will rest on a firm foundation.

However, if I have 'missed the mark' and my story is inaccurate, then I must know. There are aspects of the story that might disturb you. I maintain no value judgement about what I observed , but you may. Please let me know of your reactions and responses. Also, I welcome any comments that would amplify, extend or add to my

understanding of your ICU. It is for these reasons that I am asking nurses who work in the ICU to read and comment on the story as it is being developed.

Feel free to make your comments on your copy of the story. While your identity will remain anonymous, I do need to know who you are so I can ascertain that you are one of the nurses working in this unit. You will not be identified, and confidentiality will be maintained.

Attached for your interest is an information sheet that explains this study. It was distributed to all 6N/R nurses prior to the commencement of my fieldwork last year.

Please return your copy with your comments in the enclosed envelope no later than 8 August.

I will be at the University of Adelaide from 14 July to 8 August, and can be contacted there on Prior to that I am at home on

Thanks again,

Jane Stein-Parbury, RN
PhD Student, Department of Clinical Nursing
University of Adelaide