

**An Exploratory Study of Priority Setting in
Gynaecology Nursing Practice**

Volume I

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Mrs Audrey Morrison
Department of Nursing and Midwifery

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ABSTRACT

This study explored how nurses in acute and nurse-led gynaecology wards prioritised patient caseloads ranging in diversity and number of patient conditions. Statistics show that since the introduction of medical termination of pregnancy (MTOP) procedures into the National Health Service (NHS) in 1991, the number of women having this procedure is increasing year on year. To date very little is known about the impact this procedure may have had on nursing practice. The focus of this study was to explore the nursing care when this included, and did not include, caring for women having MTOP. The study was conducted in two parts. The first qualitative study employed non-participant observation and semi-structured interviews of nurses in gynaecology and surgical wards at two hospital sites to examine the external context in which nursing decisions were made. This found that nurses in gynaecology focused on emotional or psychosocial aspects more so than surgical nurses who focused on physical aspects of patient care. The second quantitative study involved a cross-sectional survey of nurses from both ward types in two hospitals sites in Scotland. Internal constructs were examined using personality and thinking styles measures. Nurses were assessed on their emotionality, that is, the numbers of times an emotional care aspect was prioritised. This found that nurses who prioritised the emotional aspects of the task tended to be more conscientious and elected preference for a 'people-centred' thinking style. The context in which women have TOP is also important since the findings suggest women may benefit from being cared for in nurse-led rather than in acute wards. Knowing how a person thinks about emotional and physical aspects of care also has implications for those involved in education, and career planning.

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DECLARATION

I declare that no part of the work alluded to in this thesis has been presented in support of an application for another degree or qualification at the University of Stirling, or any other institute of learning for that matter.

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Date.....

Audrey Morrison

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DEDICATION

This thesis is dedicated to my family, to my husband Ian, and children Gayle and Grant, for their continued support, love, and frequent ‘reality checks’ which helped me retain a balance between academic and family life (most of the time). This is also dedicated to my parents Danny and Freda, who have always had faith in my achievements and encouraged me to always do my best, nothing more. Unfortunately, my father did not survive his illness to see me reach my goals but I know he would be so proud of me, as he always was with all his children and grandchildren. Lastly, I must dedicate this to my good friends Alan and Catriona, Nicky and Kathryn, for rearranging countless nights out and celebratory events to accommodate my research commitments, and for helping me through the bad times. Many friendships have suffered over less. I am eternally grateful for your continued friendship, love and support.

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GLOSSARY OF TERMS

Spontaneous Miscarriage

Natural expulsion of a non-viable pregnancy from the woman's body, triggered by natural hormonal release. Non-viable meaning the pregnancy is not capable of surviving to full-term gestation of 40 weeks.

Medical Termination of Pregnancy (MTOp)

Expulsion of viable or non-viable pregnancy using medication to mimic a similar process as occurs in spontaneous miscarriage. No anaesthesia is required. This involves a two-stage process. In stage one the woman receives a single first oral dose of medication, typically Mifepristone, on an out-patient basis. This is followed by a second vaginally-administered medication, Misoprostol, some 48 hours later. The second stage usually requires an approximate six-hour stay under nurse supervision to monitor the process through to its completion. Unlike surgical TOP, the medical termination procedure involves no anaesthesia, the woman is awake throughout the procedure and aware of the process of expulsion taking place. The physical pain and bleeding, and the emotional affect are therefore similar to these which occur in a natural non-induced or 'spontaneous miscarriage of pregnancy', which can vary in intensity the more advanced the gestation of the pregnancy.

Surgical Termination of Pregnancy (STOP)

The 'forced' expulsion of a foetus, in order to terminate a pregnancy using surgical intervention, typically by vacuum aspiration or extraction methods. This procedure requires general anaesthesia, and admission to hospital on either an overnight stay or a day-case status.

Nurse-led or 'Dedicated' care

This is a specialised form of patient care where patients are nursed in separate wards or clinics dedicated to specific medical or surgical requirements. There is no, or very minimal, physician involvement in decision making. On the contrary, it is the nurses in this ward who have sole responsibility for treatments or interventions during a patient's stay. One of the main features of this type of ward is the one-to-one nurse-patient ratios.

Dependency Scoring

Method of determining the intensity of nursing care or number of interventions required during the course of treatment. Used to monitor clinical audit and quality, and determining optimal nurse-patient ratios.

Static (priority-related) decisions

One-off decisions at a single point in time such as when deciding the most appropriate bed location in the ward any new patient should occupy.

Sequential (priority-related) decisions

A series of decisions taken at different points in time which follow on logically from the same starting point, such as daily care planning assessments for patients

Dynamic (priority-related) decisions

Any decision, which needs changed or re-evaluated at any given point in time, in order to adapt to newer changing circumstances or information.

Clinical Guidelines

Formal guidance or pathways of care associated with specific interventions, procedures, or treatments aiming to standardise and maximise outcomes.

Counselling

Specialised form of emotional care involving intensive one-to-one conversation with a patient to discuss awareness, feelings, prognosis, and social impact, as part of a specific regime of care or treatment, such as following diagnosis of infertility, cancer, or foetal abnormality.

Emotional Care

Attending to a patient's general and/ or specific emotional needs or requirements including psychosocial aspects, mental health, and includes counselling. Also includes general supportive approach to patients after receiving 'bad news' associated with poor prognosis or abnormal test results.

Physical Care

Any moving and handling of the patient requiring direct patient contact, assisting with hygiene and other activities of daily living, administration of medications or other specific interventions such as wound care, examinations, or withdrawing blood for tests etc.

Theatre patients

Any patient who is about to receive or has just returned from surgery following a specified operation. This was a common phrase used by nurses to describe such patients. Thereafter, patients were referred to as 'post-operative' patients.

Boarders

Patients sent from wards full to capacity to other wards or specialities who have unoccupied beds available. Used by hospital bed managers as a viable method of providing treatment to all patients requiring admission and justifying economical use of beds

Conscientious objection

Specific clause contained within the Abortion Law, which states any person who has strong objection to being directly involved in terminating a pregnancy, for religious or personal reasons, has the right to do so. For nurses however, although an individual may refuse to take part in the actual procedure, they do not have the automatic right to refuse to care for a woman before and after the actual procedure

Chapter 1 Background to the Study

1.0 Rationale for the study

The past ten years or more has been a time of change for those working in the British National Health Service (NHS) as the discovery of new technologies has meant new equipment, treatment and procedures are introduced, at the same time requiring healthcare professionals, including nurses, to update their practical skills and knowledge to maintain competence to practice (Alfaro Le-Fevre 1997, Norman & Cowley 1999, McQueen 2000, NMC 2004). This suggests that how nurses think about their work and priorities is continually evolving.

The introduction of a medical alternative to terminating a pregnancy, in the confines of a surgical-oriented ward, is perhaps the single largest change in gynaecology nursing over recent years which influenced nursing practice. Very little research exists that explores gynaecology nursing practice or the termination of pregnancy procedure and process. To date only one study has explored priority setting in nursing and this was set in medical wards (Hendry 2001). It is not known how transferable this author's suggested 'two-stage model of priority setting' model may be to other contexts. Therefore, this study set out to explore nurses' priority setting in gynaecology wards.

1.1 Background to the study

Government drives to encourage evidence-based medicine and set performance targets or initiatives has seen an increasing focus upon clinical audit and / or nursing

and medical research (DOH 1997, Trinder & Reynolds 2000). These methods have justified the introduction and evaluation of many new treatments or services (Bloomfield & Hardy 2000). However, some authors argue these moves are covert methods to ration financial and human resources or audit performance rather than meeting the individual needs of patients or the collective needs of its employees (Carr-Hill 1985, Polychronis et al 1996). According to Bloomfield & Hardy (2000), procedures like audits have rarely taken account of the context in which patient services are provided since their concern is solely for monitoring the quality of a procedure in relation to its outcome. Setting priorities is considered an integral component of nursing work that has an important role in ensuring the quality of patient care (Hendry 2001). This may mean if a nurse wrongly assigns or cannot identify what the most important priorities are, there can be implication for the quality of care that patients receive, and for other individuals who have to help sort out any problems or complaints that arise as a result (Castledine 2002). The quality of patient care therefore is dependent not only upon the quality of the procedure or process, but on the expertise, knowledge and skills of the people providing it. It is easy to assume that nurses in different environments have differing priorities and ways of managing them, yet it is assumed all nurses ought to be equally skilled at doing this. Noon & Blyton (1997) suggest individuals make the mistake of assuming that the same priorities that can be managed at home are equally manageable in the workplace, which in reality is quite often different or more complex.

Many have suggested the nature of nurses' work to be complex (Corcoran 1986a, Bowman 1995, Latimer 2000, McQueen 1997a, McQueen 1997b), and influenced by the ever changing turbulent environment in which they work (Norman & Cowley

1999, Stockdale & Warelow 2000). Over recent years problems with the recruitment and retention of nursing staff in the NHS means the workload of nurses has increased (Buchan 2002). There has also been a rise in advanced nursing roles (Daly & Carnwell 2003) and increased demand for certain types of surgery (DOH 1997). McQueen (2000) suggested that nurses are often left to cope with the resources they have rather than being given additional resources. This means nurses have to ration their time with patients, and for certain tasks, in order that existing standards of care can be improved or at the very least maintained. Setting priorities is therefore a key element in contemporary nursing practice (Hendry 2001). Surgical regimes of care may limit trained nurses' freedom to choose the tasks they think are most important, and what they think they can do in the limited time and resources available (Melia 1979, Fonteyn 1998, Hendry 2001). However, since in surgical wards nurses' priorities may be subservient to regimes of care dictated by individual surgeons, it is safe to assume deciding relative priority is perhaps more difficult since there are many more alternatives to consider.

Nurses may have countless tasks to perform for many different patients, all of which may differ in complexity and size (Fonteyn 1998). For example, not every wound is the same in size, depth, or stage of healing: one can be a superficial inflamed wound following insertion of an intravenous cannula, while another deep suppurating wound may be a consequence of malignancy or pressure-induced trauma. Dealing with both these tasks needs to be prioritised relative to other tasks that the nurse may be expected to perform (Hendry 2001), such as those determined by protocols for monitoring post-operative vital signs or pain assessment, or bleeding in the case of

medical termination of pregnancy (MTOP). For example, it may be less traumatic to patients to have an intravenous cannula removed than it is to have a painful wound or burn redressed.

Within the speciality of gynaecology, the introduction of a radical new MTOP service in 1991 for women choosing to terminate a pregnancy may have altered the nursing workload for gynaecology nurses. Medical literature reports methods of MTOP to be a simple and effective procedure that reduces time, resources and costs for both doctors and managers running services (Penney, et al 1994, Cameron et al 1996, Vasquez et al 1999). However, it is indicated in the nursing literature that while the nursing care of MTOP ought to be simple, it is often more time-consuming than the surgical alternative (Kruse et al 2000), requires additional skills (Breitbart 2000, Walker 2000) and interferes with other nursing-related activities performed for other patients (McQueen 1997). The tasks involved in medical methods of termination have transferred from medical into nursing workloads (Howie et al 1997) and it is therefore very different from the nursing care provided by gynaecology nurses to women who choose the traditional surgical method. In general, there has been little research of gynaecology nurses' work, the impact of the medical TOP procedure upon nursing practice (Huntingdon 2002), or the possible effect where nurses are also caring for other types of patient at the same time. This led to following questions:

1. How do gynaecology nurses make decisions about prioritising patient care?
2. How do gynaecology nurses prioritise different patient conditions?

3. Is this different to nurses from other surgical areas?
4. What factors influence this process?

This study will therefore explore gynaecology nurses' priority setting when they are perhaps caring for patients with many different conditions (including and excluding TOP), or ranging in complexity.

1.2 The order of the thesis

This thesis consists of 10 chapters, and involves two separate studies. Study 1, which is qualitative, focuses on the external factors and influences associated with setting priorities, while study two focuses on factors internal to the decision-making individual, and their influence upon nurses' prioritising behaviour and uses quantitative methods. Chapter 1 begins with a broad introduction of priority setting within the context of the NHS organisation. Chapter 2 describes the nature of gynaecology nursing practice, the kinds of patients cared for by gynaecology nurses, and in particular focuses upon TOP procedures in relation to nurses' work and priority setting. This is followed in Chapter 3 by an in-depth exploration of the literature surrounding priority setting in general and more specifically to areas of nursing practice where a specific kind of priority setting occurs, that of triage assessment. Hendry's two-stage model of priority setting is introduced. In Chapter 4, priority setting is discussed in relation to judgement and decision making, cognition and individual differences, and how this is linked to nursing practice. Chapter 5 presents the methodological frameworks used in this study. Preparatory work in connection with study 1 is given separately in Chapter 6. The findings connected with observation data from this study are given in Chapter 7, and those connected

with interview data in Chapter 8. A summary of the collated findings from the previous two chapters concludes in Chapter 9. Study two begins at Chapter 9, which has as its focus the two internal constructs of personality traits and thinking styles. These two factors are examined using a cross-sectional survey of nurses working in gynaecology and surgical wards at two sites in Scotland. An overall discussion of the study's findings and conclusions are presented in Chapter 10.

Chapter 2 The Nature of Gynaecology Nursing

2.0 Introduction

This chapter begins with a definition and a description of the nature of gynaecology nursing. This describes how nursing in gynaecology wards compares to other surgical-based wards and examines those aspects of care accounting for any differences.

2.1 Definitions of gynaecology

Gynaecology has been recognised as a specialist area of medicine for almost two hundred years (Lodge et al 1997), and is concerned specifically with women who have a problem, dysfunction or disorder associated with the reproductive organs in the lower pelvic and abdominal areas (McQueen 1997a). As McQueen (1997a) points out, women with disorders of the female breast are not treated by gynaecologists despite it being an intimate part or essence of womanhood and linked to both reproductive development and pregnancy, but are instead treated by other surgical specialists or oncologists.

2.2 Literature search

Appendix 1 provides details of all the articles reviewed for this thesis and the number of articles obtained using the key words listed across various databases. This found over one thousand articles using the key word 'gynaecology'. Of this number, only 23 were specific to gynaecological nursing care. Over 180 articles related to TOP, but most of these were medical-based, and are discussed in later sections as appropriate.

Within the nursing literature, only a few studies provide any descriptions of gynaecology nursing, either as a generic surgical ward or as a unique speciality. These have tended to provide only broad descriptions of nurses' work (Webb 1985b, McQueen 1997a, McQueen 1997b). While these studies provide some insight, they add little to the knowledge base and understanding of the full nature of gynaecological nursing work. The remainder of existing studies focus on specific aspects of gynaecology care, and include;

- post-operative observational assessment (Zeitz & McCutcheon 2002)
- audit of gynaecology workload (Ferguson et al 1991)
- the development of a formal obstetric and gynaecology triage service (Reid-McKee 1993)
- nurse practitioner judgement and errors in the diagnosis of chlamydia infection (Rosenthal et al 1992)
- perceived embarrassment of patients (Lodge et al 1997)
- nurse perceptions and experiences of the emotional component of gynaecology care provision (Webb 1985a, Bolton 2000, Bolton 2005).
- gynaecology nurses' experiences of peri-natal grief and emotional labour (McCreight 2005)

2.2.1 Similarities and differences between different nursing specialities

A number of studies have explored the role of the nurse and related activity in surgical, medical and stroke rehabilitation wards (Robinson 1996, Berry & Metcalf

1996, Booth et al 1999, Jinks & Hope 1999, Waters & Easton 1999). Three studies in particular have focused upon medical and surgical wards (Bowman 1995, Crow et al 1995, Adams & Bond 1997, McCaughan & Parahoo 2000). Adams & Bond (1997) reported that nurses in surgical wards appear to focus on the use of problem-solving and routine task activities, whereas in medical wards it appeared to be the psychosocial or affective aspects of patient care that were emphasised. Others such as Bowman (1995) reported that environments in surgical wards are more ordered and predictable than medical wards. This could be explained by the nature of nursing work in surgical wards whereby the primary concern is with activity related to pre-operative and post-operative care (such as fasting, physiological tests, pain management or wound care) that normally centres on the regimes favoured by each particular surgeon (Idvall & Rooke 1998). A medical ward on the other hand, may have less need for rigid routines and time deadlines than surgical wards, since the activity of nurses and doctors does not focus around surgical operation schedules but development, diagnosis and resolution of symptoms. Nursing actions and medical interventions may instead focus upon the condition responsible for the patient's admission to hospital, the pathway of that particular disease, and the interventions that are required to alleviate symptoms or promote recovery. Therefore both context and ward speciality would appear to explain some basic differences towards patient care and subsequent intervention. The following sections explore the main features of gynaecology nursing from the descriptions contained within the literature.

2.2.2 Gynaecology as having 'unique' clinical characteristics

Some have suggested that gynaecology nursing is a 'unique' branch of nursing since it differs from the nursing work performed in other specialities (Lodge et al 1997, Dyson & While 1999, Bolton 2000, Savage 2001). These authors relate this uniqueness to a woman's physical reproductive function and sexuality, and the associated emotions and feelings perceived by both nurses and patients. However, they also highlight many other common features with other types of acute wards that care for patients requiring surgical intervention. While all patients in a gynaecology ward are likely to be female by virtue of their anatomical differences, surgical wards may often be comprised of mixed gender but equally may be all female or male. Therefore the reasons for this 'uniqueness' must be sought elsewhere. It is acknowledged that while most surgical wards care for a mixed range of surgical conditions, others like urology or colorectal conditions are often treated as separate branches of surgery where patients may be cared for in separate ward environments. Likewise, gynaecology patients may be cared for alongside patients with other surgical conditions or in a separate ward that either include patients waiting for other types of non-gynaecological surgery (such as a day surgery unit), or where all other patients have the exact same condition, as in TOP.

In gynaecology, nursing activity may have similar features in common with any other surgical ward since there is a similar focus upon pre-operative patient preparation and post-operative recovery. In a small exploratory, qualitative study, McQueen (1997a) reported that nursing in gynaecology focused on specific activities including; caring for the terminally ill, caring for relatives, and caring for

patients having TOP, spontaneous miscarriage or infertility problems. While the first two of these features were acknowledged as applicable to most clinical settings, the remaining features ‘caring for patients having a TOP’ and ‘caring for those experiencing a miscarriage or fertility problems’ were seen as distinctive and unique features of gynaecology wards. Within the study by McQueen (1997a, 1997b), miscarriage and termination are not only given as distinct categories, but the words used to describe the nursing care associated with each are also different. For instance, women ‘have’ a termination, whereas women ‘experience’ a miscarriage. One could possibly take this as an indication that the nursing care associated with these two conditions is somehow different and over and above the surgical-oriented remit of nurses, namely the physical and emotional care related to pre-operative preparation and post-operative recovery.

2.2.3 Gynaecology as ‘unique’: emotional labour

Gynaecology is also considered as ‘unique’ from other types of nursing since there may be a strong emotional element attached to the patient’s medical condition, and the subsequent nursing care that is provided (Lodge et al 1997, Bevis 1991, McQueen 1997a, 1997b, Dyson & While 1999, Bolton 2000). For instance, some conditions (such as pelvic infection or polycystic ovary syndrome), and most gynaecological surgery were cited as having the potential to affect fertility, the very ‘essence of womanhood’ and reproductive function (Allan 2002).

Women in early pregnancy can be admitted to the gynaecology ward with diverse and often contrasting conditions. For example, some women may wish to end their pregnancies for social reasons or inability to cope, while others may be having a termination because of abnormal foetal development or genetic problems (McQueen 1997b). Other women may be having a natural or spontaneous miscarriage of a much-longed for pregnancy, while others are admitted with a potentially life-threatening condition of pregnancy such as suspected or ruptured Fallopian tube pregnancy (Moore 1990). Added to this diversity, is the woman who cannot conceive, and is admitted for investigations of infertility (Allan 2002). This would suggest that each nurse who is responsible for a caseload of women that includes any two or more of the above gynaecology conditions may approach the nursing care for each woman differently since each condition may invoke varying degrees of emotional distress.

According to a quote from one ward manager in the study by Bolton (2005), there are *“women who are terminating a pregnancy because it doesn’t fit in with what they want at the time, and you are nursing these women alongside those who are desperate to keep their babies or who are losing their babies through an abnormality. I think this produces a stress that doesn’t occur anywhere else at all. I think it is unique....and not recognised by anyone outside of gynaecology”* (p176). Martin (1996) equates midwifery nursing as dealing with positive production and gynaecology nursing with failed production. In terms of outcomes, the same author reports how the birth of a live baby is perceived by midwives as a socially desirable outcome and miscarriage/ abortion as socially undesirable ones. One may question

whether the kind of loss encountered in most other areas of nursing such as the loss of a limb or breast in surgical wards, is ever accepted as a socially undesirable outcome but instead considered an unfortunate one. Dealing with this type of socially undesirable nursing work, which Bolton (2005) calls 'tainted', may be one of the reasons why gynaecology nurses speak of their nursing care as 'special' or 'unique'. Based on this reasoning it is also fair to assume this has potential to influence a nurse's priority-setting behaviour or decision making, especially when a nurse's caseload may comprise patients with different types of condition, social status, morals and/ or expectations.

Other studies have linked 'emotion work' to certain aspects of nursing care involving intensive one-to-one communication such as in breaking bad news and counselling work (Mann 2004). The emotional component of gynaecological work has been recognised as a stress agent for both nurses and patients in previous nursing research (Smith 1992, McQueen 1997b, McCreight 2005). Within gynaecology, emotional-related nursing care was consistently identified as being particularly associated with surgical and even more so with medically-induced termination of pregnancy /miscarriage (Penney et al 1994, Marshall et al 1994, Cameron et al 1996, Henshaw et al 1997, Howie et al 1997, McQueen 1997, Gibb et al 1998, Maaita et al 1999, Swanson 1999, Murphy et al 2000, Walker 2000, Wilson 2000, Allen et al 2001, Slade et al 2001). Nurses have a direct role to play at every stage of the MTOP procedure: from pre-procedural counselling, to administration of the abortifacient drugs, and the passage of the contents of the womb ('products of conception' or POC). In the medical care that patients receive for early, mid- and

late MTOPs (before 24 weeks), the work of the nurse also entails the 'sensitive' handling and disposal of the foetal remains. Vadeyar et al (2005) reported how in rare circumstances a foetus can still be born alive despite medication to terminate the pregnancy, resulting in an extremely difficult emotional situation for nurses. This suggests the time a nurse will spend with a patient may depend upon the level of physical and psychological care required, and may therefore vary between women having surgical and medical procedures, and more specifically between procedures performed at an earlier or later stage of pregnancy. This clearly has a potential effect upon women undergoing this procedure, and upon nurses involved in caring for such women. It is no surprise therefore that the TOP process was linked to psychiatric morbidity in in-patients after such an event (Zimmerman 1992). Thus, there is a significant emphasis upon the provision of emotional support and counselling to patients (Smith 1992, Breitbart 2000, RCOG 2000).

2.2.3.1 Termination of pregnancy

Until the introduction of medical methods to terminate pregnancy in 1991, surgical intervention was the main 'gold standard' treatment offered to women (Vasquez et al 1997). However, the position has now changed with MTOP one of the most common procedures offered in gynaecology units (Penney & Templeton 1994).

2.2.3.1.1 Incidence of TOP in Scotland

In the fifteen years since the introduction of the medical TOP procedure, the percentage of MTOP procedures performed in Scotland has risen steadily from 16% in 1991 to 62 % in 2005, with a corresponding decrease in STOP procedures from

85% to 38% (Scottish Health Statistics ISD 2005). Equivalent statistical data for England and Wales (DOH 2005) reveal fewer medical TOP procedures performed (24%) than surgical TOP (75%). In Scotland this means more medical terminations are performed than their other NHS counterparts in the UK. In the same time-frame, according to the same statistical source, there has also been a shift from in-patient to day-care status, reducing hospital stays (Speirs 1997, Wiles et al 2001). Since MTOP is largely performed on a day-case basis (RCOG 2000), a high proportion of day-cases in gynaecology may be women having this procedure. Data provided by Scottish Health Statistics (ISD) based on figures for 2003 indicate that gynaecology has a higher than average throughput of patient cases per year (n=74 patients per bed) when compared to other areas such as general surgery (n=55) However, it is unclear what number of women are treated in acute gynaecology wards compared to dedicated nurse-led wards.

It remains unclear how the large throughput of day cases in gynaecology wards has affected the way that nurses work, including possible changes to nurses' workload, the organisation of nursing care, and priority setting for different types of patients. According to Hinshelwood & Skogstad (2005) however, assumptions have been made that if quicker treatment or intervention provides savings in efficiency then so too should the transient personal contact provided by nurses, with the result healthcare professionals are often left to cope as no changes to practice have been considered necessary. From the emerging picture of the development of TOP methods in the NHS in Scotland, a general exploration of the literature on

termination was undertaken to identify the views of different stakeholders of this service, namely medical professionals, patients, and nurses.

2.2.3.1.2 Different perspectives of the TOP process

A search of existing literature was conducted in various databases including CINAHL, PsychLit, Cochrane Library, Ovid, Medline, and Ingenta, using the following terms singly and in combination; (gynae or gyn(a)ecolo*), (induced miscarriage or abortion), (medical or surgical TOP), (termination of pregnancy), and (nursing care or intervention). A total of 42 relevant articles were found. Most of these studies focused medical evidence to support or evaluate medical and surgical treatments or procedures. Very few explored gynaecology nursing practice. Further hand searching of journals and references yielded only three additional relevant studies. Those with a medical focus were large clinical trials which demonstrated medical methods to reduce risks and length of patient stay in hospital (Penney et al 1994, Henshaw et al 1996), financial costs (Gouk et al 1999, Vasquez et al 2000), and the need for theatre list slots and staff involved in the process (Ashok et al 1999). Others examining patient experiences and satisfaction with alternative methods of TOP found that women who chose medical methods were not prepared for other physical and emotional side-effects associated with the procedure such as intense pain and excessive bleeding (Maaita et al 1999) arising from the experience of expelling, and in doing so, seeing the foetus (Slade et al 2001).

Some nursing studies suggested the attitudes of nurses were an important factor influencing their own as well as women's experiences of TOP (Webb 1985a, Webb1985b, Blain 1993, Marshall et al 1994, McQueen 1997). These are mostly small qualitative studies employing self-report and anecdotal evidence to substantiate such claims. However, small studies of this nature can yield a large amount of rich data and insight into how nurses think and feel about aspects of their work (Taylor 2003). Nurses were reported to perceive patients differently by virtue of their 'religious affiliation' (Marwick et al 1994), morality (Webb 1985a) or value of their condition (Webb 1985b, Marshall et al 1994, Dyson & While 1999).

Thirty nurses interviewed in an early study by Webb (1985a), revealed strong negative attitudes towards TOP, referring to TOP patients as 'bad'. Other patients perceived positively as 'good' tended to be patients who had hysterectomy for example. Nurses appeared to make distinctions therefore between patients having TOP (not seen as a 'real' illness), and patients having major gynaecological surgery (seen as 'genuinely' ill). In a second article, the author (1985b) comments that the nurses involved had no grounds for such strong negativity since nurses had no active role in the TOP procedure. Since the introduction of MTOP methods has transferred the workload for this procedure from medical to nursing staff, and Webb's study took place prior to 1991, nurses are now more actively and directly involved in the process than gynaecologists (Howie et al 1997). That being the case, this now begs the question, is there any difference in nurse attitudes in a climate where MTOP is commonplace, with more potential for exposure to emotional and moral conflict?

According to Howie et al (1997), 30% of gynaecology nurses expressed job dissatisfaction after the introduction of the MTOP procedure, mainly because this newer procedure involved different work and skills than for the surgical alternative. The strength of negative attitudes shown by nurses towards women having TOP has tended to increase with the length of the pregnancy gestation (Marshall et al 1994, Dyson & While 1999), particularly so in gestations from 12-24 weeks. Other factors, such as the length of time the nurse had worked in gynaecology and caring for women having termination were also associated with more negative nurse attitudes (Marshall et al 1994). There were also situations where women who chose to terminate pregnancy due to rape or assault (Marshall et al 1994), or who experienced a spontaneous miscarriage or infertility (McQueen 1997a, 1997b), received more empathy and compassion from nurses than women whose reasons were for 'social' rather than medical benefits. It is suggested that both the nurse and the patient experience the emotional effects of termination together, but in different ways (Huntingdon 2002).

However, one should not assume that issues concerning emotions, morality or the social stigma attached to a specific condition is pertinent only to gynaecology and TOP. On the contrary, other areas exist where similar issues pose the same potential problems. For instance, in a study by Sherman (2001) AIDS patients were equally subjected to judgmental attitudes as a result of the social stigma associated with their illness. At that time these patients were more likely to be isolated from non-AIDS patients were cared for in specialist nurse-led rather than in general ward environments (Sherman 2001). In the same study, AIDS patients reported they felt

more exposed to the judgemental attitudes of others in a general ward environment suggesting that the physical isolation provided in small nurse-led wards or units may be linked to patient well-being, at least for certain types of patient condition. According to Blain (1993), nurses who displayed the most positive attitudes towards women tended to work in nurse-led termination units rather than in general acute gynaecology wards. This may suggest that other variables such as personality traits, motivation, or ward culture /environment may be significant factors in the provision of non-judgmental care and which may result in different prioritising behaviours.

2.2.4 Implications for this study

It is possible to argue, at least based on the evidence presented thus far, that the rationale for the introduction of MTOP methods into traditional nursing workloads has been based largely on the efficiency and evidence of the treatment from a medical and economic viewpoint, and patient choice. However, there is no evidence that it has been effective from nurses' perspectives. One might expect that transferring a major part of medical workload onto nursing staff would have resulted in it being recognised as additional work, requiring additional human resources and training on gynaecology wards. However, this does not appear to have been the case for, according to Huntingdon 2002: 275), the most recent evidence of this kind suggests MTOP work has been 'absorbed' into nurses' workload and has become another hidden element of nursing practice. The additional skills required of nurses may have a positive as well as negative effect

upon nurse satisfaction, having implications for nurse morale, methods of coping, and self-efficacy.

Non-judgmental care and positive staff attitudes are common themes across both nurse and patient literature. The 'self-induced' nature of TOP and AIDS in particular appears to be potential criteria for influencing any decision regarding priority status. This supports Neuberger et al (1998), who reported self-induced disease as a major factor influencing the allocation of donor liver grants especially where decision makers held strong views of a particular disease. Increased prevalence of the MTOP process appears to have emphasised the need for specialised physical and psychological skills and knowledge, mainly for nursing staff involved. From the literature assessed, it appears that the care of women having TOP in dedicated nurse-led units may differ from that of acute gynaecology wards. Likewise, the necessary level of expertise and skills in both areas may also differ. As there is very little evidence of what the procedure means for nurses and what decisions or expectations are involved, other sources are examined for further evidence.

2.3 Dedicated nurse-led care

In section 2.2.1, it was suggested that ward structure or culture may influence the kind of nursing care provided by nurses and received by patients. There has also been a rise in the number of nurses possessing extended or advanced roles (Daly & Carnwell 2002), and in nurse-led units providing care for patients, including gynaecology patients (Walker, 2000, Wiles et al 2001).

In 1998, in a survey conducted by the Abortion Law Reform Association (ALRA) consultant doctors suggested that providing dedicated nurse-led centres for TOP provision was the best way forward in light of a reduction in the numbers of suitably trained doctors. This also argued that patients would benefit and receive better care since nurses who chose to work there were less likely to be ‘conscientious objectors’ of abortion than those in acute wards. The recommendations provided by the study preceded the establishment of subsequent guidelines produced by the Royal College of Obstetricians and Gynaecologists (RCOG) for the normative management of induced abortion (RCOG 2000). One of the guidelines supports the segregation of women having TOP from other women in the ward with unrelated gynaecological conditions (Appendix 2). The guidelines recommend that women having a TOP procedure have the right to non-judgmental care and privacy. This can mean a woman is nursed in a single or multi-bedded room separated from the rest of the gynaecology ward, or in a separate unit outside the gynaecology ward altogether depending upon interpretation. One may therefore argue the dedicated ‘nurse-led’ TOP model appears to be best matched to the ‘ideal’ described in the RCOG guidelines. If so, could this mean nurses prioritise care for these women any differently to other patients?

Studies of dedicated nurse-led units have described how nurses tend to be more motivated and autonomous, and more likely to possess extended nursing roles than those working in non nurse-led units (Wiles et al 2001). These studies were undertaken in specialist units for AIDS patients (Sherman 2001) and for intermediate care of the elderly (Wiles et al 2001). Only one study describes a

specialist nurse-led termination service in detail (Ojidu & Sabharwal 2001). This retrospective study involving one NHS hospital in England described the rewards and benefits following the introduction of a specialist day-care service for women seeking TOP. The study recruited the first 10-12 women opting for MTOP each calendar month to receive specialist care, rather than attend out-patient clinics. For patients, the main benefit was a supportive and non-judgmental environment with committed nursing staff. While the study represented the views of the medical professionals and patients, there was no mention anywhere of the benefits to nursing staff. The study reported very high rates of patient satisfaction (ranging from 82% to 100%), with the care they received. On the one hand, this may indicate genuine satisfaction, or alternatively, some form of response bias. It may also be the case that the authors selected only those questions rating highest on satisfaction for final reporting. However, across all studies reviewed concerning dedicated units, patients were in no doubt that the level of care they received was better than they expected would be the case in general ward environments.

The focus of the literature surrounding dedicated nurse-led care and nursing activity varied according to the kinds of care provided. For instance, nurse-led intermediate care for elderly medical patients focused on continuing care and discharge planning-related activity whereas caring for AIDS patients focused on physical comfort and interventions and spiritual care. The difference between care provision in the two types of ward (acute and nurse-led) lies in the emphasis upon psychological care in addition to the specialised physical and medical interventions (nurse-led) and the

precedence given to routine interventions by virtue of surgical regimens (Blain 1993).

2.4 Routine and non-routine work in surgical based wards

Previous sections have already described the nature of work in surgical wards. Whether this is an acute surgical, orthopaedic, urology, gynaecology or vascular ward, the common feature between them is that they focus on surgical operations as opposed to medical treatment, to resolve problems. Authors such as Wiggins (1997, p119) have likened surgical wards to 'conveyor belts' of care, to describe the controlled and systematic journey of patients in, through, and out of the NHS system. This systematic 'just-in-time' production system extends to admitting patients ready prepared for theatre just in time for surgery to proceed. According to Wiggins (1997), the use of routines make it difficult for nurses to provide individualised care effectively since the need to adhere to routines supersedes other aspects of patient care. For example, getting a patient to the operating theatre at the prescribed time requires a sequence of structured, formal and routine activities meaning this may be given priority over other aspects of care such as psychological care. More specifically, others have suggested that specific physical tasks such as routine pain management take priority in surgical wards (Idvall & Rooke 1998). Other studies have demonstrated how nurses use routines to organise patient care or resort to routines as a way of dealing with difficult problems (Forrest, 1989). In studies where situations involving complex care decisions formed part of a normal workload, nurses increasingly resorted to specific basic or routine aspects of care for patients (Tummers et al 2002) such as routine personal hygiene or bathing

(Proctor 1989, MacLeod 1994). One can question the extent to which patients with similar dependency levels actually received individualised care. Arguably, relying on guidelines to govern care may mean that individual patient needs could end up being overlooked owing to the pressure to conform to prescribed, routine care or treatment pathways. In the nurse-led gynaecology ward, there is typically only one group of patients cared for, all with the same condition, unlike in general gynaecology wards, where there is larger diversity of different conditions and treatments. One may question whether prioritising patient care in acute wards is more complex and might therefore involve more frequent reevaluation than is the case in nurse-led wards.

2.4.1 Temporal aspects of nursing-related activity

Temporal activity clearly forms a major proportion of nurses' work in gynaecology and surgical wards, with rigid deadlines for surgery, expected recovery times and specified patterns of work. A common finding in studies that examine nursing practice is that nurses frequently experience interruptions from other people during care provision (Bowman 1995, Waterworth et al 1999, Hendry 2001). This suggests that interruptions may be a normal part of everyday practice. Manias et al (2005) highlighted how interruptions impacted upon the time a nurse had to spend on the assessment and management of pain of post-operative surgical patients. From a series of field observations, they revealed that nurses showed a 'sense of priority' by deeming certain tasks to be 'interruptible' and others as 'non-interruptible'. For instance, administering post-operative analgesia was non-interruptible whereas administering 'comfort' analgesia (e.g., for a headache) permitted interruption. This

supports earlier work by Idvall and Rooke (1998), in which pain management was a routine part of practice in surgical wards, and accordingly assigned high overall priority. Despite experiencing a high level of interruptions, Hendry (2001) found this did not affect outcome but instead only delayed nurses' priorities.

These studies, regardless of the wards or speciality from which the sample came, identified common themes of activity-related behaviour such as attending to administrative or managerial work, documenting patient records, administering medication or providing patient interventions, communication with others and time spent in direct care-giving activity or 'hands-on' patient care (Bowman 1995, Jinks and Hope 1999, Latimer 2000). Some studies used fieldwork observation, taking only hand written notes when required as the desired activity occurred (Jinks and Hope 1999). Others used observation schedules to document specific activity and frequency (Bowman 1995), or utilised empirical time sampling methods to determine activity, as well as the frequency and duration of each separate sub-unit of activity (Dowding et al 2000). Most of the studies exploring activity or physical tasks performed by nurses are small exploratory studies in one or two different specialities. This makes it impossible to generalise findings because of differences in the context and organisation of nursing work between specialities. It does however provide information that is important to nurses and educators by describing the similarities and differences in different areas or types of nursing.

Bowers et al (2001), explored nurses' use of time in a long-term care ward for elderly patients. Nurses assigned emotional work lower priority than physical work

since most of the patients had problems with mobility or ability due to the ageing process and therefore required assistance with activities of daily living (ADLs). In gynaecology there is an emphasis on the physical ADLs associated with recovery from surgery and an equally high emphasis on emotional work content. In the study by Bowers et al (2001), nurses sequenced routine work in a way which allowed them to achieve the most physical work in the time available. Nurses made use of various strategies to help them save time and unnecessary effort by giving smaller tasks higher priority, clustering or omitting tasks, or changing the sequence. When unscheduled tasks became a priority, such as in a case of emergency, the nurses abandoned tasks they personally felt they *should* be doing for tasks they *had* to do, usually associated with routine work such as medication rounds, or doctors' ward rounds. The behaviour of nurses in Bower's study supports the notion that people are more aware of time only when it becomes a problem (Kaplan et al 1993). Priority-setting is assumed a strategy used by individuals when they anticipate or are already aware that time is, or will be a problem (Kaplan et al 1993).

2.5 Chapter summary

In summary, surgical, medical, gynaecology and dedicated nurse-led wards may differ in terms of professional and personal qualities of nurses and the range of, and time spent in physical and psychological related activity. In gynaecology, the nature and scope of decisions, and the time spent in various MTOP-related activity, may also differ in comparison to nurse-led wards. The MTOP procedure has apparently been absorbed into the normal surgical-based workload associated with gynaecology nursing practice yet demands a stronger commitment to emotional care. The tensions between those two types of care could interfere with basic ward

organisation and work patterns. Furthermore, the increased throughput of patients and higher number of day cases (for surgical operations and MTOP) performed in gynaecology wards (as opposed to an actual day care ward), results in rapid turnover of patients. This means nurses care for women requiring longer stays for major surgery, and shorter stays for day patients. If nurses have to spend time both nursing and counselling women who are only on the ward for a few hours, one can question how the nurse deals with issues relating to nursing care and the priority that may be given to this procedure. The next chapter will therefore focus on setting priority.

Chapter 3 Priority Setting

3.0 Introduction

The following section explores the nature of priority setting in the context of nursing practice. This begins with the search strategy used to locate the most relevant research studies. This is followed by definitions of what priority setting is, and why it is an important part of work organisation, both in the general literature and in healthcare, but more specifically to nursing practice.

3.1 Search strategy

The search strategy used to locate relevant literature surrounding the topic of priority setting can be seen in Appendix 1. The abstracts were then filtered by context, with business management, education and research identified as the three main domains where priority setting was the focus of research interest. Excluding those with a financial focus, only 47 out of over 2,000 articles appeared to focus on priority setting in relation to strategic, or group-level priorities. In contrast, only eleven studies emphasised the type of priority setting that took place at individual level, for individual tasks. Only four related to nurses but focused directly on setting priorities in an acute hospital ward, one in the speciality of medical nursing practice.

3.2 Definitions

Firstly, it is necessary to clarify what priority setting or prioritisation means. From the literature reviewed on priority setting across contexts, a range of definitions was obtained (Table 3.1).

Table 3.1 Definitions of priority setting

AUTHOR	DEFINITION	CONTEXT	PRIORITISE BY:
Chambers Dictionary (2000)	<i>To arrange, deal with in order of importance or urgency</i>	Dictionary	Urgency
Barnard (1995)	<i>Selection of certain factors over others in terms of effectiveness, importance or constraints</i>	Business	Importance Effectiveness Limitations
Stewart (1995)	<i>Something one does first doing A before B and meeting all A's claims before B's are considered</i>	Public Sector Management	Importance
Potter & Perry (1998) Leahy (1998)	<i>Ranking of problems or concerns in order of importance or urgency</i>	Nursing	Importance Urgency
Kron & Durbin (1981) Alfaro le-Fevre (1999)	<i>Determining the precedence of tasks in terms of what needs to be done first before others</i>	Nursing	Needs
Long & Fischhoff (2000)	<i>Ranking in terms of the magnitude of a problem</i>	Risk Management	Magnitude
Irurita & Williams (2001)	<i>Selectively focusing on certain patients and ranking needs or activities in order of perceived importance.</i>	Nursing	Needs Importance

It is clear that while there are obvious similarities and a degree of consensus about what priority setting may be, there are also differences in definitions. For example, while priority setting may well involve factors such as the size, complexity and nature of a task, and the environment in which the task is performed, these concepts cannot be treated as mutually exclusive. One could argue that the magnitude of any task is less significant since it does not necessarily mean that performing a small task is unimportant or any less urgent than a larger or more complex one. Overall however, there appears to be a general consensus of opinion that priority setting occurs by ranking or ordering issues of concern by ‘urgency’ (Potter & Perry 1998, Leahy 1998, Chambers dictionary 2000) or ‘importance’ (Barnard 1995, Irurita & Williams 2001), and is linked to patient need (Kron & Durbin 1981, Alfaro le-Fevre

1999). However, how is urgency or need determined? Is this what the nurse thinks? Or is this what the patient, doctor, peers or management thinks is urgent or important? For this reason, a literature review was conducted to look for evidence of situations where prioritising has occurred, and where it is most likely driven by urgency, importance or need. The next sections explore the nature of priority setting at general, strategic and individual levels, and will discuss features that are common or distinct to each concept.

3.3 Priority setting in general terms

Further to the many definitions describing importance, urgency and need as the main three elements of priority setting, there appears to be an priority order associated with priority itself. For example, Tracy (2003), advises individuals of the A-B-C-D-E method:

Figure 3.0 'ABCDE' method of priority setting (Tracy 2003)

A	Very important, must do, severe negative consequences if not completed
B	Important but not as much as A, minor consequences if not completed
C	Nice to do, not as important as A or B, no negative consequences
D	Delegate to someone who can do the task in your place
E	Eliminate whenever possible

This method assumes it is possible for all individuals to set priorities in the same way. In nursing however, as may be the case elsewhere, there may not always be a suitable or competent person available to delegate a specific task or tasks to. In

addition, it may not always be possible to eliminate tasks that might not be considered a priority to the individual but which the organisation expects to be done anyway.

3.4 Priority setting at strategic management level

An initial search revealed areas where the primary focus of priority setting was most predominant in studies with a general management focus and in healthcare fields (Parkes 1996, Mabin et al 2001, Mitton & Donaldson 2002, McKee et al 2002). The nature of this priority setting was associated with teams of key individuals within organisations who met to plan the future direction of the organisation, and mostly involved long-term decisions. In strategic priorities made in healthcare organisations, many adopted a utilitarian approach (McKee et al 2002, Smith & Hadorn 2002, MacCormick et al 2002), typically to determine which groups of individuals (or individuals within them) with certain conditions, should have priority access to treatment or investigation (Speirs 1999). Such prioritising decisions may therefore be 'distanced' from the individuals to whom they assign priority status. In summary, it is unlikely that the kind of priority setting by groups of individuals corresponds to the nature of priority setting undertaken by individual nurses in acute settings. Therefore since it is of little relevance to nursing is not explored in detail.

3.5 Priority setting at functional level: nursing priorities

Nurses, like all other individuals, prioritise elements of work in order to make best use of the time or resources available, to achieve the work or personal goals

associated with the caseload of patients for whom they are responsible (Bowers et al 2001). Priority setting in nursing is a key factor and an integral part of assessment and care planning (Kron & Durbin 1981, Wilkinson 1992, Potter & Perry 1998, Fonteyn 1998). Others suggest it is a thinking strategy and a skill (Carnevali & Thomas 1993), requiring clinical judgment (Wilkinson 1992), and is used to deal with time constraint or deadlines (Kaplan et al 1993).

Alfaro le-Fevre (1999) identified three categories of high, medium, and low priority illustrated by specific examples from clinical practice. Nurses, the author expects, assign high priority to individuals with potentially life-threatening conditions such as acute problems with airway or circulation (e.g., acute asthmatic attacks). Medium priority ought to be assigned to those with less urgent conditions that may threaten safety or stability such as abnormal blood test or X-ray results, and lowest priority to those with stable conditions or minor concerns such as fatigue. This makes a major assumption that priority is wholly associated with severity of disease or condition and of objective, rather than subjective cues, thereby ignoring the individual as a person. This assumes all individuals will assign patients the same status in accordance with these three categories, which in clinical reality, nurses may not do. As has been shown in studies relating to nurses' use of time (Bowers et al 2001), nurses do not all assign priority in the same way, for the same task, in the same situation. Furthermore, the boundaries between low, medium and high priority may not be clear cut but could well be blurred rendering priority setting more complex than assumed.

While there is an abundance of priority-setting literature as a whole, very few studies focus on the domain of nursing practice. Studies explicitly investigating priority setting in nursing were mainly conducted in non-acute areas such as occupational therapy nursing (Harries & Harries 2001), community public health nursing (Hansen & Thomas 1968), primary care (Walsh 1999), and in acute settings such as high dependency or intensive care (Riegel & Dracup 1986). Others focussed on one particular form of priority setting that occurred in emergency triage settings (Crouch 1998, Leprohon & Patel 1995, Siddhartan et al 1996, Travers 1999, New 2000, Marsden 2000, Gertz & Bucknall, 2001, Cioffi 1998, Cioffi 2001). Only one study has been located exploring priority setting in generic settings, and occurred in an acute medical setting (Hendry, 2001).

3.5.1 Priority setting in the community

In studies that have explored aspects of nursing in community-related settings, it was reported that different emphasis was given to the same set of patient conditions depending on the grade of the nurse involved (Hansen & Thomas 1968), and level of experience (Hansen & Thomas 1968, Walsh 1999, Harries & Harries 2001).

In the early study by Hansen & Thomas (1968), six grades of North American public health nurses, from the most junior to the most senior, were given a 50-item questionnaire (describing various levels of patient needs, and further sub-divided to form six categorical variables; situation, context, decision-maker; judgments, and decision response). When asked to determine which clients should be given priority

for home visits, qualified nurses were found to rank communicable disease and prenatal conditions higher than students. Conversely, students gave higher priority to chronic illness. The author suggested that students who spent the majority of their training in hospital settings were not as exposed to communicable disease, therefore their lack of experience and knowledge may have affected the way they assigned priority. Those in senior professional roles (arguably more experienced and knowledgeable) were better able to deal with the more complex cases. This outdated study occurred before health system and educational reforms on both sides of the Atlantic. As a result, it is unlikely that the results are transferable to setting priorities in modern day clinical settings in either the USA, or more importantly in the UK, where health and education systems may be different. It could equally be argued that while the actual priorities may have since changed, the basis of how priorities are set (i.e., using experience and knowledge) are likely to be just as relevant today, as has since been acknowledged by other authors (Hendry 2001) .

Two authors linked both experience and knowledge to skill acquisition (Benner et al 1996; Dreyfus & Dreyfus 1986), and another to the transference of skills between individuals to improve the quality of trainee decisions (Harries & Harries (2001). In their small exploratory study, Harries & Harries (2001), investigated the prioritisation policies of four occupational therapists working as part of a community team as they dealt with incoming patient referrals for treatment at home rather than in a hospital unit. Using social judgement theory as a framework, 120 computer-generated referrals were presented to experienced occupational therapists using the same format as original referral forms, and asked to firstly rank each

referral on a visual analogue scale (ranging on a continuum from low to high priority). When asked to state what criteria they thought they had used in each case to judge priority, 'reason for referral' was identified by all four therapists as the main criteria used. All but one overestimated the number and degree of relevant cues, and that individual happened to be the therapist with the highest professional role of the four therapists questioned. This coincides with the findings of a much earlier study by Hansen & Thomas (1968) where those in experienced senior roles were better at identifying priority. Being a pilot study however, the sample size may have been much too small to be a reliable indicator of activity or behaviour as a predictor of the significance and influence of professional roles upon prioritising.

The community-based studies of both Hansen & Thomas (1968) and Harries & Harries (2001) were limited to one site. In each study, the nature of priority setting involved situations where one-off decisions were required, and required no direct visual or verbal interaction with the clients concerned, and are therefore not easily transferable to real world settings. In the case of occupational therapy referral forms, only the information contained within the referral form was used to make clinical judgments but there could have been other factors influencing the priority decisions they made. In the study by Harries & Harries (2001), the large number of case scenarios presented while essential to the validity and reliability of social judgement methods were also acknowledged to have been cognitively demanding for individual decision makers.

3.5.2 Priority setting in acute care

Only a handful of studies explicitly examined individual nurses' patient-care priorities (Riegel & Dracup 1986, Walsh 1999, Hendry 2001), and these explored priorities in intensive care (Riegel & Dracup 1986), and medical wards (Hendry 2001). Walsh (1999) compared the priority setting of both nurse practitioners in primary care and trained nurses in general wards. Other studies did not explicitly investigate priority setting, but identified it as a component of another phenomenon such as coordination as an element of managed care (Allred et al 1995), quality and experience of nursing care delivery in acute hospital settings (Irurita & Williams 2001), perceptions of time when caring for patients (Bowers et al 2001, Waterworth 2003), and nursing perspectives of key elements of the decision-making process (Offredy 1998, Boblin-Cummings et al 1999).

Bowers et al (2001) illustrated that nurses in long-term care wards chose a series of small routine tasks in preference to larger or complex tasks, simply because they had a better likelihood of being accomplished in the perceived time available, and appearing 'efficient' to others. Prioritising in this way did not necessarily make their work any more effective. Therefore, one can argue that the inability to prioritise or prioritise effectively may have implications for the quality of care nurses can provide in certain circumstances.

Irurita & Williams (2001) identified coordination as one of four themes contributing to the quality of patient care. The other three were identified as 'cooperating', 'justifying compromised care and lowering expectations' and 'protecting self by

attracting or repelling'. The authors linked poorly coordinated care to the nurses' attempts to cope with an increasingly higher patient turnover and early patient discharge policies. In order to prioritise patient care, nurses assessed and determined each patient's needs but the authors of this study neglected to provide details of exactly how this was achieved. However, they did report that nurses gave higher priority to physical tasks such as giving out patient medications and monitoring vital signs and other important observations, and lesser priority to assisting with personal hygiene. Others exploring nursing activity of trained nurses have demonstrated that patient hygiene tended to be delegated to untrained or student nurses (Bowman 1995). Although it is not possible to tell from the study in question whether hygiene needs were the responsibility of untrained nurses, it could possibly explain the low priority given to hygiene in this case.

Both Irurita & Williams (2001) and Waterworth (2003) shared the same view that where nurses perceived time pressure was a problem, they often gave higher priority to physical rather than psychological needs of patients. In both of these studies, some physical tasks considered less important were 'sacrificed' in order that other kinds of task could be more evenly distributed among all patients (such as distributing patient medications at the appointed times). If time was perceived a problem, nurses deliberately ignored some patients as a 'self-preservation measure' against interruption or conflict. This supports examples provided in other studies where strategies were employed by nurses to avoid unnecessary conflict from disruptive (Hendry 2001), or noisy patients (Hummelvoll & Severinsson 2001).

However, one cannot ignore the alternative possibility that nurses might not have had a good relationship with the patient.

3.5.2.1 Two-stage model of priority setting in medical wards

Hendry (2001) described the priority-setting process in one medical ward. Using a combination of observation, simulation, think-aloud and interview, he investigated how junior trained nurses, and junior and senior student nurses dealt with aspects of nursing care as priority. Various external factors (fragmented work or time pressure), and internal constraints (lack of confidence, personal views and values of individual nurses), appeared to determine how the nurse made priority decisions.

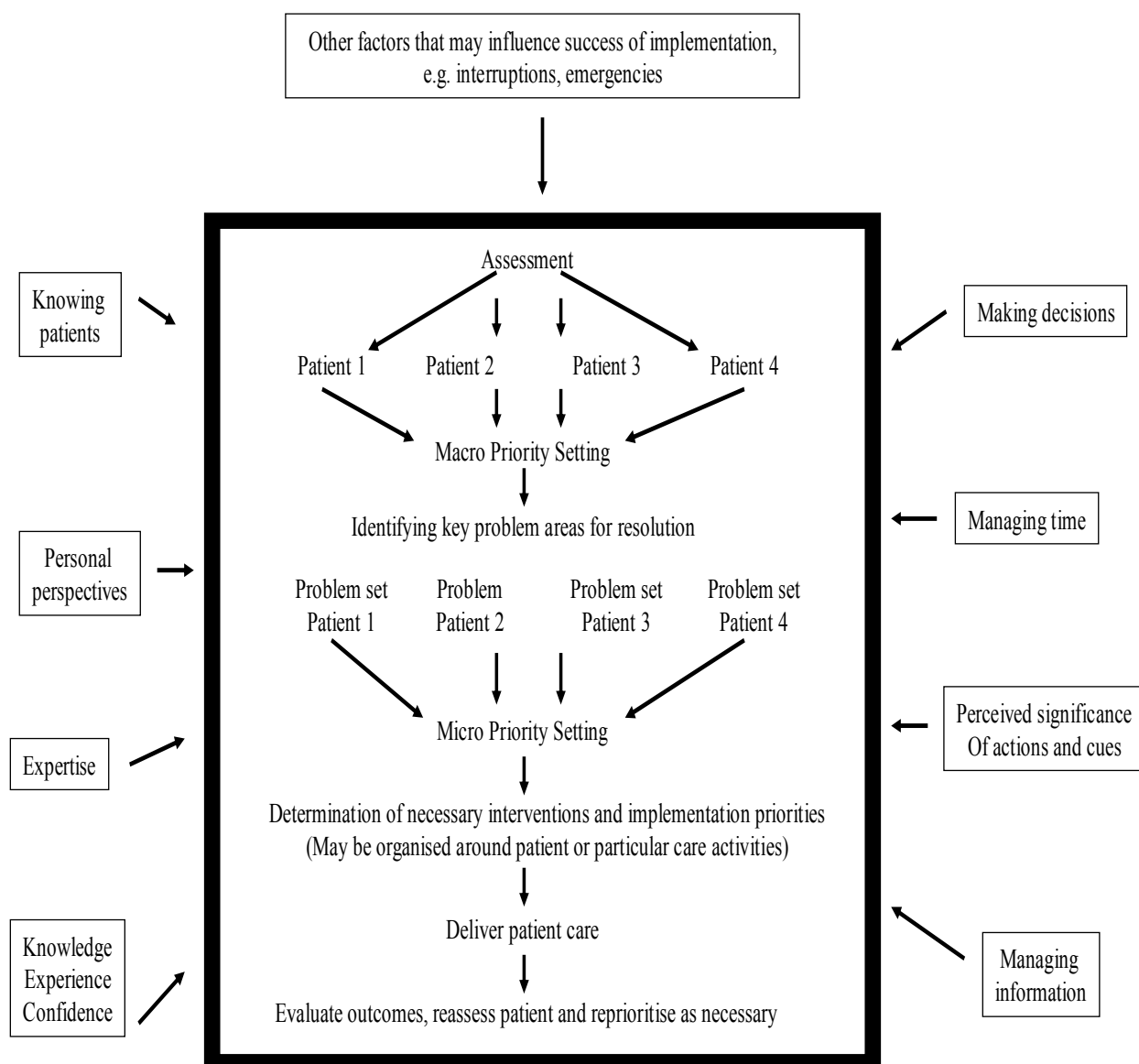
Nurses demonstrated various strategies to deal with fragmented work, and to limit the degree of interference it had on the tasks they were attempting to achieve. Nurses either assigned first or last priority to difficult tasks and/or difficult or ‘disruptive’ patients. To make sure those assigned the least priority came to no harm while waiting for attention, nurses employed a style of ‘watchful waiting’, meaning the patient, the situation, or the environment were monitored now and again between other tasks. If the nurse felt the need to intervene quicker than originally planned, current priorities were re-evaluated or re-adjusted to fit in with work already in progress. This leads Hendry (2001) to consider priority setting as a “sophisticated cognitive skill” linked to assessment or planning but influenced by many other factors. He identified one other specific factor as having a key role in setting priorities, the knowledge and experience of individual nurses. Hendry does

identify that some nurses experienced difficulty in setting priorities. These individuals appeared inconsistent in the way they provided nursing care, appearing as disorganised or uncoordinated. This agrees with previous studies of prioritising in healthcare management situations that have shown similar individual differences in decision consistency (McKee et al 2002). However, it is less clear what percentage or number of senior and junior nurses in Hendry's study were consistent or inconsistent, organised or unorganised, and coordinated or uncoordinated. Based on his findings, Hendry proposed a two-stage model of priority setting (Figure 3.1).

The first stage of this model represented by the inner box in the diagram, shows there are two levels of priority setting. Macro-level priority setting consists of prioritising between and amongst patients and their problems and at micro level, between the tasks or interventions that need to be performed to achieve any identified outcomes.

Macro-level priority setting can therefore be likened to the 'global' assessment of patients and the micro level as the more detailed assessment of specific tasks, activities, or interventions for each patient, in particular for the patient who the nurse has decided will receive his/ her initial attention. The outer part of the diagram shows the various factors which influence this process.

Figure 3.1 Hendry's two-stage model of setting priorities (2001)



3.5.2.1.1 Critique of Hendry's two-stage model of priority setting

Having individuals think aloud as they determined their priorities made it possible for Hendry to access how nurses perceived the relative importance of patients and tasks/activities. Hendry acknowledges that certain nurses determined priority by

patient condition and others by specific tasks or interventions. However, in the model this is represented as a linear process with patient coming before task, and both patient and task coming before evaluation of priorities. There is no evidence of a feedback loop from evaluation to assessment. It could be argued the priority setting process in real life clinical environments, some being more dynamic and subject to constant change than most, may be a cyclical rather than a linear process. While the model may represent the priority-setting process in medical wards it is not known how transferable this model will be to other wards which have surgical rather than medical-based care.

3.6 Implications for this study

Across studies, priority setting is consistently linked with assessment-related activity and therefore supports the definitions given previously by Fonteyn (1998), Carnevali & Thomas (1993), and Hendry (2001), that priority setting is a key component of nursing assessment and care planning. The methodologies employed in the majority of these studies involve simulated (and often isolated) tasks and environments rather than real-life clinical practice (Harries & Harries 2001). One can therefore question the ecological validity of these studies since in acute general wards there are multiple patients to care for at the same time, often with more than one need or problem. The exception is in intensive care or high dependency settings where a one-to-one ratio of nurse to patient was the norm (Riegel & Dracup 1986, Harrison & Nixon 2002, Bucknall 2000). Hendry (2001) was the only study to involve both simulated and real-life settings.

There is general agreement in some studies that as the number of patients in a caseload, and the number of problems that are associated with each patient increase, priority setting becomes a key factor in the process of dealing with that complexity (Hansen & Thomas 1968, Harries & Harries 2001). These studies however only examined specific tasks in isolation rather than in the dynamic environment in which those tasks occurred. Lack of consistency in how priority setting was addressed means results are not comparable.

The literature suggested it may be possible that priority setting, as a cognitive skill, is developed through practical experience (Benner et al 1996, Harries & Harries 2001, Hendry 2001), supporting the notion of prioritising as a thinking strategy (Carnevali & Thomas 1993), somehow linked with individual learning (Riegel and Dracup 1986, Harries & Harries 2001, Hendry 2001). It is also possible to suggest individual nurses may deal with negatively perceived patients or tasks differently since previous research reported how patients perceived negatively as ‘unpopular’ or ‘bad’, ‘ill’ or ‘non-ill’ were often treated differently to those perceived in a more positive light by nurses (Smith 1992, Holyoake 1999, Hummelvoll & Severinsson 2001, Stockwell 2002). Nurses have deliberately ignored patients when pressured for time, choosing to give physical tasks priority (Walsh 1999, Irurita & Williams 2001). This being the case, nurses’ perceptions of their patients may possibly exert an influence on their individual priority-setting processes or strategies.

From the literature reviewed, priority setting was strongly associated with assessment, experience and expertise. It is suggested that all of these concepts share

a common denominator, that of information. As assessment relies on the collection and use of information (Crow et al 1995, Junnola et al 2002), and assessment is the prelude to nursing plans of action (Corcoran 1986), the focus is on assessment related information.

3.7 Assessment and priority setting

Assessment forms a large part of nurses' work (Harrison & Nixon 2002), and is generally described as gathering relevant information to form judgement and decide on a course of action (Meurier 1998, Crow et al 1995, Thompson & Dowding 2002). The suggestion that nurses focus on subjective assessment of patients to help identify those that need care more quickly, means that assessment has an important role in setting priorities (Meurier 1998). According to Meurier (1998), during this assessment there is always the possibility that the nurse may use inefficient or ineffective cognitive strategies that may affect any subsequent care planning. If so, there will also be implications for the outcomes of the actual care given to the patient (s) concerned.

According to Arnold et al (2006), planning and priority setting requires declarative (principles or formulas), procedural (knowing how to) and strategic (how to act) knowledge. This is similarly acknowledged by others as knowledge 'for' and 'from' practice (Clark & Wilcoxon 2002). Nurses have drawn on knowledge from external information sources such as nursing journals, patient charts and laboratory results (Higuchi & Donald 2002) or internal sources such as intuition (Berragan 1998). Some considered health care professionals (Thompson et al 2001) and patients

(Radwin 1996, Dunn 2000) as valuable sources of information, while others considered that spending time with patients and getting to know them better had potential positive benefits for both patient and nurse (Radwin 1996, Irurita & Williams 2001).

According to Radwin (1996) and Irurita & Williams (2001), 'knowing the patient' resulted in a deeper knowledge of an individual's personality and/or personal situation. This helped nurses to formulate a plan for an individual's care by being better able to anticipate their potential response (Radwin 1996). In several studies, expert nurses were especially adept at 'knowing their patients' when making decisions about patient care (Benner et al 1996, Lamond & Farnell 1998, Peden-McAlpine 1999, Hendry 2001). However, one could also argue getting to know patients well can equally be a disadvantage when prioritising groups of individual patients. For example, the patient with whom the nurses have established a rapport and come to know well may receive a higher priority than they ought. In contrast, other nurses may give a lesser priority to individuals they know equally well, but whom they do not have a good relationship. This is supported in the seminal work of Stockwell in the early seventies (Stockwell 2002) where some nurses favoured one dysphasic stroke patient who they got on well with, over another stroke patient who was equally dysphasic and desperately trying to get attention but otherwise ignored.

Lamond et al (1996), who identified verbal communication, observation, prior knowledge, and written material as four information sources used by nurses in

assessment situations, found that surgical nurses used observation and prior knowledge more than medical nurses. Junnola et al (2002) found that surgical nurses tended to collect more pain-related information than medical nurses, and medical nurses more information relating to medical examinations and diagnosis. These findings suggest nurses in different ward specialities may differ in the way they gather information, therefore linking the nursing context to the kinds of information needed, and the kinds of decisions that require to be made.

Studies relating to assessment and priority focussed on the themes of urgency and need (Edwards 1998, Leprohon & Patel 1995, Gertz & Bucknall 2001). These studies were mainly associated with both traditional face-to-face triage (Bradley & Heiser 1996, Travers 1999, Bucknall 2000), and contemporary telephone triage encounters (Crouch 1998, Leprohon & Patel 1995, Edwards 1998, Allen-Davis et al 2000). In gynaecology, as in other surgical specialities, the focus of nursing care revolves around the preparation of patients prior to surgical intervention, and monitoring the patient's post-operative recovery and return to full health. Patient needs may therefore be determined partly by medical models of care prescribed by a particular surgeon (Idvall & Rooke 1998, Hedberg & Larsson 2003) and partly as shared negotiation between patient, nurse and / or relatives (Hendry 2001). The extent to which each of these individuals become involved in the determination of patient need will vary according to the reason for admission and length of hospital stay, and can be postulated to affect the priority status that is subsequently given.

3.7.1 Triage as a form of priority setting: face-to-face triage

This next section explores triage as a particular form of priority setting since triage environments deal with ‘urgency’ assessments and treatments for patients who appear unannounced, and are often unable to provide information, at accident and emergency departments (Bucknall 2000, Cioffi 2001). Triage has been defined as a dynamic decision-making process that prioritises a person’s need for treatment and is dependent upon the nature and quality of the information available (Gertz & Bucknall 2001). As this type of priority focuses primarily on ‘urgency’ it naturally involves rapid decisions and accurate judgement (Cioffi 1998).

The large majority of studies examining face-to-face triage focussed on temporal aspects such as the time taken to conduct triage assessment for each priority category (Travers 1999, Gertz & Bucknall 2001), or the total duration of time spent from initial presentation until discharge (Bradley & Heiser 1996, Siddhartan et al 1996). With the exception of Bradley & Heiser (1996), these were studies in a naturalistic setting of triage nurses performing assessment to determine treatment priority. Emphasis appeared to be upon improving the throughput of patients, by comparing the time standards prescribed by guidelines and algorithms, to the actual time taken for each individual assessment, and the accuracy of the decisions made by triage nurses. In some cases, it was reported that less than one quarter of all assessments met with the prescribed standard (Travers 1999), suggesting it is somehow assumed that all patients are assessed in the exact same way, in the exact same time, for each individual patient. Instead nurses were demonstrated to vary in the length of time they spent with certain patients such as when dealing with

patients from different cultures where language was a barrier, and with elderly patients who were often limited by communication, knowledge or memory problems (Travers 1999).

For the patients assigned to lower priority categories in the studies of Travers (1999) and Gertz & Bucknall (2001), there was no measurement of patients' vital signs by nurses conducting assessment. While this may have saved time being wasted doing routine tasks perceived as inappropriate and otherwise unnecessary, it assumes that patients have been correctly assigned to the most relevant level of priority. For patients possibly assessed inappropriately or wrongly, then left waiting for longer periods than they ought to have been, there may be implications that were not addressed in any of the studies. In contrast, Bradley and Heiser (1996) highlighted inaccuracies regarding how nurses assigned priority to patients, reporting how 52% of cases had incomplete documentation of triage assessment, while 7% were wrongly assigned to lower categories than they otherwise should have been (Bradley & Heiser 1996). Although 7% may seem an insignificant number, it may be dependent on the particular categories assigned. For instance if this were only 7% of non-urgent cases, the consequences may be minimal. If, however, four out of 48 urgent or life-threatening cases were wrongly assigned to a lower category than was necessary, there could have been adverse consequences. However, as this was a retrospective audit of computerised patient records, it was not possible to ascertain if any adverse outcomes resulted from these inaccuracies. The actual reasoning process behind the prioritisation policies of triage nurses are also unable to be ascertained from the data. The inaccuracies may have been more

to do with errors in data collection or data entry as opposed to any nursing error in acuity assessment or judgement. As the study relied completely on potentially inaccurate data, it is possible the results were flawed.

Siddhartan et al (1996) examined the average waiting time for urgent cases and proposed the introduction of a priority queuing system, with the aim of reducing the time between assessment and treatment. This system involved calculating the sum of the total time spent evaluating the patient plus the weighted average time spent waiting for X-rays or blood tests to permit a final diagnosis and subsequent priority rating. They managed to reduce the waiting time by 21 minutes (from the original average of almost five hours) for medium and high priority cases. For the purposes of the study however, categories one (immediately life threatening such as collapse or heart attack), two (life threatening to a lesser degree such as haemorrhage, or asthmatic attack) and three (serious but not life threatening, such as fractured limbs), were combined meaning many more patients were assigned to the same one category. Once assigned to this category, individuals were then dealt with on a first come-first served basis. It could not be ascertained whether the outcomes for patients were any different than if they had been assigned to separate categories since the emphasis of the study was solely on the variable of time. Priority appears to have been more related to economical considerations than to any real concern for patients since it neglected individual differences and variation in personal, social and psychological requirements.

3.7.2 Triage as a form of priority setting: telephone triage

Studies on telephone triage similarly focused on temporal aspects of assessment and priority setting but in contrast to the traditional triage approach, involved triage assessment without the physical presence of the patient (Crouch 1998; New 2000; Marsden 2000). In recent years this concept has emerged as an alternative way of conducting triage assessment, helping to resolve the bottlenecks of patients requiring attention in accident and emergency units (New 2000). In the absence of face-to-face patient contact, prioritising relies on, and is determined by, computerised algorithms to identify signs and symptoms as self-reported by patients (New 2000). Marsden (2000) suggested nurses compensated for the absence of the patient by creating a mental image of the person making the call and their situation. This results in assessments that are arguably no different or less accurate than traditional triage assessments. Others portrayed the absence of visual contact as a direct disadvantage and affected the accuracy of the prioritising process (Edwards 1998; Salk et al 1998; Allen-Davis et al 2000). Studies have examined telephone triage in various settings such as ophthalmic triage (Marsden 2000), gynaecology triage (Allen-Davis et al 2000), and general accident and emergency triage (Crouch 1998, Leprohon & Patel 1995, Salk et al 1998, New 2000). All involved taped telephone assessments and follow-up interviews. Only one study (Salk et al 1998) employed a randomised crossover design, but this may have been flawed since inter-rater reliability scores were very low.

Salk et al (1998) examined the effect of visual cues, vital signs and protocols in both telephone and face-to-face triage situations. They demonstrated both forms of triage

to be non-equivalent, emphasising the importance of visual cues in the triage process. Non-visual telephone triage that relied on protocols to determine priority was less likely than visual-aided triage to correctly identify those cases that were serious enough to warrant admission to hospital. However, the fact that inter-rater reliability of the telephone interviewers was never checked, and the scores in face-to-face triage low, must surely affect the confidence that one can place on the results of the study.

Non-visual judgements were less accurate when more complex and urgent telephone triage cases could not be readily determined by any algorithm or protocol (Leprohon & Patel 1995, Edwards 1998, Allen-Davis et al 2000). Some triage nurses felt certain gynaecology complaints were unsuitable for telephone triage, especially where symptoms for certain conditions such as vaginal bleeding could not be easily distinguished from the self-reports of the caller alone (Allen-Davis et al 2000). In such cases nurses in the study felt the physical presence of women was a necessity. In the case of gynaecology triage, it can be questioned whether the algorithms used in the study by Allen-Davis et al (2000) allowed the nurse to make subtle distinctions between colour, consistency and amount of vaginal bleeding or discharge without a visual check (that would have formed part of any assessment in a face-to-face situation). A mismatch in knowledge, understanding and experience between nurse and patient may well have hindered the process. If this were the case, it may explain why inaccuracies occurred, and how inaccuracy could possibly affect the quality of judgements, and / or patient outcomes. Accurate triage may therefore

not simply rely on the physical presence of the patient alone but also on adequate, relevant and accurate information.

3.7.3 Summary of triage-related priority setting

The key issues in triage priority appeared to be time, patient complexity and perceived urgency of the patient's condition (Leprohon & Patel 1995, Siddhartan et al 1996, Edwards 1998, Gertz & Bucknall 2001), and were linked with knowledge, information and experience (Crouch 1998, Angelini 1999, Allen-Davis et al 2000). Priority setting appeared to have involved combining, comparing and ordering information using specifically designed tools to justify giving attention to one or more patients over others. In the studies of individual nurse priority setting, it appears that prioritising is a largely invisible process, since it is cognitively determined and therefore not obvious to other people in the same way as performing a physical task would be. Priority setting, as part of a cognitive process may therefore be a particular component of the decision-making process. Both the priority setting that occurred in business management and healthcare at a strategic management level, and that of triage, relied on the use of decision support tools. There is no specific measure to explore the relationship between decision making and the prioritising process, therefore a further literature review was required. The next chapter explores decision making.

Chapter 4 Decision Making

4.0 Introduction

The previous sections have identified priority setting both as a component of nursing judgement and decision making, and as a key part of the cognitive thinking process. Both clinical judgement and decision making are considered integral to nursing practice (Wurzbach 1991, Scott 2000, Hendry 2001, Thomson & Dowding 2002), yet there is ambiguity in the literature regarding their definition. The literature suggested that there are several components of priority setting that may impact on decision making. For example, the complexity of the situation or the diversity of patients in nursing caseloads may alter how decisions are made, and may govern or be constrained by the time available to think or plan the order of patients or patient tasks they are expected, or would prefer to do first, second or last. In order to explore priority setting in the wider context the distinctions between the two concepts are first clarified.

4.1 Definitions of clinical judgement and decision making

Dowie (1993) defines judgement as an 'assessment of alternatives'. The same author defines decision making as 'the choice between alternatives'. Connolly et al (2000) have suggested there is no difference between judgement and decision making, while Goldstein and Hogarth (1997) assert each of the two concepts can be distinguished by the activities involved. Baumann & Deber (1989) give definition of the two concepts more clarity by describing judgement-related activity as associated more with the assessment of information about alternatives, and in decision-related activity with

choosing between two or more discrete options from a set of alternatives. The studies by both Goldstein & Hogarth (1997), and Dowie (1993) assume that judgement and decision making are mutually exclusive. In a nursing context, Thompson and Dowding (2002) distinguished between a nurse who judges a patient's condition to have deteriorated, and who makes a subsequent decision based on this judgement that it is necessary to get a doctor to come and see the patient. This indicates that judgement and decision making may not necessarily be mutually exclusive as suggested previously. In order to choose which patient or patient-related task to attend to first, second or last, the individual nurse must therefore make certain judgements about each of the alternatives involved. Therefore priority setting may bridge judgment and decision making. Since this mental activity is not observable to others in the priority setting process, how the nurse then accesses and uses information to judge alternatives and then decides the order of the alternatives, requires examination. The assessment of alternatives is therefore a crucial component in decision making (Janis & Mann 1977, Janis 1982).

4.2 Literature search

Using the same databases as previously, over twenty thousand articles were found pertaining to decision making and the cognitive processes involved in the processing of information. Nearly two thousand of these related to the generation and evaluation of alternatives, and nearly two hundred to the role of emotion in making decisions about these alternatives. By far, the term 'individual differences' generated the largest number of hits in databases, accounting for over one hundred thousand articles. With regards to healthcare, the majority of these related to patients' decision making but only fifteen were associated with nurses.

4.3 Decision-making and priority setting

It appears to be taken for granted in the literature that individuals know how and where to obtain the specific information they need, and how to use it for making decisions and solving problems (Elstein et al 1978, Llewelyn & Hopkins 1993). Such assumptions are consistent with the normative, rational decision making process as a series of stages whereby alternatives are ordered and evaluated in such a way as to achieve an individual's desired objectives, minimise risk and maximise outcomes (McGrew & Wilson 1982, Gilhooly 2002).

In normative decision theory, the fact that alternative choice options are assumed known makes it possible to calculate certain outcomes in a rational manner (Gilhooly 2002). In real life this information and knowledge may not be known and so may result in less than optimal patient assessment or clinical judgements. There is as yet, no empirical knowledge that can confirm how priority-setting decisions occur. For this reason, it is thought this cognitive process will be best described within an information processing framework since it will describe how individuals may be using information when dealing with alternatives, which may then give some indication of the priority-setting process in more detail (Newell & Simon 1972).

4.3.1 Information processing theory

Descriptive approaches to decision making have found that individuals do not always think rationally or analytically, but are prone to performance, processing errors, and inconsistency (Simon 1956, Newell and Simon 1972, Kahneman et al 1982,

Stanovich & West 2000), or use heuristic strategies to reduce cognitive effort and enhance judgements and decisions (Tversky & Kahneman 1982, Hastie 2001).

These limitations mean that individuals may not all have comprehensive knowledge or certainty regarding the environments they work in. Likewise, they may differ in cognitive ability or capacity to deal with an endless information search and calculation that normative decision theories propose (Newell & Simon 1972). For example, in tasks involving formal decision analysis in healthcare settings (such as Bayesian analysis to predict outcomes of certain treatments), it is assumed the decision maker already has the knowledge of prevalence rates and signs and symptoms of different conditions or disease (Llewelyn & Hopkins 1993) that are necessary to calculate probability of possible outcomes.

The execution of formal decision analysis in clinical medicine relies on specific information extracted from a large number of randomised controlled trials and funded medical research. This is not the case in the nursing profession, which is only developing empirical-based nursing research and therefore has no such equivalent evidence base (Thompson 1999).

One early study suggested it was possible to apply formal decision analysis to patient care (Grier 1984), but was a time consuming process and limited only to care planning application. If the time nurses have to perform their daily work is limited (Bowers et al 2001), one can argue the benefits of using decision analysis would have to be great enough to rationalise how it could be used by nurses as part of their daily nursing practice, over and above their existing work. Some studies have shown nurses

rely on algorithms (a series of set actions based on decision rules), protocols (guides to promote uniformity and consistency of action but no decision rules) and intuition (no rules just 'gut-feeling') to help them select the most appropriate alternative for any task (Bucknall 2000, Gertz & Bucknall 2001). Those sections of the decision-making literature, which deal directly with the examination of alternative options and how they are processed, tended to focus on judging between alternatives with a single attribute (Shafir 1993), or between alternatives with any number of attributes (Payne et al 1988, Senter and Wedell 1999, Harvey and Bolger 2002).

The number of alternatives involved also appeared to have a direct influence in how alternatives were processed by individuals; the more alternatives to consider, the more cues there were to process (Huber 1980), and the more likely heuristic strategies would be utilised (Cioffi & Markham 1997). It is generally thought that a set of alternatives are dealt with as pairs of alternatives, one being rejected, the remaining one integrated with a new alternative for comparison, and this process repeated for the remainder in the set until one final alternative option remains (Tversky 1972, Shafir 1993, Wedell 1997). This makes the implicit assumption that processing single-attribute alternatives may be easier than where alternatives with a number of attributes are involved. For example, selecting from two different coloured cars of the same make and model may involve only a straightforward preference between two colours, whereas as Gilhooly (2002) suggests, choosing between two cars which vary in cost, maximum speed, reliability or fuel economy may involve the consideration of other alternatives in addition to preference. In this example, it may mean considering engine size, fuel intake, insurance and noise in addition to colour preference, and so may influence the final choice of alternative.

As individuals may have different priorities and personal motives, it is fair to assume that weighing up the risks associated with the outcomes for each alternative may be included in determining relative priority (Tversky 1972). In the previous example this may mean weighing up additional monetary costs. Tversky and Kahneman (1981) reported how, in giving participants the same information about the same task situation, but with different frames of reference (negative risk in terms of the lives lost and positive risk in terms of the lives saved), it appeared to influence the way alternatives were evaluated. Subjects revealed a strong preference for the latter option, implying that positively perceived alternatives may be less likely to get rejected. These findings were replicated in a more recent experimental study exploring the framing of decisions under both real and hypothetical conditions, and illustrated how the framing effect depended on the size of the pay-offs involved (between the alternatives under consideration and the decision consequences): with risk aversion strategy used for gains and risk seeking strategy for losses (Kuhberger et al 2002).

A number of studies exploring heuristic strategies used by individuals when choosing or rejecting alternatives identified ‘satisficing’ (*sic*; as reported by Simon 1956), ‘take the best’ (Chater et al 2003), ‘take the first’ (Johnson & Raab 2003), and ‘save the worst for last’ (Okuyusen, et al 2003). The first of these strategies (‘satisficing’), associated with ill-structured task environments, is utilised to reduce the search for information when a quick response is required (Simon 1956). In such cases, the search for information ceases as soon as an alternative is processed which appears to address the task situation in hand. However, while this may be a useful mental shortcut there can be no guarantee that accuracy or quality is unaffected (Thompson

& Dowding 2002). The other three strategies were associated with fast and frugal approaches to decision making (Chater et al 2003, Okyusen et al 2003, Johnson & Raab 2003), and are so named because they have been employed in dynamic environments that require rapid decisions, but are frugal with the information processed. The fast and frugal approach weighs alternatives in order of ascending or descending importance, and depending on the strategy employed by the individual the positive or negative alternative with the highest value is selected.

In a 'take the first' strategy, the search terminates as soon as one of the two alternatives appears with a positive cue value (Gigerenzer & Goldstein 1996, Johnson & Raab 2003). In contrast, perceived burdens (negative cues) were reportedly less effective or accurately processed than positive information. In leaving them until last, the individual decision maker was allowed to focus on alternatives that were more appropriate for the task (Okyusen et al 2003). In a nursing context, this corresponds to the 'watchful waiting' strategy reported by Hendry (2001) on page 53.

4.3.2 Information and alternative options

The literature has tended to focus on the various reasons or rules that appear to influence how individuals accept or reject alternatives, such as attitudes (Ajzen 2001), importance beliefs (Aschbrenner et al 1986), emotion (Kaplan et al 1993), complexity (Payne 1976, Luce et al 1997, Weenig & Maarleveld 2002) and time pressure (Agor 1986, Svenson & Maule 1993). Aschbrenner et al (1986) demonstrated how subjects selected only one small subset from the entire alternative set on the basis of perceived importance. Similarly, when Barlas (2003) presented a task of choosing

contraceptives (alternatives) in rank order according to perceived importance, subjects (n=40) weighted rational attributes and non-rational attributes differently, at different stages of the judgement process. Subjects gave rational alternatives (for example health risks) and their attributes (for example complications, such as anaemia, pelvic infection, sterility, and pregnancy) greater weight during the stage of subjective evaluation (thinking about how these risks would affect them personally), than non-rational attributes (such as pleasure). However, when it came to the final choice of alternative, they bypassed rational low-risk attributes for non-rational high-risk attributes described as ‘tempting’ (pleasure), that were consistent with their own preference. This is in line with other decision-making research that proposes individuals choose the alternative that has the most personal gain, in this case a pleasurable experience (Tversky 1972).

In contrast, other research has demonstrated how individuals eliminated attributes considered as undesirable or risky early on in the process of judging alternatives (Payne 1976, Shafir 1993, Harvey and Bolger 2001, Levin et al 2001). Early research showed how subjects appeared to use decision rules to screen out non-viable or undesirable alternatives in the preliminary rather than the later stages of judgement, allowing them to focus only on the viable or desirable ones (Payne 1976). For example, all apartments in neighbourhoods that had high criminal activity or levels of violence were rejected at the very start, which had the effect of reducing cognitive effort that might have been involved if they were included in the alternative set. This notion of a pre-decisional stage of rejecting alternatives as illustrated in Payne’s (1976) study, have since been validated by Harvey and Bolger (2001), where the only difference was that the attributes presented to participants were rejected not on the

basis of 'desirability' but on how 'attractive' they were. The studies of both Heller et al (2002) and Levin et al (2001) described this inclusion-exclusion process in a slightly different focus as 'narrowing' of an individual's options. Rather than starting out with a pre-screened set of alternative options, they assumed an initial state of neutrality where all things were neither desirable nor undesirable. The assessment of alternatives stage at the start of this process resembled either an empty vessel waiting to be filled (where no options exist at the start) or a full vessel waiting to be emptied (where all the options exist), from which alternatives were admitted (inclusion strategy) or eliminated (exclusion strategy) (Newell et al 2003). In the study by Levin et al (2001) subjects were more likely to select an inclusion strategy to pre-screen alternatives if the task was perceived as positive (in this case hiring employees). For those perceiving the task in a negative light (in this case getting rid of employees) the opposite was true and an exclusion strategy more likely to be adopted.

Whether 'rejecting', 'screening out' or 'narrowing' of choice alternatives, all appear to be variations of the same theme, describing a process whereby the consideration (and therefore ordering) of alternatives are in some way or other enhanced, to avoid undue cognitive expenditure. One author suggested accepting and rejecting as non-equivalent (Shafir 1993), as a result of subjects in his experimental study appearing to focus more on positively perceived attributes where the task involved a choice to be made, and more on negative aspects when it involved rejection.

Implicit in studies examining the inclusion and exclusion of alternatives is this suggestion of not only conscious thought, but also an automatic response to one specific factor or combination of factors, resulting in a shift towards those that are

positive, desirable or attractive, or else those that are negative, undesirable or unattractive. One can question what happens in a situation where alternatives are either equally attractive or unattractive. According to Wedell (1997), where individual participants found it difficult to differentiate between alternatives, they were more likely to choose one alternative at random for rejection. If there is an element of conscious choice in deciding which alternative is rejected, it can be postulated the negatively perceived alternative would be the one most likely rejected (according to the findings in previous studies). Equally, if there is little conscious control over which alternative gets rejected it is just as likely a positive alternative may end up rejected. If this were to happen, it is easy to foresee how potential implications such as inaccurate or poor judgements and decisions could ultimately affect any outcomes.

The number (Huber 1980) and sequence of alternatives (Senter and Wedell 1999) under consideration may also influence how alternatives are processed. In his experimental study, Huber (1980) manipulated information given to participants by varying verbal and numeric information, the number of alternatives and the number of dimensions across alternatives. Judgement was more straightforward when there were less than five alternatives to consider, but in a complex situation involving more than five alternatives, appeared to include some process of weighting. In making the final choice of alternative, Senter and Wedell (1999) found information presented by dimensions (cost, neighbourhood, location in relation to work, or risk) was more likely to be accurate than presenting alternatives without dimensions (choosing house A or house B). They suggested that processing in terms of alternatives alone is more effective when judged from a small set. For a larger alternative set, the opposite was

true, where processing by dimensions of alternatives was more effective. These studies have shown how subjective preference and biases are more likely and rational calculation less likely, to account for the importance given to alternatives. This suggests individuals may employ different strategies for different situations depending upon how many cues there are, how many alternatives there are, and how many dimensions are involved.

Many of the studies examining alternatives were large, robust experimental studies accounting for the judgement or choice of a one-off decision making task in artificial environments (Wedell 1997, Senter & Wedell 1999, Levin et al 2001, Barlas 2003). Typical of scientific experimentation, these consisted of an amalgamation of smaller experiments. Although great effort appeared to be paid to the content of the tasks subjects had to perform, their ecological validity is questioned on a number of counts. Firstly, without exception, the study participants were all undergraduate students (some of whom were 'forced' to take part since this formed a necessary pre-requisite of their curriculum design), who were asked to 'buy' or 'sell' apartments (Payne 1979, Harvey & Bolger 2002), purchase a laptop computer (Senter & Wedell 1999), or 'choose' contraceptives (Barlas 2003). Secondly, the fact that as students, they were unlikely to have any real 'investment' in those decisions needs consideration. Thirdly, across studies subjects were either told to undertake the task when prompted by computer (Payne 1976, Levin et al 2000), or had alternatives given to them in advance of the task (Harries & Harries 2001). In a naturalistic setting however individuals would naturally make a decision when they decide it is necessary, at the most appropriate time in whatever task situation. Therefore, while these studies perhaps account for the way in which students make judgements or decisions in

unfamiliar and episodic tasks, they do not explain how individuals respond to such decision tasks in everyday working life. Nevertheless, they do provide some vital evidence to explain how individuals process information in order to generate and evaluate alternative options in a decision-making task, and therefore give some indication of how individuals may be determining priorities. While this has provided a description of how information about alternatives is processed internally, this has not explained how the external environment impacted on this process. The kinds of decision tasks involved in the experimental studies reviewed until now involved no social interaction. In a nursing context, social interaction forms a large part of the nature of a nurse's work. Undergraduate students are also unlikely to possess the same level of experiential knowledge and expertise from repeated exposure to the same events making it unlikely that the results can be transferable to a nursing context.

4.3.3 Task complexity and decision making

A number of studies have revealed how complexity impacts on decision making by presenting patient cases to subjects that varied in the level of complexity involved (Corcoran 1986, Cioffi & Markham 1997, Lamond & Farnell 1998, Offredy 1998, Wong & Chung 2002). There is consensus among these authors who reported the significance of experience and expertise in the ability to deal effectively with complex situations, with experts generally performing better than novices or inexperienced individuals. Experts were reported to be in possession of a more efficient information processing system, the ability to better recognise patterns of information, to focus on relevant and quickly discard irrelevant information, and the use of intuition more than formal analysis. This was a common finding in studies

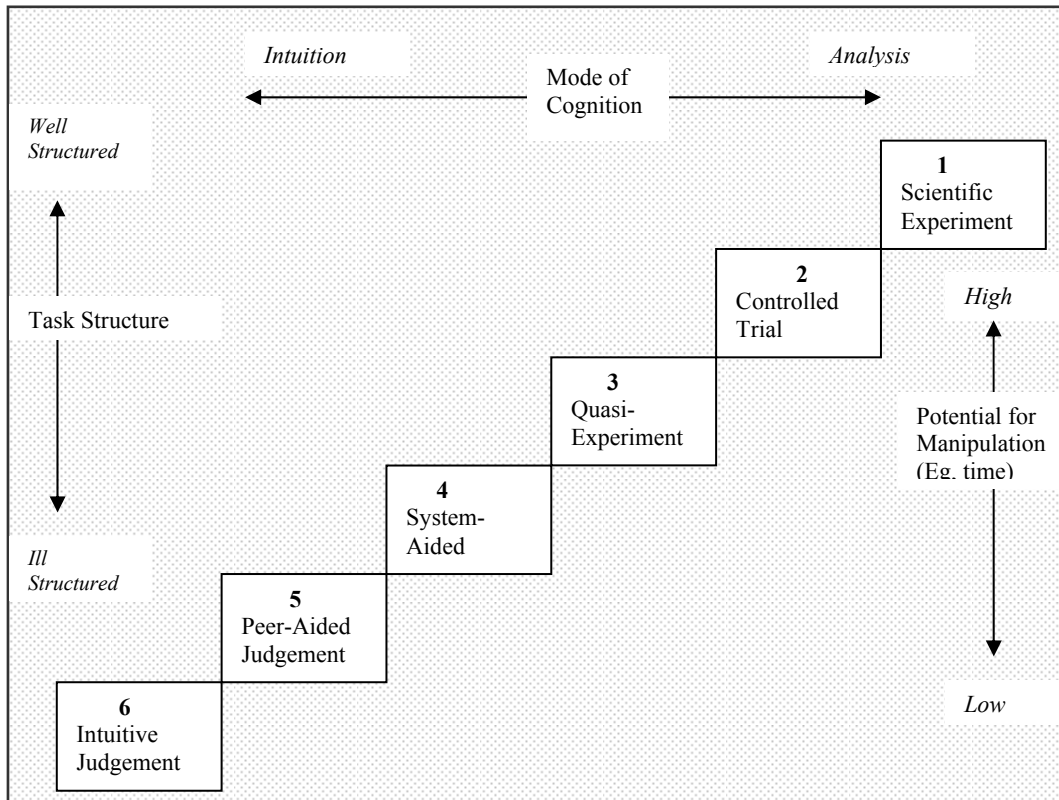
across a wide range of different nursing practice backgrounds such as general medical and / or surgical (Crow et al 1995, Hendry 2001), intensive care (Benner 1984; Bucknall 2000, King & MacLeod-Clark 2002), public health (Hansen & Thomas 1986), occupational health (Harries & Harries 1999) and primary care (Offredy 1998, Walsh 1999). Intuition or 'gut feeling' tended to be employed in uncertain or unfamiliar task environments or encounters (Hams 2000, Lamond & Thompson 2000, Effken 2001, Thompson & Dowding 2002). Where rapid decisions are required (such as in life-threatening situations), experts were reported as being more likely to draw on long-term memory where knowledge from previous exposure to the same or similar situations are stored (Corcoran 1986, Cioffi 1997), as opposed to searching through every possible alternative as novices typically do. This suggests that as systematic processing takes time, the more cues there are, the less likely there will be any comprehensive analytic assessment of alternatives, and more likely that mental shortcuts such as intuition will be used (Hamm 1984, Hams 2000). The influence of complexity on information processing, task structure and its associated temporal significance appears to be a recurrent theme throughout the literature (Luce et al 1997, Cioffi 1998, Bowers et al 2001, Bucknall 2000). A number of studies have reported that certain types of cognition may be more suitable for certain task structures (Hansen & Thomas 1968, Corcoran 1986, Hamm 1984).

4.3.3.1 The cognitive continuum

According to the cognitive continuum theory, intuition and analysis, and complex and simple tasks, are situated at opposite ends of a continuum (Hamm 1984). Figure 4.1 shows complex tasks are associated with many cues, ambiguity, ill-structured task environments and little time, indicating the use of heuristics and intuition is more

appropriate. Analytic modes however, are better suited to well-structured environments where time is not such an issue (Payne 1976, Shanteau 1992).

Figure 4.1 The cognitive continuum



One study has demonstrated how a mismatch between cognitive mode and task structure or environment may have negative implications (Hams 1984), since individuals that used a conscious, rational, and analytical approach performed less well than others who used intuition for the same situational task in the same highly stressful, ill-structured environment. It has been argued that nursing requires a mixture of both analytic reasoning and intuition as a result of the dynamic and rapidly changing task environment in which nursing care takes place (Lauri & Salanterä 1995, Benner et al 1996, Thompson 1999).

However, according to some, there is a lack of research examining the nature of specific nursing tasks and the context in which they are carried out (Crow et al 1995). Instead, decision-making research in nursing, like that of priority setting, has continued to focus mainly on the intuitive processes employed by nurses in critical care and emergency environments (Benner et al 1996, Cioffi 1997, Lauri et al 1998, Bucknall 2000) rather than in general acute medical or surgical wards. Information processing studies conducted in a nursing context have used combinations of verbal protocols and think aloud, interview and observation techniques (Corcoran 1986, Edwards 1998, Cioffi 1998, Hendry 2001, Offredy 2002). Others employed computerised simulation of patient cases (Junnola et al 2002), or card sorting techniques (Lamond 1996, Lamond & Farnell 1998). With the exception of two studies (Bucknall 2000, Aitken 2003), both conducted in actual coronary care settings, the majority of studies gave nurse participants an assessment-related tasks to perform in an artificial or non-clinical setting. In conclusion, different approaches to task in different areas of nursing suggest there may be environmental influences upon performance at work.

4.4 Occupational psychology

The psychology of work has become an increasingly researched topic over the last 20 years, exploring the behaviour and performance of individuals (James 1992, Kirkcaldy et al 1999, Hochschild 2003) and teams of individuals (Mulholland 2002, Burch & Anderson 2004) in the workplace. These have explored environmental culture (Mulholland 2002), employee involvement (Guest 1993), recruitment and selection (Gilligan et al 1996) and leadership (McPhail 2002, Downey et al 2006), to

name but a few. In tracing the history of this research one finds a shift in focus from assembly line output to quality and performance and finally to the quality of individual work and qualities of individuals (Noon & Blyton 1997). Studies have shown how knowledge of individual management or learning styles, behaviour and / or personalities can influence job performance, motivation, satisfaction, self-esteem or health (Demetriou et al 1999, Nikolau 2003, Bakker et al 2005). The same studies demonstrated how individuals who have more perceived autonomy or control over their work are generally more motivated and satisfied with performance. Within this body of research, three types of demands were identified that were associated with different types of job or work roles. For example, high mental demands were associated with air traffic controllers because of their concentration on information and visual data (Demetriou et al 1999); high physical demands with work involved in manual activity such as in the construction industry (Hammar et al 1998); and high emotional demands with counsellors or nurses (McClure & Murphy 2007). It is possible to argue that certain types of nursing work (e.g., accident and emergency, gynaecology or oncology) encompass physical, mental and emotional demands since these form components of everyday nursing work in those areas. This appears to suggest performance in specific types of work can perhaps be predicted by the practical skills, mental ability, emotions and personality of individuals.

4.4.1 Person-environment or job 'fit'

In a post-modernist view, the notion of truth is seen as "*relative to the individual's mode of engagement with the 'world' for which there is no independently existing criteria*" (Philips 1996, p 138). Contemporary debates surrounding the psychology of work correspondingly emphasise the importance of matching jobs and roles to

employee attributes in the shape of ‘person-organisation or person-job ‘fit’ theory (French et al 1982, Strazdins 2000, Bakker et al 2005). Rather than a traditional ‘one size fits all’ approach these authors recognised certain jobs need people with specific physical, mental, or emotional skills, traits or attributes. This ‘fit’ of matching worlds makes the assumption it is possible to maximise performance and well-being and help rid the organisation of emotional ‘toxins’ (such as stress, ill-health or absenteeism) that arise as a by-product of ignoring workers as individuals (Mark 2005). However, this must also assume the reverse is true, that when there is a mismatch between the worker and job or organisational characteristics, there could equally be negative effects (French et al 1982). Individual performance was also linked with both the concepts of efficiency (Macan et al 1990) and ‘polychronicity’ (Slocombe & Bluedorn 1999). The need to assign priorities according to calendar time slots was cited as having direct influence upon an individual’s preference for the type of task they engaged in as well as for engaging in more than one task simultaneously (Macan et al 1990). According to psychologist accounts, preference for task is dependent upon individual perceptions of ‘objective’ and ‘subjective’ task content and the amount of time relative to the tasks they have, want, or need to do (Kaufman-Scarborough & Lindquist 1999). This is in direct contrast to early proponents of time management (e.g., Drucker 1967) in the workplace whereby organisational rather than individual goal setting predominated. If, according to the literature reviewed in Section 4.3.2, subjectivity is involved in choosing relative task preference one may argue a person’s attitudes, moods, personality and style of thinking may impact on final preference. There is evidence from early research to indicate a person’s emotional reaction (Puffer 1989) or the geographical location and distance (Hayes-Roth & Hayes-Roth 1979) attached to tasks is just as likely as goals of efficiency to

drive prioritising plans at work. For Puffer (1989), workers whose approach to managing time was an appropriate style for a particular type of workplace were most likely to benefit those organisations than those who had an inappropriate style. For instance, those with a ‘monochronistic’ style preferred to do one task at a time whereas polychronistic stylists preferred to engage in more than one task at a time, finding ways to dovetail or overlap different tasks (Kaufman-Scarborough and Lindquist 1999). In nursing terms this means an individual with a preference to deal with one thing at a time may perform less well in a busy uncertain environment (e.g., accident and emergency room) than they do in one where there is order and routine (e.g., outpatient clinic). In other words, the degree of control the organisation has over one’s work and the emotions workers are expected to display or hide are significant factors in studying psychology in the workplace.

4.4.2 Person-emotion work ‘fit’

In Strazdin’s (2000) PhD study investigating emotion work, he found person-environment (P-E) work ‘fit’ theory did not explain response behaviours to, and control over emotional work role demands and proposed emotional behaviours *“group together to form distinct dimensions based upon the sorts of emotions in others that are handled”* (p68). If so, one might expect gynaecology nurses to assist patients and other colleagues to address any negative responses linked to the MTOP process or infertility treatment such as anxiety, sadness, or loss in much the same way. This could perhaps explain why the gynaecology nurses in the McQueen (1997) study spoke of the different emotional stance they had to adopt for different sequential demands at work such as when caring for miscarriage, TOP and infertility

patients. This leads one to question what are the optimal environmental conditions or the qualities a person requires to be able to manage emotions connected to work or for nurses to manage not just their own emotions but the emotions of patients they may need to care for. Philips (1996) suggested nurses and patients shared the journey together, not only in providing physical care and comfort but also emotions and feelings. According to Omdahl and O'Donnell (1999, p135) this was described as 'emotional contagion', which as the term suggests may have adverse results such as exhaustion and stress (Cooper 2002), yet which nurses were expected to experience given the nature of their work. In nursing work it is recognised additional skills are required to meet the increasing demands of caring work (England & Folbre 1999). Research has demonstrated how people who have good interpersonal skills and are expressive in nature are more inclined to do emotional work (Strazdins 2001, p43), indicating that such individuals may perform better in sectors of work where emotions predominate such as in nursing, education, childcare, counselling or social work (England & Folbre 1999). One may postulate that handling, or learning to handle positive emotions may be different to handling negative emotions in those types of workplace. Emotional work can therefore be considered as a set of skills (James 1992) to which certain personality traits may contribute (Morris & Feldman 1996, Steinberg & Figart 1999). Brunton (2005, p351) conducted semi-structured interviews with 19 healthcare workers from different areas within one large hospital and reported work was 'infused with emotion'. This 'infusion' was seen to be a critical component in the facilitation of interpersonal communication and establishment of relationships at work. Downey et al (2006) demonstrated how female managers who could control their own emotions well at work tended to consider the needs of others over their own and was predictive in the use of an

intuitive cognitive style. However the author offered no real discussion of what happened when emotions were not managed well. This is important as others like nurses do not work in a business but a busy and often turbulent clinical environment where a large part of that nursing work is often dealing with emotional care on a frequent basis. In nursing terms, this may mean that certain tasks with strong emotionality connections may be prioritised differently. According to Soderfelt et al (1996), how much emotional work will impact on an individual or organisation depends on the perceived or actual degree of control, responsibility and available time involved. In a positive sense, this means those with higher work autonomy may manage the emotionality of work-based tasks more efficiently than individuals who are much less in control of work demands. In effect, any decision making taken by an individual in situations where they may have little time to handle their emotional reactions effectively has been demonstrated as leading to health problems such as stress (Strazdins 2000, p213).

4.4.3 Individual differences, cognitive processing and decision making

If there is a high emotional content attached to a particular task, as is suggested to be the case in gynaecological nursing practice (Webb 1984, McQueen 1997, Bolton 2000), nurses will be likely to need to create time to allow them to deal with the patient's emotional distress. How the nurses create this time when they have other important priorities and what influence this may have on the order of these tasks is not yet understood. If the clinical environment does not allow time to permit nurses to provide for emotional tasks then decisional conflict may arise, or else emotional tasks may suffer depending on how nurses choose between decision alternatives of a

physical or an emotional task or activity. According to Berry and Broadbent (1984), it is possible that an individual can shift between strategies when dealing with complexity, meaning it is possible to act intuitively before then acting rationally in such situations, or vice-versa. Similarly almost ten years later, Payne et al (1993) reported individuals as 'adaptive' decision makers. If a nurse were also capable of employing shifting strategies, this could explain how a nurse deals with priorities in parallel with changes in the working environment.

Many studies reported how individuals 'adapted' their mode of processing information using three main strategies: acceleration, selection of information and alteration of information search patterns, to reduce the rate and amount of information processed, and rely on internal information stored in memory rather than external sources (Kaplan et al 1993, Maule 1994, Weenig & Maarleveld 2002). Legrenzi et al (1993) demonstrated how individuals could spend less time on each alternative and accelerate the rate at which they processed information, but in doing so focussed on certain information at the expense of the rest. Other authors revealed how, when the strategies individuals use fail to resolve a situation, individuals appeared to switch from processing by alternatives to processing by task attributes (de Dreu 2003). In focussing on one or two attributes across all alternatives, the information needing to be processed was narrowed down to those perceived as most important or relevant (Weenig & Maarleveld 2002). Studies demonstrate how, in situations where many cues exist, nurses tended to give priority to only the one or two alternatives they considered as the most important or relevant (Irurita & Williams 2001, Harries & Harries 2001). Such strategies are reported to be increasingly used the more situations become complex and emotion-laden (Luce et al 1977). One study illustrated how

switching focus to an internal information processing style meant individuals relied not only on knowledge stored from previous encounters, but also on attitudes (positive and negative) associated with them (Ajzen 2001). Furthermore, the cues that subjects processed have tended to be the ones most consistent with their own attitudes (Fischhoff 1975, Ford et al 1989, Smith & Zarate 1992, Ajzen 2001). In exploring the effect of stereotypes in information processing activity, Ajzen (2001) showed how subjects judged research consistent with their attitudes towards homosexuality more than they judged research that was inconsistent with their attitudes. This may explain why in Hendry's (2001) study, the values and attitudes of nurses appeared to be an important factor in determining priority. In gynaecology wards, certain procedures such as TOP have the potential to induce strong negative responses from those involved, and may possibly influence how the nurse considers relative priority, and thus affect the quality of care subsequently provided. If the values and attitudes of nurses are relevant to setting priorities of care in medical wards, arguably, they are just as likely to be relevant in gynaecology wards.

It is less clear which of the patient or task alternatives a nurse chooses to reject and why. In a nursing situation, it is just as important to know why a nurse leaves a particular patient until last. Like most other studies using an information processing approach, subjects were only permitted to perform tasks for a fixed duration involving no manipulation of time in simulation exercises (Corcoran 1986a, 1986b, Cioffi 1998, Offredy 1998, Hendry 2001). Since nursing practice occurs in a complex and dynamic environment, simulations may not have accurately represented nurses' work or behaviours. However, despite its limitations, the use of simulation in information processing-based research can at least provide clearer explanations for

how nurses think about tasks in general such as identifying what information nurses use, and how they use it to make assessments and judgements, (and therefore judging what alternatives take priority) during the decision-making process (Hendry 2001, Thompson & Dowding 2002).

It is evident from the preceding literature review that the emotional content of a task or situation, and how an individual reacts to it, is a significant influencing factor in decision-making situations. Priority setting may therefore be rational and directed by other people or else driven by internal preferences and intuition (Parkes 1996). In the context of priority setting, this may mean choosing between patients or tasks on the basis of whether they have positive or negative elements, and the response given may be closely linked to the personality traits, emotions or personal values that enable individuals to act in, or deal with, certain situations.

One may postulate that the priority assigned to the nursing care of patient caseloads including TOP and non-TOP patients, may be influenced to a certain extent by personal values or characteristics as much as by rational means. For example, is it possible a nurse with an assertive personality would choose between alternatives (patients) any differently from a nurse with introverted personality characteristics? Will a nurse who is more empathic than others manage emotional situations differently, and if so, how? To explore this further, a third literature review was undertaken to look within the literature on individual differences for evidence of possible links with, or influence upon, decision making or priority setting.

4.4.3.1 The nature of individual differences

In the field of psychology, the individual differences approach is cited as being concerned with explaining why one particular individual may behave in a certain way in certain situations similarly to or differently from others (Eysenck & Eysenck 1985). Since priority setting is a function of the organisation and management of nursing work and gynaecology nurses' interactions with patients within different environments is a focal point of interest in this study, it is important to consider how specific aspects of personality or cognitive differences may influence this process.

A search was conducted using OVID, PsycInfo, CINAHL and ASSIA databases for the years 1970-2006. Various key search terms and phrases were employed including 'information processing or cognitive style', 'individual differences', 'cognition and personality' and 'cognition and thinking'. These terms were used on a stand-alone basis as well as in conjunction with 'decision making' and clinical judgement'. This revealed a wealth of literature (Appendix 1), much of which was directly specific to biological components associated with brain function, rather than at the interface of naturalistic human performance or interpersonal relationships. The vast majority of the individual differences literature tended to focus on various dimensions associated with cognitive style or ability and personality type or gender (Heinstrom 2003, Burns & Fedewa 2005, Hall-Lord & Larsson 2006); the nature of task and / or task environment (Glass & Riding 1999, Judge, Heller & Mount 2002, Mandell & Johnson 2002, Shiloh et al 2002, Bruine de Bruin 2003, Hedberg & Larsson 2004, Fink & Neubauer 2004, Kuvaas & Selert 2004, Ratner & Herbst 2005) and coping styles or strategies adopted in difficult, complex, or uncertain task situations (deRidder & Kersof 2003, Karademus & Kalanzi-Aziz 2004).

4.4.3.2 Individual differences, personality and decision making

Research on individual differences also emphasised the influence of personality upon behaviours and actions of individuals in different types of environment and in the performance of different types of tasks. It was defined by one author as “that pattern of characteristic thoughts, feelings, and behaviours, that distinguishes one person from another and that persists over time and situation” (Phares 1991:4). This means that personality factors, as fixed constructs, may predict how an individual may react in any given situation (Costa & McCrae 1992, Furnham et al 2005). There are several approaches to the measurement and classification of personality types.

For example, there are five traits or ‘factors’ of personality which authors agree (Heinstrom 2003, Hewitt& Flett 1993, Ferrari 1995, Slade & Owens 1998, Burns & Fedewa 2005) measure an individual’s affect and emotional control (N, Neuroticism), in situations of positive emotions or outgoing character (E, Extraversion), divergent thinking and creativity (O, Openness to experience), nurturing, caring and motivation (A, Agreeableness), and control over impulses or sense of purpose (C, Conscientiousness). Specific personality traits such as perfectionism, neuroticism, and extroversion-introversion have been associated with different cognitive information processing styles, and demonstrated to be significant predictors in the identification of personality ‘types’ (Table 4.1).

Table 4.1 Typologies of Personality

Author Torgersen (1995)	Factors	Author Costa & McCrae (1992)	Factors
Spectator	-E, - N, - C	Style of Learning	C, O
Insecure	- E, + N, - C	Style of Attitude	O, A
Sceptic	- E, - N, + C	Style of Activity	E, C
Brooder	- E, + N, + C	Style of Impulse Control	N, C
Hedonist	+ E, - N, - C	Style of Defence	N, O
Impulsive	+ E, + N, - C	Style of Character	A, C
Entrepreneur	+ E, - N, + C	Style of Well-being	N, E
Complicated	+ E, + N, + C	Style of Interests	E, O
		Style of Anger control	N, A
		Style of Interactions	E, A

4.4.3.3 Personality traits and nursing performance.

Some authors have demonstrated links between certain personality traits such as neuroticism and anxiety (Burns and Fedewa 2005), or inability to cope with complexity and time pressure at work (Cooper 1983). This suggests that in any nursing situation where the establishing of priorities is of high importance, and time pressure is experienced as the ‘norm’ (such as in triage), an individual with a high level of neuroticism and thus high trait anxiety, might be less able to fulfil patient priorities in the time available. Therefore, one would expect certain types of environment or task situation to invoke higher anxiety responses in predisposed individuals, such as in a busy acute gynaecology ward where nurses are often under a lot of pressure, and lesser anxiety in a nurse-led gynaecology ward where nurses may have much more autonomy or flexibility of time. If so, one could argue that if Agreeableness is associated with caring, nurturing qualities and Conscientiousness with controlling emotion, then these may be associated with individual nurses in wards where the emotional content is high.

There have been very few studies examining personality in a nursing population. Only six were identified with reference to nurses, five with only nurses (Cohen & Satrer 1992, Hall-Lord 1999, Gambles et al 2003, Sand 2003, Hall-Lord & Larsson 2006), and one with nurses included in a wider occupational sample (Witt 2002). One study identified two personality traits, Agreeableness and Conscientiousness, as being associated with one specific aspect of nursing work and decision making, that being pain assessment (Hall-Lord et al 1999). In a more recent study of 71 trained and 184 student nurses, Hall-Lord and Larsson (2006) established that trained nurses who demonstrated higher scores on the Neuroticism dimension, estimated the pain of patients with a chronic pain condition as more intense than did nurses with lower scores (respective means of 20.3 and 15.5, z score 1.91, $p < 0.05$). For Witt (2002), one other trait, Conscientiousness, was described as the most consistent of the five personality factors across a wide range of occupational groups whose job involved interpersonal interaction and evaluating others' performance at work. Conscientious individuals, according to the author, think before acting, planning, or prioritising thus enhancing their performance. The interaction of this trait with Extraversion predicted four types of work individuals. Two of these four types were identified by employers in the above named study as those most likely to perform to an optimal and least desired manner in situations involving interactions with clients or other employees.

Figure 4.2 Personality types and performance (Witt 2002)

Conscientiousness	Extraversion	Type
Low	Low	Introverts, indecisive, uncooperative
High	High	Extraverts, decisive, cooperative
Low	High	Person-centred, rash, impulsive
High	Low	Cautious, reserved, deliberate

Figure 4.2 shows how those with high levels of both conscientiousness and extraversion were seen as more organised, confident and task-focused than the other types, making an individual with this combination of traits a highly sought after human commodity in the workplace. On the other hand, those with low levels on the same traits were seen as the opposite, and least likely to engage effectively in interpersonal situations, especially where conflict might be involved. Based on these descriptions, and since nursing is an occupation in which nurses' work relies on interpersonal interaction, these two particular traits may be deduced as vital to managing the priority-setting process efficiently and competently.

Sand (2003) conducted a longitudinal study (over a 10-year period) of a cohort group of 51 nursing students. At the end of this period, only 23 nurses could be traced for final assessment. Nursing qualities such as empathy, work variables such as work satisfaction, and personality factors such as nurses' psychogenic needs and defence mechanisms, were measured using six different instruments: 'Job descriptive index', 'profile of non-verbal sensitivity', 'cesarec marke personality scale', 'questionnaire measure of emotional empathy', 'scale of discomfort', and the 'modified defence mechanism test'. At the final follow-up testing, Swedish nurses who started out as 'real jewels', being highly motivated and conscientious, ended up with periods of long-term sickness, were no longer as motivated, and had difficulty in being assertive. Long-term satisfaction at work was associated with empathy, and indicated nurses' ability to show empathy to patients with difficult or emotional issues may have been hampered by the realities of nursing work rather than the 'ideal' vision of nursing which assumes every patient who needs support receives it. The author also gave no

indication of the type of wards in which nurses were working and so limits interpretation and thus any conclusions that are drawn. Despite the fact this may not correspond to a cohort of British nurses, the study assists in helping to clarify how personalities in nursing may influence, or be influenced by, circumstances or patient relationships.

4.4.4 Thinking styles research

While personality traits may predict certain behaviours and actions in situations, and how information may be processed, there are other traits linked to cognitive performance in the form of thinking ‘skills’, or ‘ability’ traits (Cooper 2002). Several kinds of thinking have been associated with clinical practice including rational-experiential thinking (Pacini & Epstein 1999, Shiloh et al 2002), reflective thinking (Argyris & Schon 1974, Mezirow 1981, Schon 1983, Conway 1998, Page & Meerabeau 2000), and critical thinking (Pardue 1987, Daly 1998, Greenwood et al 2000, Hicks 2001, Hicks, Merritt & Elstein 2005). The rational-experiential style is associated with how individuals use either analytic or intuitive thinking and is related to individual capacity for processing information (Pacini & Epstein 1999, Stanovich & West 1999) or how information is framed (Shiloh et al 2001). Reflective thinking is concerned with how individuals reflect during (in action) and after (on action) and is used as a concept within nurse education (Conway 1998, Page & Meerabeau 2000). While both the rational-experiential and reflective thinking styles are in no doubt beneficial, they are not being considered in this study since they are unlikely to be used to any great degree in setting priority. Other thinking ‘styles’ research was associated with how individuals may control or govern the mode of thinking used in a

situation and has investigated the relationship with styles to personality traits (Sternberg 1994, Fjell & Walhovd 2004), academic achievement (Zhang & Sternberg 1998), work environment variables (Abraham 1997) and critical thinking (Zhang 2003).

4.4.4.1 Critical thinking

Critical thinking as a meta cognitive skill was found to aid nurses to function in their complex working environment (Daly 1998), and emphasised analytic rather than intuitive thought (Alfaro-LeFevre 1995, Hicks 2001). In nursing it was often emphasised as equally, if not more important, than psychomotor nursing skills (Kataoka-Yahiro & Saylor 1984, Daly 1998). In an international Delphi study to examine the meaning of this construct, Scheffer & Rubenfeld (2000) derived seventeen dimensions of critical thinking including analysis, intuition and self-reflection.

Research has tended to focus on the investigation of critical thinking in novice and trained nurses (Corcoran 1986, Westfall et al 1986, Pardue 1987, Hicks 2001), and in certain ward types such as adult (Hicks, Merritt & Elstein 2005) or paediatric intensive care wards (Greenwood et al 2000). Critical thinking skills were shown to be evident in nurses of many years' experience (Hicks 2001). Studies tended to focus on isolated 'critical' events that were typically associated in wards or situations where life-threatening crises were the norm. For instance, in the study by Hicks, Merritt and Elstein (2005), much of nurses' thinking in critical care wards was almost entirely associated with monitoring, evaluating, and diagnosing a patient's biological status to identify or resolve problems. Whilst diagnosis of problems formed a large part of

nurses' work in critical care or medical wards where clinical reasoning and problem-solving is the norm, it may be less likely to guide nursing work to the same degree in surgical or gynaecology wards where there is more routine and predictable work. One final item of interest from the Hicks et al study involved the rankings provided by participants for the thinking exercise. This showed how nurses yielded equally clearly defined plans of action based on analytic thinking in low complexity cases, and intuitive rankings in cases of high complexity, reflecting the central tenet of Cognitive Continuum Theory (Figure 4.1). However, where the patient descriptions given were of equal status, nurses were unable to provide a clear ranking or plan of action. In decision-making terms, this corresponds with earlier discussions of alternatives in Section 4.3.2, where random selection of an alternative may result.

4.4.4.2 Thinking and planning

Two types of planning were identified in the literature; as intentional (Kokis et al 2002) and opportunistic (Greenwood & King 1995, Corcoran 1996, Hayes-Roth & Hayes-Roth 1998). According to Kokis et al (2002), intentional planning requires an individual to think in a certain way 'with the intent' of reaching a goal or outcome they expect, or that others expect them to achieve. Cohen (1996) describes this as a 'top-down' approach, whereby highest priorities are sequenced before lower-order priorities, and those of near equal priorities or close in timing, are clustered together. Intentional planning might therefore encompass the setting of initial priorities at the time of a handover report. However, when situations change rapidly, one may question the extent to which intentional plans remain valid, and at what stage opportunistic planning becomes employed.

Others found that, unlike the intentional planner, certain individuals such as those with experience, planned in an opportunistic rather than a systematic manner (Hayes-Roth & Hayes-Roth 1978, Corcoran 1986, Cohen 1996). These authors described how individuals had no global plan or goals but jumped about in no logical sequence so that both a top-down and a bottom-up approach to the achievement of goals could be used at times where rapid decisions required to be made on a moment-by-moment basis. This supports the notion of ‘shifting strategies’ or ‘adaptive decision making’ discussed in section 4.3.3. In the study by Corcoran (1986a) the effect of task complexity was examined based on how five novice and six expert nurses planned pain management for three simulated patients ranging in complexity. The influence of complexity upon planning was determined by asking nurses to formulate a drug administration plan at the same time thinking aloud to the researcher. Experts consistently used a broad approach to planning, and in the most complex cases, adopted an opportunistic approach. Novices used an opportunistic approach regardless of the level of complexity. The following definition perhaps offers the most appropriate description of planning and its links with prioritising in the context of nursing:

“ successful planning depends on learning how to prioritise goals to postpone achievement of goals due to low priority or overall lack of available resources, and resume pending goals when their priority increases or needed resources become available” (Patalano & Seifert 1997, page 2)

In terms of priorities this indicates that important goals or tasks may be dealt with first, then in order of approaching deadlines. According to Sternberg (1986) there are three key dimensions which may govern the planning process: components (ability to

process information effectively), experience (ability to combine unrelated facts or information) and context (ability to adapt to changing conditions so as to maximise strengths and compensate for one's weaknesses). In terms of priority setting in nursing, while formulating care plans are a daily activity for nurses, they are different to the type of planning involved in making decisions about the order or sequence of care and interventions that occurs for instance at the handover report. However, such abilities may be fundamental in helping a nurse to also 'think on his or her feet', in circumstances where time or human resources are perceived to be a problem, or where many interruptions are likely to interfere with the ability to carry out planned work.

4.4.4.3 The Sternberg and Wagner theory of mental self-government

The theory of mental self-government, proposed by Sternberg (1995), encompasses how individuals feel and think about different kinds of task activity (including affective tasks), how information is perceived, processed or managed (analytic or intuitive), and how this is likely to affect interactions and performance at work, including priority setting. Based on this theory, the Thinking Styles Inventory (Sternberg & Wagner 1997) was developed incorporating five different dimensions and thirteen different styles associated with thinking (Figure 4.3). These styles are associated with how an individual controls or directs the way he or she will approach and plan a task or situation in the same way as a political government controls society, for example in legislating activities. Certain combinations of the various subscales have resulted in a logical typology of styles (Sternberg 1997).

Figure 4.3 Examples of 13 thinking styles (Sternberg & Wagner 1992)

Dimension	Information processing style	Typical example of key characteristics
Function	Legislative	Prefers tasks requiring creative strategies and own choice of activities
	Executive	Prefers tasks with clear instruction and to implement tasks using guidelines
	Judicial	Prefers tasks allowing for evaluation, and judging others' performance
Form	Hierarchical	Prefers to distribute attention to several tasks that are prioritised according to the values of the task
	Monarchic	Prefers tasks allowing focus on one thing at a time
	Oligarchic	Prefers multiple tasks in the service of multiple objectives without setting priorities
	Anarchic	Prefers tasks allowing flexibility re: when, what, where, and how
Level	Global	Prefers more attention to the overall picture
	Local	Prefers tasks requiring concrete details
Scope	Internal	Prefers tasks that allow one to work independently
	External	Prefers tasks in form of collaborative ventures
Leaning	Liberal	Prefers tasks involving novelty and ambiguity
	Conservative	Prefers tasks allowing adherence to existing rules and protocols

This means for example that individuals who are 'over-zealous' may exhibit certain kinds of behaviour at work such as being judgmental, wanting to know everything about a situation, controlling others, and like freedom to make their own decisions. Sternberg describes such individuals as Type 1 (legislative, judicial, global, hierarchic and liberal styles). Type 2 individuals are those who prefer to let rules guide their work, to work on one task at a time, and prefer facts rather than detail (executive, monarchic, local and conservative styles). Type 3, the internal, external, oligarchic, and anarchic styles have features of both thinking types. This provides further evidence of a link between personality, thinking style, and performance.

Type 1 individuals have been associated with risk-taking, complex information processing (Zhang 2002), a deep learning approach (Zhang & Sternberg 2000), holistic thinking (Zhang & Sternberg 2005), and one of the five factors of personality,

that of openness to experience (Zhang 2002). Type 2 individuals on the other hand are associated with simplistic information processing, non-risk taking and conformity (Zhang 2002), a surface approach to learning (Zhang & Sternberg 1998), analytic thinking (Zhang & Sternberg 2005) and neuroticism (Zhang 2002).

Some studies reported individuals with a hierarchic thinking style and conscientious personality as indicative of a natural ability to set priorities (Fjell & Walhovd 2004), or legislative and hierarchic as predictive of job title (Zhang 2005). To some extent, one would expect this since if hierarchic thinking style is associated with experience, the more experienced an individual, the more likely he or she may be in a senior post or in a position of responsibility which demands hierarchic thinking. Similarly, an individual with a preference for a legislative style prefers tasks where he or she is in a position to choose their own tasks, which, individuals with senior or experienced roles in an organisation are more able to do than those in junior positions.

4.4.4.4 Summary of individual differences

There are therefore links between experience, intuition, emotion, information, knowledge, cognitive thinking, personality and the environment, which were raised in the preceding literature reviews as important elements in the priority-setting process. How nurses think about patient conditions, and organise or manage work, may influence decisions regarding planning, organising, and prioritising care. Although critical and reflective thinking are given as separate concepts, there are overlaps between the two. However, both of these styles are considered inappropriate for this study since nurses in dynamic clinical situations nurses may have little time to stop and question their practice, only to stop briefly and reassess priorities. However, if an

individual may be capable of deliberately selecting styles to suit different environments and situation, this could possibly explain how nurses manage frequent changes to the sequencing of patient care and between tasks that vary in 'emotionality' or 'physicality'. Since Sternberg (1997) purports thinking styles as volitional or content dependent, some control is implied over the choice of styles that are adopted, such that thinking can be deliberative as well as intuitive. Thinking preference may therefore be viewed as a form of "intentional planning" (Kokis et al 2002). As a consequence, the thinking styles proposed by Sternberg are considered the most appropriate for exploring the many different aspects of nursing work: dealing with objective data, doing tasks for other people, controlling the flow and order of their work, and how they are seen, or expect to be seen, by other individuals.

4.4.5 Possible links with priority setting

If individuals can elect to use any thinking style at any particular time, then this may be useful in a nursing context. Knowing how nurses from different wards with different levels of nursing experience think about patient tasks in general, and understanding individual differences regarding the uniqueness of thinking style may serve to reveal more about the priority-setting process. The literature surrounding internal constructs and thinking styles would suggest there is evidence of an overlap between different styles used in everyday thinking tasks, and those used in problem solving or diagnosing critical situations or events. There is a wider overlap between all the styles of thinking and personality traits of the individual engaged in the thinking or decision task. Traits were considered by Demetriou et al (1999), as

reflections of an individual's cognitive function and ability, overlapping with how one thinks, and the choices that are made.

The evidence thus far would suggest that if nurses do experience conflict in prioritising physical and emotional aspects of care for patients relative to one another, individual nurses ought to use information differently, and elect different tasks in line with their particular preference for that particular situation. If emotional tasks are given higher preference than physical tasks in certain situations, and if individuals choose tasks in line with their own traits or thinking style (Sternberg 1997), it ought to be the case that nurses who have an Agreeable personality and thus have caring and nurturing qualities might prefer interaction with, or tasks for, patients or patient situations with emotional issues.

4.5 Literature review summary Chapters 2-4.

First and foremost, priority setting in nursing was not always determined using objective but subjective information consistent with the attitudes and biases of individuals (Payne 1976, Hummelvoll & Severinsson 2001, McKee et al 2002). This varied according to the context of the clinical environment in which the task occurred (Bucknall 2000). For example, in traditional triage and occupational therapy prioritising of referrals, one-off decisions were typically employed (Marsden 2000, Allen-Davis et al 2000, Gertz & Bucknall 2001, Harries & Harries 2001), that were based upon objective assessment of patient symptoms and severity of condition. In high dependency or intensive care settings, priority was also determined objectively from biological and physiological data associated with a particular patient (Bucknall 2000, Harrison & Nixon 2002).

Nurses in intensive care had no need to think about relative priority with other patients since the basis of this type of specialised care was almost always one nurse to one patient (Pilcher 2000, Harrison & Nixon 2002). In contrast, nurses in acute ward settings however, did have the need to establish relative priority among any number of patients that formed their working caseload (Irurita & Williams 2001, Hendry 2001). In critical care wards, the critically ill patients nurses cared for were different from triage settings where patients ranged in severity of conditions and illness. Both triage and critical care are also different from gynaecology, as is acute from nurse-led gynaecology where there is diversity of patient type, but all with a condition related to the reproductive tract. Dealing routinely with emergency cases is the norm in both triage and critical care on a daily basis, but less so in gynaecology where these are more isolated than consistent events.

In medical wards, participants in Hendry's (2001) study assigned priority firstly to the tasks or interventions required for each individual, and then relative to each of the other patients for whom the nurses were responsible (Hendry 2001). Mental health nurses often gave priority to disruptive patients as opposed to the type and severity of the patient's psychiatric illness (Hummelvoll & Severinsson 2001). This therefore agrees with descriptive theories of decision making which indicate that what individuals are supposed to do is not always consistent with what they actually do in a real-life situation (Thompson & Dowding 2002).

There is evidence that in priority setting, as well as decision making, knowledge, experience and the use of information appear to be associated more with experts than

with novices (Benner et al 1996, Harries & Harries 2001, Hendry 2001). Experts are associated with the use of intuition and novices with deliberative thinking. However, priority setting may be linked to both types of thinking. Deliberative thinking may be involved at the time of the handover report where patient information is exchanged between nurses and nurses receiving the information make relative comparisons between patients to decide priority. Intuition may be more involved once this report is over and the nurse leaves to deal with his or her patients in a dynamic environment. Therefore it is not known whether all nurses set priorities using this model or whether it tends to be specific to expert nurses as Hendry suggests is the case in his study of medical wards.

Many of the tasks given to subjects in studies exploring priority setting (Walsh 1999, Harries & Harries 2001, Hendry 2001) and decision making or information processing (Hansen & Thomas 1968, Corcoran 1986, Cioffi & Markham 1997, Offredy 1998, Junnola et al 2002) tended to involve no interaction with people. In many ways, prioritising patients from paper or computer referral forms (Harries & Harries 2001) may be much easier than if the patients were present. Conversely, there is evidence from the triage literature that priority-related decisions that nurses made when patients were not physically present, where 'non-visual' cues were available for consideration, was less effective (Edwards 1998, Salk et al 2003).

In her study of the use of non-visual (verbal) information used by nurses at the shift handover report, Lamond (1996) hints that nurses may have a general idea of how they will prioritise patient care before moving into the ward to greet patients. In

keeping with the literature of priority setting (Hendry 2001) and the generation and evaluation of alternatives (Payne 1976, Luce et al 1997, Senter & Wedell 1999), it is likely that a two-stage prioritising process may be involved. This would mean an initial pre-screening stage at the time of handover report, and a second stage occurring after a subsequent visual assessment of the patient, and a visual check of patient charts, and nursing plans.

There is also evidence that individuals react differently under time pressure and uncertainty, and in complex task environments with (Luce et al 1997, Bolton 2000) or without (Bowers et al 2001) emotional content. These studies indicate that under such conditions individuals may not collect, interpret, or evaluate all the alternatives in a rational (normative) manner. Although the cognitive processes of individuals may be relatively consistent, the informational content used may vary.

4.5.1 Implications for the current study

If gynaecology nursing is indeed unique (Webb 1996, McQueen 1997), and if work is emotionally laden (McQueen 1997, McQueen 2000, Bolton 2001), then according to the decision-making evidence, nurses who work in gynaecology may give different emphasis to physical and emotional aspects of care and thus think differently about this information from nurses in other specialities.

If critical thinking is essential to priority-setting ability (Castledine 2002), then nurses' thinking style is worthy of further exploration. However, critical thinking is more associated with diagnostic or analytic skills in crisis events than the kinds of

thinking involved in determining everyday clinical priorities for any number of patients in a nurse's caseload. Deductive decision making has been suggested as more suited to medical and intensive care wards where patients are typically admitted with an unstable condition. In surgical settings however, patients are admitted in a stable condition since they have not yet received any surgery and there is a different emphasis, that of aiding recovery rather than diagnosis. Authors reported how diagnosing a patient's condition and then treating the patient's main symptoms as they presented was the norm in medical wards whereas the emphasis appeared to be routinely managing symptoms related to surgery such as pain in gynaecology and other surgical wards.

In routine surgical care there are assumptions that women should experience certain procedures uniformly, but research literature has shown wide variations in experiences of pain, bleeding and psychological problems for women having a TOP (Howie et al 1997, Gibb et al 1998, Wakabayashi et al 2001). The role of the nurse, and the timing and nature of the tasks involved, differed for surgical and medical TOP according to patient needs and the type of interventions required. This may explain the different way in which this service is provided to women, in either dedicated nurse-led units or in general acute gynaecology wards.

4.5.1.1 Addressing gaps in the literature

The evidence provided in the preceding chapters on nursing practice, priority setting and decision making offers some clarity as to how nurses prioritise between patients in terms of their health condition, and nurses' possible use of information. However,

it takes little account of the tension between the consideration of the emotional connections to specific patients or tasks, especially in situations where there are more than two patients involved. Very few of the studies reviewed, especially those of cognitive origin, examined individuals in a naturalistic setting, choosing instead a positivist laboratory-based testing approach. This leaves no clear indication about how the nurse determines relative priority between patients admitted for MTOP and those with other gynaecological conditions, each of which may require a different approach to nursing intervention and type of care offered. To compound this further, the evidence forthcoming from the literature describing gynaecology nursing practice is rather scanty and still vague.

4.6 Aims of the study

This study therefore has two broad and three specific aims. Broad aims are to:

- Observe and analyse how gynaecology nurses organise and manage the patient caseload
- Compare gynaecology nurses' priority setting with nurses in different contexts.

More specifically, this aims to

- Investigate the role of contextual and patient factors on decision making and priority setting.
- Investigate and describe how nurses think about the types of decisions or tasks that need to be prioritised.

- Examine the relationships between the styles of thinking used, the way nurses prioritise, and whether personality factors have any influence on such decision making.

4.7 Research questions

Following this discussion of the evidence derived from the literature review the following questions arose:

1. How do gynaecology nurses prioritise patient care?
2. How do gynaecology nurses prioritise different patient conditions?
3. How do nurses prioritise in different task contexts?
4. How does this differ from other types of nurse, e.g., surgical nurses?
5. What kinds of judgements and priority-setting decisions are nurses expected to make in gynaecology and other surgical-based wards?

4.8 How this study is approached

In order to answer the questions raised, the study was carried out in two stages:

1. Stage 1, which was concerned with external factors involved in shaping priority setting and involved exploring the nature of nursing work in gynaecology, the types of patients cared for, and the sequencing of activity.
2. Stage 2, which was concerned with factors within the individual decision maker that may determine how nurses set priorities in different contexts.

The main focus of this thesis is the priority setting that occurs in gynaecology wards. In particular, this is interested in whether there is a difference between that prioritising which occurs when nurses have women for a TOP in their caseload, and when they do not. As there are two very different types of wards where women having TOP procedures are cared for, this study includes one acute or ‘general’ gynaecology ward and one ‘dedicated’ or nurse-led gynaecology ward. When not looking after TOP patients, the majority of gynaecology work is concerned with caring for patients having gynaecological surgical operations. In this respect, based on the literature in Sections 2.2.1 and 2.6 of this thesis, their work is highly similar to surgical nurses since both are preparing patients for, and looking after patients recovering from, surgery.

To examine whether the emotional content of gynaecology work is any different to nurses from other wards involved in similar surgery-related work, this study compares gynaecology nurses with surgical nurses as illustrated in Figure 4.4.

Figure 4.4 Outline of the study strategy

Non-gynaecology wards	Acute gynaecology wards	Nurse-led gynaecology wards	
Others	MTOP	Others	TOP patients only

The following three main themes therefore guided the subsequent design and interpretation of results obtained in this study:

1. MTOP in gynaecology wards
2. MTOP in nurse-led units versus MTOP in acute gynaecology wards
3. Non-MTOP in gynaecology nursing versus non-MTOP in surgical nursing

This necessitated two different approaches: firstly, a qualitative approach for the first of the two studies, followed by a quantitative approach for the second study.

Chapter 5 Study 1: Methods

5.0 Introduction

This first study forms a foundation for exploring priority setting by gynaecology nurses. This aims to provide basic but essential information about the contextual background in which priority setting occurs. This concerns what types of patients nurses care for, the type of work, and related decisions involved in different types of ward. Although gynaecology nurses believe the care they provide is somehow different to nurses working in other types of surgery-based areas this has been rather lacking in research evidence. A stance of neutrality is therefore adopted which assumes no differences in nursing care. Assuming neutrality with respect to actual care provision, nurses in the two wards ought to show no difference in how they prioritise emotional and physical aspects of care. If, on the other hand, gynaecology nursing has particular characteristics, then based on evidence presented in the previous chapters nurses in gynaecology might be expected to show more emphasis towards emotional care when determining priorities. From information processing and decision theories there is evidence to suggest nurses may be placing different emphasis on certain information. While Hendry (2001) provided a detailed account of how nurses performed priority setting in medical ward environments, there was no corresponding account of the priority setting of patient care in gynaecology and other surgical environments. Therefore, this initial study focused on investigating whether Hendry's (2001) theoretical model of priority setting would apply to the context. This model is used as a guide to examine priority setting in the gynaecology and surgical rather than a medical clinical area, to determine the model's fit with a different

nursing context. The chapter first deals with epistemological issues underlying theory and methodology. This is followed by a description of the actual methods used and how the research was conducted.

5.1 Research design

In order to describe what types of decisions nurses make, it was first necessary to determine the tasks that gynaecology nurses undertake on a daily basis, and how they simultaneously manage care for a group of patients. Once the contextual and patient factors involved in priority setting are better understood, one may then focus on how nurses perceive or think about the coordination or prioritising of patients or tasks in more detail. Since nurses' priority setting could not be explored without actually knowing what kinds of work they are involved in, this was considered a significant indicator for the choice of research methods used.

The literature reviewed in the preceding chapter highlighted cognitive science and medical research as mostly quantitative and positivist in nature. For the medical profession a scientific approach ensures there is factual evidence on the best treatments, interventions or services for the treatment of large patient groups. For example a gold standard, first-line treatment for newly diagnosed patients with high blood pressure is 'Thiazide' diuretics (Clinical guideline 18: NICE 2004). Nursing research however, appears to have less of a need to search for facts and figures (e.g., number of patients given a Thiazide drug) than for understanding individual patient experiences or behaviour (e.g., what is the patient experience of this drug and how might it affect his or her nursing care or my approach to it?) in its quest to achieve

optimal care. This perhaps explains why the majority of the nursing literature reviewed for this thesis was predominantly qualitative as opposed to quantitative in nature.

5.1.1 Epistemology of research methods

Quantitative and qualitative approaches therefore have different epistemological foundations and assumptions which are shown in figure 5 (adapted from Halfpenny 1979: 179).

Figure 5 Epistemological differences between paradigms of research

	Quantitative	Qualitative
Foundations	science	sociology & anthropology
Mode of enquiry	positivism	interpretivism
Evidence	one reality	many realities
Context	context-stripping	context interaction
Values	value free	value-laden
Data gathering	objective	subjective

As the literature suggested priority setting to be a subset of decision making involving automatic or deliberate thinking and planning, the relevant literature was revisited to examine the methods used by authors. Under controlled laboratory conditions, authors used scientific tests to explain what kinds of, or to trace how decisions were made and managed. For example, the use of electro-encephalograph (EEG), electrocardiograph (ECG), and similar methods were used to trace cognitive neural network involvement and physiological responses (Glass & Riding 1999, Fink & Neubauer 2004) during decision-making tasks. However although such tests provided factual information they were unable to describe the actual feelings, values or experiences of the individual(s) concerned. One can question the extent to which the sole use of a positivist approach would reveal the full extent of decision making since

nursing care does not take place in isolation and so would be unlikely to capture emotions or the interaction taking place between nurses and their patients, or between nurses and other professionals or relatives. According to Butler and Butterworth (2001) this means it *“is not just studying people that may be important but learning about and from people”* (p406). Qualitative approaches therefore emphasise process (how) and meaning (why) more than they do quantity, frequency or intensity (how many/how much) (Denzin & Lincoln 1994).

Historically, anthropologists such as Savage (2001) and James (1992) have attempted to understand, interpret and explain behaviour and social interaction in their naturalistic environments and cultures. As nurses' work involves close interaction with patients and others it is imperative to reflect how decision making, and in particular priority setting, is shaped by this. This means the researcher must interact in some way or other with those under study to be able to do this. Typically, this has involved looking at or asking individuals about what it is they are doing, have done, or are planning to do either before, during, or after any interaction or action. Previous studies used various methods to capture this information ranging from the use of think-aloud protocols (Corcoran 1986, Hurst 1993, Hendry 2001), card sorts (Lamond & Farnell 1998), to simulated exercises via written, electronic or videotaped scenarios (Gould 1999, Roberts 1999, Junnola et al 2002, Gould 2004, Baxter 2005), to name but a few. While each of these methods had clear advantages they also reported disadvantages. For instance, those who used think aloud were required to make a trade-off in deciding whether to ask participants to think aloud during or after the task in hand. In retrospective think aloud a participant's thinking processes may be affected by the lapse in time from action to interview (Jones 1989, Kuusela & Paul

2000). This is similarly the case when asking participants to think aloud during a task since it is not possible to dismiss the notion that thinking aloud at this time could also be disrupting the natural thought processes and the flow of nurses' work (Smith 1988, p33) in other words causing interference in the exercise itself. Of course, it is not only the participant who is disadvantaged but also the researcher who, while recording a participant's response, may miss vital or significant cues concerning the phenomenon of interest.

Since the phenomenon of interest in this study is how nurses approach and think about priority setting there are two main routes of qualitative inquiry available: phenomenology and ethnography. Both involve essentially different epistemology: phenomenology being concerned with understanding the 'lived experiences' of a small or limited number of people (Harvey & Moyle 2001), and ethnography with understanding any number of people's perspectives as well as interactions between the phenomenon, the individual and the environment in which it exists (Baillie 1995). This assumes that the person (phenomenology) or the person and others they interact with in their respective cultural world (ethnography) are the target source of information from which the research questions can be answered. Studies of phenomenology have found that listening to other's accounts can be very time consuming despite the small number of participants involved (Giorgi 2003) but worthwhile when exploring the lived experiences of student nurses (Ironsides et al 2005), novice and expert nurses (Benner 1994), or nurse practitioner judgement (Brykczynski 1989). However, it may be argued that simply asking nurses to provide isolated narrative accounts of their total experiences of priority setting is in itself unlikely to reveal much about the cognitive processes involved at the time the

experience is lived. As a consequence, this is perhaps more likely to provide the researcher with a biased or less accurate account of priority setting as it would occur in real observed practice.

Ethnography on the other hand, has been used widely in healthcare to explore hidden aspects of nursing practice (James 1992, Manias & Street 2000, Payne et al 2000, Jones & Lyon 2004), decision making processes of triage (Fry & Stainton 2005) or ICU practice (Hancock & Easen 2006), management of risk in acute psychiatric nursing (Quirk et al 2004), nursing activity (Baillie 1995, Bowman et al 1995), and sensitive topics in nursing (Gibson 1996, Savage 2001). These studies typically employed fieldwork in the form of observation in the same way as anthropologists have observed people or primates, and /or involved interviews or personal reflective diaries. In this way, authors benefited from the narratives of subjects in providing more comprehensive understanding of a phenomenon. For instance, a recent study by Edvardsson & Street (2007) suggested how keeping written narratives in the form of a reflexive journal helped the researcher to draw out information that might otherwise never be considered. For example, the sounds of telephones and alarms while recording data triggered the researcher's own senses, making him feel stressed and uncomfortable. This led him to think how the palliative care cancer patients must have felt when they experienced sounds in that environment. This is in direct opposition to views in Cartesian philosophy where the avoidance of feelings and personal experiences is frowned upon for fear of 'contaminating' data and introducing bias (Polit & Hungler 1997).

The key to interpreting and understanding what it is that individual nurses need to know about ordering, organising or prioritising the work they do, and the influence other factors have upon this knowledge appears to cross boundaries between the two approaches but slants mainly towards an ethnographic rather than phenomenological or scientific origin. One author specifically emphasises how ethnography proved highly suitable in highlighting the role of emotions in nursing practice (Allan 2006). As gynaecology work reportedly involves high levels of patient and nurse emotions, the research questions in stage one are best answered using a qualitative approach. For stage two however, a consistent method of measuring internal cognitive constructs of individual nurses is required. For this reason, a quantitative approach was adopted and is discussed in chapter 9. Hammersley and Atkinson (1983) ethnographic research with certain features such as detailed examination of a small number of cases, a tendency to work with unstructured data, and ‘exploring’ rather than ‘testing’ the nature of the research topic. These features were used to guide the design of this study.

5.1.2 Triangulation of data

Merely observing nurses in action gives no indication of the mental processes that occur as they make judgements and decisions about patient care and priorities as many authors have testified (Gould 1996, Offredy 1998, Thompson 1999, Hendry 2001). As accessing the thought processes of individuals is to involve a naturalistic rather than a positivist approach, the use of triangulation will increase the validity of findings that are largely based on the qualitative researcher’s own conclusions of

events (Kumar 1996). According to Shih (1998), there are various approaches to triangulation, which include a consideration of:

- methods (using different methods of data collection and/ or analysis)
- space or location (of the same phenomenon at different sites)
- time (of the same phenomenon at different times)
- person (using different individuals)

5.1.2.1 Triangulation involving methods

A qualitative ethnographic approach is often associated with case study research (Mulhall 2003), and two methods are typically employed in such research, these being observation and interview (Miles & Huberman 1994). Case study research may be descriptive, explanatory or exploratory and can examine single or multiple cases (Yin 1994). A multiple case study design was used in this study since there were different nurses from different types of ward at different sites involved, all or some of who were likely to have different approaches to setting priorities. Since the main aim of Stage 1 was to provide a comprehensive picture of what is involved in the prioritising of patient care by nurses in different types of ward, a combination of descriptive and exploratory approaches were used. Mixed methods involving observations and interviews with nurses were therefore employed in the current study. Within observation, two methods are involved, one set of informal preliminary observations of generalised nurse activity and decision making, and one set of formal observation of individual nurses as they go about their daily work caring for patients.

5.1.2.2 Triangulation involving location

As priority setting in gynaecology was the primary focus of this thesis, and part of this involved comparing gynaecology nurses with nurses from other contexts, triangulation was used to observe and conduct interviews with nurses at different wards, in different hospitals, at different locations in Scotland. In this way, nurses' priority setting could be compared for consistency.

5.1.2.3 Triangulation involving time

One limitation of a multiple case study is that only 'time capsules' (Robinson 1996) of data can be taken of the phenomenon at any one time, and so results may not be transferable to other cases involving different elements and different environmental factors, at a different point in time (Lincoln & Guba 1985). Conversely, since the nature of nursing is such that it can alter rapidly or is constantly changing, one could argue that research at best can only ever capture a snapshot of a phenomenon.

5.1.2.4 Triangulation involving people

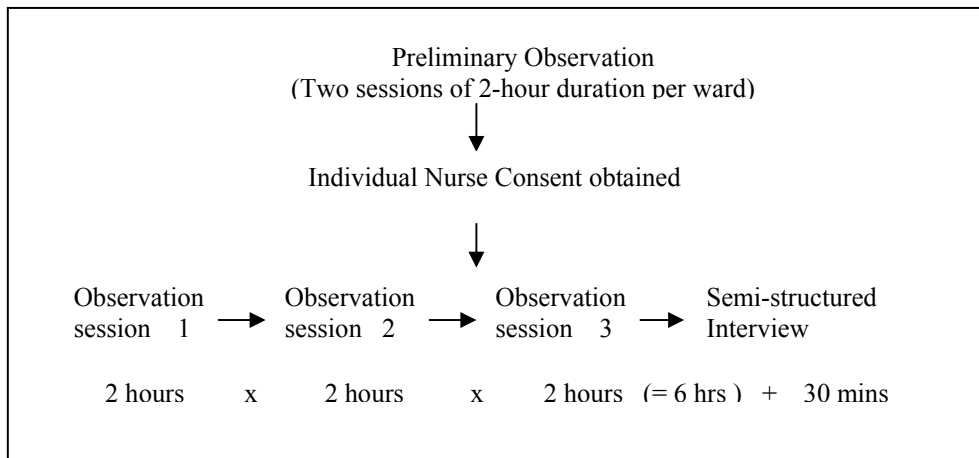
Using different individuals to describe, explore or examine the same phenomenon can be very useful in providing a grasp of the differences in perceptions, feelings and behaviours invoked (Davitz & Davitz 1975). In the current study, not only were comparisons between nurses from different wards and hospitals important, but so too were individual differences in the level of nursing experience, role, grade and status, all of which may be important factors in setting priorities.

5.2 Procedure

Data were collected between the months of July and September in 2004 once verbal permission had been obtained from the relevant directorate and ward managers. As

illustrated in Figure 5.1, before any individual nurse observations took place, two periods of preliminary observation, each lasting two hours, were conducted in each of the four wards participating in the study. All ward and nurse activity was observed at this time and no direct contact was made with any of the nurses or patients in the ward. This preparatory work was considered essential for both the researcher to gain an appreciation of different clinical contexts and nursing practices, and for potential participants in getting used to being observed. Following this preparatory work, the main observation study commenced. This involved three observation sessions, where the researcher observed each of the nurses who volunteered to take part, on an individual basis for two hours, during which time the nurse performed her daily work providing care as usual for patients. At the end of the final observation session, the nurse was given an interview lasting 15-20 minutes.

Figure 5.1 Study 1 Protocol



5.3 Observation

In order to find out how nurses go about their work in the ‘real world’, one of the best ways of doing this is by observing nurses as they are immersed in their own culture

(Atkinson & Pugsley 2005). Several authors criticise others for seldom collecting data about the physical environment of the people or events being observed (Mulhall 2003) or in the case of health care, the emotional aspects of the treatment settings (Hinshelwood & Skogstad 2005). According to Polit & Hungler (1997), one of the strengths of observation is the ability to collect information about characteristics of the individual, task and environment, all of which are central to this study of the priority-setting process. Observation was considered the best way of providing rich or detailed information and insight into the nature of gynaecology nurses' work, such as: (a) how nurses manage the care of different individuals with different types of gynaecological complaints, (b) providing a broad idea of the types of tasks involved, (c) examining the kinds of decisions that nurses appear to be making, and (d) noting any external factors influencing this process.

5.3.1 Different approaches to observation

Observation may involve a participant or non-participant approach by the researcher. Participant observation requires the researcher to become directly involved with participants by actively taking part in the phenomenon, event or situational context (Wilkinson 2000). Non-participant observation has no such requirement since the researcher is indirectly involved, and observes from a distance (Martin & Bateson 2000). However, as conducting observational research can be perceived as 'intrusive' (Baillie 1995) especially when researching 'sensitive' topics such as perinatal loss or termination of pregnancy (Kavanaugh & Ayres 1998), the researcher and any participants risk experiencing psychological distress as a result of observing, and being observed during a difficult or emotional life experience. As nurses in this study would at times be observed providing care to women having a TOP or spontaneous

miscarriage, or being present during intimate physical pelvic and vaginal examination, a non-participant approach was deemed the most appropriate of the two options. This approach allowed a fuller exploration of all nursing activity without the distractions associated with active participation, such as being drawn into conversations with individuals other than consenting participants (Wilkinson 2000). Furthermore, this was considered less likely to interrupt any counselling or other emotional aspects of nursing work associated with TOP care, normally conducted on a one-to-one basis between a nurse and his or her patient. More importantly, this was to avoid becoming emotionally engaged in such situations, since this had the potential to lead to bias.

5.3.1.1 Different types of observation used in this study

Merely observing nurses at only one point in time would be unlikely to record typical descriptions of nurses' priority setting as many other researchers have attested (Bowman 1995, Gould 1996, Robinson 1996, Offredy 1998, Shih 1998), and would be unlikely to reflect the full range of nursing work. To reflect this, a series of preliminary observations were undertaken, where all activity and interactions were assessed. This preparatory pilot work allowed the researcher to gain a broad appreciation of the environment and the context of nurses' work rather than focus on any one or more aspects of their work.

This prepared both the nurses and the researcher for the series of individual nurse observations that would be undertaken during the main period of data collection. Both preliminary observation sessions and sessions shadowing individual nurses in the

main observational study were therefore chosen to coincide with different days of the week (including weekends), and different times of the day (excluding night shifts), allowing for the variation in workload and nursing interventions thus incorporating typical times of optimal and minimal nurse activity. To ensure the same activity would not be repeated, observations were arranged to occur over several days or weeks apart, and to allow for holidays, sickness etcetera. Whereas in preliminary observation, nurses would be observed on a collective basis as the researcher sat in the one location in the ward, for individual nurse observation, a non-participant approach was adopted by the researcher who would 'shadow' each nurse on a one-to-one basis over three separate occasions, each session lasting two hours. This meant each nurse would be observed for a total of six hours overall.

5.3.2 Methods to record nurse activity and behaviour

In a structured approach, studies have used a formal observation schedule to categorise activity or behaviours of people or animals while observing, which invariably involves some form of time sampling method and the completion of any number of categories and subcategories (Pretzlik 1994, Bowers et al 1995, Martin & Bateson 2000). In a non-structured approach, the researcher continuously records events using free notes as and when events occur (Martin & Bateson 2000). According to Martin & Bateson (2000) the non-structured approach is extremely beneficial for use in preliminary observation of phenomena by allowing the researcher to gain a full appreciation of the environmental context in which the phenomenon occurs, such as the various interactions and relationships between participants, other people, and the organisational setting or culture in which it takes

place (Mulhall 2003). Although priority setting has been linked with nurses' use of time, it was not appropriate to formally 'time' nurse activity here. A non-structured approach was considered the most suitable for both preliminary pilot observation and observation of individual nurses in the main study. Other approaches have been used such as continuous video recording (Andersen & Adamsen 2001), but these are less common in nursing research, and have several disadvantages. First and foremost such equipment is likely to be expensive, and secondly, there can be technical glitches meaning data are not recorded, or of poor quality. Video recording nurses and patients in Andersen & Adamsen's study (2001) involved observing gynaecological and anal cancer patients while they were receiving irradiation treatment. This was the only way of observing owing to the radiation dangers involved. Videotaping may not be considered appropriate in a gynaecology ward for obvious reasons and so pen and paper methods to collect data were chosen.

A 20-page paper booklet (Appendix 3) designed by the researcher allowed free recording of data for both preliminary and individual 2-hour observation sessions. The front cover of this booklet detailed the date and time of each session as well as a unique code for each participant.

Other supplementary information describing the environment immediately prior to the commencement of each observation session was also logged on the front cover and listed as follows:

- number of staff on duty
- the number of patients

- patient conditions (e.g., hysterectomy, TOP)
- location of patients in the nurse's caseload (at individual observation only)
- total number of available beds in actual use

This acted as an aide-memoir when analysing the data, and helped to provide a comprehensive account of the background environment before each session. This information, in conjunction with the actual observed priority-setting behaviour of each individual nurse, was used to provide a more accurate account of witnessed events. During and after observation sessions, reflective comments recorded any feelings or thoughts which may have lead to bias as well as any concerns, problems or hypotheses that could be explored or verified later. When this occurred the nurse concerned was asked directly to clarify the situation once the observation session was over. This was very useful since on a few occasions, minor misunderstandings from the researcher's own interpretations of events did arise. For example, on one occasion in the surgical ward, one nurse was observed in discussion with what was initially thought to be a consultant, but who turned out to be the bed manager. Such action allowed the researcher to amend previously recorded data.

5.3.2.1 Modifying the observation tool

During the preparatory observation of wards involved in the study, and because some of the activity changed so rapidly, the researcher found it difficult to record all the information at the one time without losing track of events as they unfolded. This has been recognised as one of the main problems encountered in observational approaches (Bowman 1995, Johnson 1995, Martin & Bateson 2000). Conversely, the use of a formal time sampling approach to record activity or behaviours can miss out

on any activity which occurs between sampling points (Martin & Bateson 2000). Following the generalised preliminary observation of wards, the booklet was modified from a blank page format in order to make certain aspects of recording data entry easier. On each page of the revised booklet (Appendix 4), six columns documented text entries for time (where the researcher felt she wanted to time certain interactions or events), free notes and comments, location of nurse, and tick boxes to record any interruption, documentation, or conversation made by, or to, the nurse. As such this could be considered a semi-structured method of data collection since it is neither free nor completely structured.

5.3.2.2 Observation times for preparatory sessions

This permitted the researcher to experiment with ways of recording observation. With the permission of individual ward managers, the researcher recorded generalised ward activity, and the movements and interactions in which all of the nurses on duty were involved during each of the two, 2-hour observation sessions (Figure 5.2).

Figure 5.2 Duration and frequency of preliminary observations

Ward Type	Preliminary Sessions	Length (minutes)	Total Duration of Observation(minutes)
Acute Gynaecology	2	120	240
Nurse-Led Gynaecology	2	120	240
Acute Mixed Surgical	2	120	240
Acute Colorectal Surgical	2	120	240
Total	8	480	960

The times of each of the two preliminary observations of generalised activity were arranged to take place on one morning and one afternoon over a three-week period.

5.3.2.3 Observation times for the main observation period

Observation session times were arranged in accordance with the personal shift roster of each individual nurse who gave consent. On a few occasions, one or more of these individual sessions had to be rescheduled owing to sickness or last minute changes of shift in order to cover staff shortages. In one out of the three sessions, the timing of the session was set to coincide with a shift handover report. An example of one completed series of observation for one individual nurse is provided in Figure 5.3. This allowed the nurse to be shadowed during and after the patient handover report, designed to exchange and/or update information about patients from one shift of nurses to the next. This permitted each nurse to state the order in which she proposed to attend to patients, as well as any specific tasks or interventions planned. In addition, an indication of how information provided at the handover report might have been utilised by the nurse was derived from interview data.

Figure 5.3 Example: Summary of observation sessions (ID: Nurse 4A)

Observation session	Time	Available beds	Beds occupied	Staff on duty	Theatre list in progress	Handover report	Patients in nurse caseload
1	10.00-12.00	30	27	4 trained	✓	x	6
2	12.30-14.30	30	26	4 trained	✓	x	6
3	14.15-16.15	30	27	3 trained	x	✓	7

5.3.3 Methodological rigour: reliability and validity

As the researcher alone recorded data, it was not possible to conduct observer reliability tests. However, following each individual observation period, nurses received a brief verbal synopsis by the researcher for verification of perceived events

and behaviours. The nurse in turn gave her own interpretation of events that had occurred during the preceding two hours. Further verification of observation data occurred later at interview, where the nurse had the opportunity to elaborate on ambiguous or misinterpretation of any observed behaviour or event.

5.4 Interview

Although observation can provide an understanding of how the nurse may be giving priority to certain tasks or patients, the researcher cannot determine what participants are thinking when using this method (Breakwell et al 2000; Hendry 2001). For this reason, nurses were also interviewed as well as being observed. Since retrospective interviewing is best conducted as soon as possible after the period of observation while events are still uppermost in the individual's mind (Offredy 1998), individual nurse interviews were held after the third and final observation session. This validated observational data from one or more individual observation periods by asking questions about specific events or behaviours that occurred during these times, that were perceived as associated with the priority-setting process. Given that the aim was to access individual nurse's thoughts and emotions in connection with sensitive topics such as intimate gynaecological conditions and TOP, individual rather than focus group interviews were chosen. One of the main disadvantages of focus groups is the potential for individuals to have poor or inaccurate recall of the experience in question, to withhold information, or else give false accounts if intimidated in the presence of their junior and senior peers (Kumar 1996, Bryans & McIntosh 2000). It was thought nurses might feel more comfortable and be willing to divulge personal information in a one-to-one rather than a group interview.

Each individual nurse participant consented to a 20-30 minute interview following one of the three individual observation sessions. Where possible, this took place after the third and final observation session, which in most cases was scheduled to occur during the period of time that immediately followed on from a patient handover report. The reason nurses received the interview at this time was three-fold. Firstly, each nurse could be asked directly about the way she used information from the handover report to determine her potential priorities of nursing care, and question any specific observed behaviour during the remainder of the two-hour observation session. Secondly, the possibility arose that the nurse might discuss the content of the interview with her colleagues if interviewed after the first observation session. Interviewing the nurse following the final observation reduced this possibility. More importantly, since there was no way of knowing what to expect from the interview until the final session, it also reduced the potential for the nurse to rehearse her response in advance and thus promote and encourage as natural a response as possible (Kumar 1996). The majority of interviews occurred mainly during, or immediately after patient visiting hours, which by chance, proved to be the best time since, while patients were otherwise preoccupied, there were less demands on nursing staff leaving it easier to release the nurse from her duties.

5.4.1 Interview format

Interviewers may choose to take either a structured or unstructured approach. Researchers using a structured interview format only use a formal set of specific predetermined questions (Kumar 1996). One of the main disadvantages of a

structured approach is that there is no flexibility to probe any unclear, misunderstood or ambiguous response (Kumar 1996, Taylor 1997, Miles & Huberman 1994). For this reason, the current study employed a semi-structured interview design to prompt responses to several predetermined questions relevant to the research questions and to additional probing questions from the researcher where it was felt pertinent.

5.4.2 Interview guide

Each nurse participant responded to the following questions. Prior to interview, the researcher read over each of the field notes associated with all three observations. Any aspects of observed activity or behaviour identified by the researcher as worthy of further explanation were explored in addition to the five main questions, and nurses were probed further when answers were short, ambiguous or unclear.

1. During the time you have been observed today, what decisions do you think you have made?
2. Can you explain how you prioritised care for a number of patients simultaneously?
3. Did any specific factors aid or limit that priority setting? Why was that?
4. Who, besides yourself was involved in setting those priorities?
5. How often do you think those priorities changed during this time?
6. How do you typically prioritise a caseload? Is this by patient condition, tasks or interventions, or both

5.4.3 Methodological Rigour: Reliability and validity

Two means of ensuring reliability and validity were used. Firstly, a copy of the list of codes applied to all interview transcripts, together with a random sample of fully transcribed interviews (with codes removed) were assessed by another individual independent to this study, and competent in qualitative research methods. This second individual's use of codes was compared with those coded by the researcher. The level of agreement between the two assessors was obtained by calculating the Index of Concordance (Martin & Bateson 2000:120). This is described as a percentage agreement for codes applied to each interview transcript and is calculated by dividing the number of times both coders agreed by the number of times coding was possible. To estimate the likelihood this agreement could have been obtained purely by chance, Cohen's Kappa statistic was also calculated using the equation $Kappa = (O - C) / (1 - C)$ where O is the observed proportion of agreements and C, the proportion of chance agreements. For example, using this formula for interview A the calculation was $(16/21 \times 20/21) + (5/21 \times 2/21) = (0.76 \times 0.95) + (0.23 \times 0.09) = 0.74$. The Kappa coefficients indicated a moderate to strong agreement between the two individuals raters (Figure 5.4). As these were not substantially lower values than those of the Index of Concordance, it can be assumed that the number of agreements between two individuals could not have been reached by chance alone (Martin & Bateson 2000).

Figure 5.4. Inter-rater reliability for interview codes

Transcripts evaluated	Index of Concordance (% agreement)	Cohen's Kappa Coefficient	Inter-rater Reliability
Interview A	0.80 (80%)	0.74	Good
Interview B	0.77 (77%)	0.77	Good
Interview C	0.91 (91%)	0.82	Very good
Interview D	0.85 (85%)	0.78	Good

Secondly, every effort was made to ensure that participants were not led towards responding in a favoured direction. Only when individuals had responded to a question did the researcher probe further. Nurses were given the option whether or not they would like to listen to the tapes or withdraw any part of the conversation that they did not want the researcher to use. All nurses declined this offer.

5.5 Ethical issues and ethical approval

There are various issues associated with conducting fieldwork especially when like this study that research is of a highly sensitive nature meaning some patients may be emotionally labile. The following section briefly describes the patient and nurse issues that may potentially arise during data collection.

5.5.1 Reflexivity

Other authors have been noted to raise ethical concerns regarding the use of ethnographic research where the participants may be vulnerable such as those in nursing homes (Schuster 1996) or people with a mental health condition in the community, acute, or mental institution (Johnson 1995) and generally sensitive topical issues (Gibson 1996) such as AIDS or TOP. As nurses in gynaecology may be caring for women having a TOP during the data collection period, and this was assumed to be a sensitive issue for nurse and patient alike, close consideration was given as to how to avoid or at the very least limit the potential for creating anxiety or distress. This meant considering the level of familiarity and distance between the researcher and participants. According to some, consideration of the insider-outsider relationships within healthcare and research are essential components of

observational research (Waters & Easton 1999, Allen 2004). For instance Allen (2004) highlighted tensions between being closely immersed in the field to enable authenticity of findings (insider) and being too close to participants. Equally, being distanced from participants would mean less bias but at the possible expense of meaning (outsider). Interestingly, Allen adopted a dual role as both observer and participant, switching between the two roles as the situation demanded, but does not inform the reader what type of situations these involved. In addition she does not provide any information on how this 'switching' was managed in terms of her own reflexivity or possible bias and the affect this may have had upon those observed. For instance, were nurses always aware which particular role she was in at different times? In the current study, as a nurse with insider knowledge, at least in the field of gynaecology, the potential for researcher bias was duly recognised. However, this knowledge also grants the researcher an understanding of the intricacies of gynaecology nursing work which may help to imbue meaning that might otherwise be missed or overlooked by other people with no such nursing background or experience. Keeping distanced from one's previous roles as nurse was easier when thinking of the self as an outsider rather than an insider. In addition, it was important to recognise that should nurse participants become aware of the researcher's previous nursing role there was a likelihood individuals might think their performance or practice was being judged, which may have affected their actions or behaviour. Every effort was made to reassure nurses this was not the case. Nevertheless, entries were made in field notes regarding the issue of reflexivity whenever conflict between the two roles arose, or where the researcher may have interpreted any event or situation in light of her own experience.

5.5.2 Respecting privacy and dignity during 'sensitive' research

As nurse participants were to be observed providing intimate personal care to patients, all patients in the nurse's caseload were advised of their right to decline to be observed anytime they felt uncomfortable with the presence of the researcher. This also extended to the nurse, who could advocate on behalf of her patient where she felt necessary. At such times, individuals were informed the researcher would stand outside the bed screens, examination room, or toilet, until the procedure or event had been completed. Only one patient declined to be observed during an intimate physical examination. Data recording ceased for ten minutes until the examination was complete, and the patient confirmed with her nurse that observation could recommence.

According to Woods (1986), recording in the field is fraught with difficulty as there is always potential for written and in particular verbal information to be seen or overheard by others. During the initial observation of all ward nurse activity, the plan to use a hand-held dictaphone was dropped after the initial ten minutes of the session since there was too much background noise from constant activity and conversations. As a consequence, to avoid causing unnecessary distress to patients, field notes were not recorded verbally using a dictaphone machine since there was considered to be a high risk that vulnerable patients would be in earshot of the researcher (such as TOP patients). This prevented patients or nurses who might become unhappy or distressed overhearing their details being recorded aloud. Every effort was made to respect the patient's dignity when conducting observations.

5.5.3 Mitigating against adverse effects

Time was taken to facilitate nurses' trust and confidence rather than distrust in the researchers intentions. The researcher stressed to nurses there was no intention to judge performance or report 'bad' practice. Any initial tensions appeared to resolve once the nurses became relaxed after the initial few minutes of the observation period, seemingly becoming immersed in their work and impervious to the presence of the researcher.

The caseload of patients for whom a nurse was responsible during any of the observation sessions, were also advised that the focus of data collection was only the nurse, but that as the nurse was being followed by the researcher this would mean the researcher would always be in close proximity. As there was always a possibility that patients or nurse participants might experience undue stress from being observed, nurses and patients were given written and verbal instructions to mitigate this. At any time, participating individuals, despite giving formal consent, could decline to be observed for some or all of the observation session.

As an added safeguard, in case anyone felt pressurised to be observed, or had any complaint against the researcher or her actions, the contact details of a third party agreeing to act as an independent counsellor were given to all individuals. The independent counsellor offered complete confidentiality of any information imparted. After the period of observation was completed, the researcher approached the counsellor only for the total number of individuals who contacted her. The counsellor reported receiving no such calls.

5.5.4 Ethical approval

The research proposal was submitted to the University of Stirling, Department of Nursing and Midwifery's Research Ethics Committee. After approval was granted (Appendix 5) on 12th January 2004 the proposal was then submitted to the NHS Local Research Ethics Committee (LREC). Following a personal visit to verify to the chairperson of the Tayside LREC the steps which would be taken toward ethical protection for patients, final approval to proceed with data collection was granted on 20th April 2004 (Appendix 6).

In accordance with the principles of good research practice as outlined in the University of Stirling policy handbook (2002), participants were only allowed to volunteer or 'opt in' to research. This approach is not without difficulty for Rudestrom & Newton (2006) reminds researchers that individuals who volunteer may be motivated for reasons other than genuine contribution to evidence-based practice or research. The authors suggest such participants may have strongest views on the phenomenon under investigation, or may be flattered by the attention it brings. This potential bias was kept in mind when analysing data.

According to NHS ethics all individuals who are not employees are required to apply for an honorary contract with the human resources department at the hospitals involved. The researcher encountered problems in securing an honorary contract (Appendix 7) from the Human Resources department in NHS Tayside. From ethical approval to securing this contract a period of six months had elapsed. During this

time and many phone calls later it appeared this task had been taken on by no less than four different personnel. The reason for this appeared to be due to confusion arising from recent changes in the organisation as a direct result of recently introduced research governance policies. This delay was reported to the research and development office at NHS Tayside.

5.6 Creating the sample

According to data provided by the Scottish Health Statistics Division on the worldwide web, only two gynaecology units in Scotland could be identified as fully nurse-led, one in Aberdeen and one in Tayside. For this reason, a purposive sample was used to select sites. As the nurse-led setting can be considered the gold standard for TOP service provision, one nurse-led unit, and one acute general gynaecology ward that includes care for women having MTOP, was included in the study. Each of these ward contexts were investigated at two separate hospital trust sites in Scotland:

- a highly specialised gynaecology environment providing MTOP
- an acute gynaecology ward providing care for women having MTOP, as well as women with a diverse range of other gynaecology conditions
- one general surgical ward at each of the two sites was also included in order to determine if nurses' priority setting in acute gynaecology is distinct from nurses in other acute surgical wards or other types of gynaecology ward.

One gynaecology ward and one surgical ward were selected from two hospital sites. ISD data for 2005 showed Tayside had highest rate of TOP (n=16.4 per 1,000 women), followed closely by Aberdeen (12.7 per 1,000 women) and Fife (11.1 per

1,000 women). As Aberdeen was furthest from the University of Stirling study costs such as travel costs were considered a problem. Statistics for Fife were similar to Aberdeen and located within distance of both Stirling and Dundee therefore these two areas were chosen to provide the pool of nurses that would form the sample frame for the study. The nurse-led gynaecology ward was easily chosen since only one such ward existed at the two locations, in Tayside. The acute gynaecology ward was taken by default from the remaining Fife site. In contrast, there were many more surgical wards than gynaecology wards at both sites. Clinical managers in each of the surgical directorates were approached to assess wards for suitability to be included in the study. One surgical ward originally agreeing to be involved in the study was later withdrawn by hospital management since it was no longer considered appropriate for inclusion for staffing reasons.

5.6.1 Approaching ‘gatekeepers’ for access to potential participants

Directorate and ward managers at each separate hospital site were also approached by telephone or personal visits for permission to (a) conduct preliminary observations and (b) to access potential participants. Letters were sent to the relevant consultant gynaecologists (nurse-led gynaecology and general gynaecology wards) or surgeons (surgical wards) seeking permission to include any of their patients who nurses participating in the study might be caring for during any of the three periods of individual nurse observation (Appendix 8).

5.6.2 Access to participants

In order to approach potential participants, and following approval from respective ward and clinical managers, each ward was visited on an individual basis at times when managers reported a large number of nursing staff would normally be present. These tended to be at times immediately before or after any of the nursing handover reports. In agreement with ward managers, the researcher met with nurses at the patient handover report on days identified as being fully staffed in order to explain the study and answer questions or concerns. Nurses were left information leaflets (Appendix 9) with contact details to consider at their leisure. A further visit was arranged to identify volunteer participants and arrange for consent to proceed. At this next visit, individual volunteers read and signed a formal consent form (Appendix 10), and a copy was given to the nurse for personal reference.

5.6.3 Access to the patient caseload

As the individual nurse was to be shadowed, this would expose the researcher to any patients for whom the nurse was responsible for their nursing care. Although the patients themselves would have no direct involvement in the study, nevertheless, as they would be observed during times the nurse provided specific individualised care, every consultant surgeon was approached by letter to seek their approval for their own patients to be included in the observational process. No surgeon declined and all indicated verbal approval to proceed. Posters designed to impart awareness of the study were distributed to wards involved in the study, and placed in nurses' duty rooms and patient sitting areas (Appendix 11). Nurses also distributed information

leaflets to patients in their caseload on days when arranged observation sessions were due to take place (Appendix 12). Patients who had any aversion to being observed by a third person were provided every opportunity to voice concerns. As a failsafe option, all patients in the caseload of the nurse about to be observed, were approached before each observation session by the researcher to confirm they had received and read the information leaflet, and been given the opportunity to ask questions, before being asked for written consent in the presence of the nurse. Only one patient declined to be observed, and was assured the researcher would not accompany the nurse during any personal care she might receive, but advised that if in a multiple bedded area, the researcher would be present while the nurse was with other patients. Patients who gave consent but felt uncomfortable about being observed (for instance while at toilet or while having any sensitive procedure) were given privacy until ready to recommence.

5.6.4 Inclusion and exclusion criteria

From earlier discussions with gynaecology nurses, it appeared that only experienced qualified nurses, or in some areas, midwives, were responsible for the care of women having MTOP. As one of the aims of this study is to compare gynaecology nurses' priority setting with other nurses in different contexts, surgical nurses were also included. For this reason only qualified nurses in surgical, gynaecology and dedicated wards, (including staff nurses and enrolled nurses) with a minimum of six months experience, were invited to participate. Since agency or bank nurses only have responsibility for prioritising nursing care on an intermittent basis they too were

excluded. As clinical managers drew attention to the fact there were no male nurses working in any of the gynaecology wards, a decision was made to include only female nurses caring for female patients. Trained nurses of male gender were therefore excluded by default.

5.7 Informed consent

Nurses who volunteered to participate were asked to read and sign the formal consent form (Appendix 10), and patients for whom they were caring during the observation periods were also asked for written consent to be observed (Appendix 13). For individual nurses, consent was signed prior to the first observation session only. For patients however, every patient in the nurses' caseload was approached ten to fifteen minutes before each individual observation session for formalised consent. Although observations of the same nurse were separated by several days or weeks, on one or two occasions the same patient appeared in different nurses' caseloads. This happened when a patient retained in-patient status while awaiting long-term care placement or as a result of complications. This provided an unexpected opportunity to explore priority setting when caseloads included patients 'known' to nurses. On such occasions, the researcher asked the patient for verbal consent only.

5.8 Data analysis

There are various approaches to analysing qualitative data such as the constant comparative, narrative, metaphorical, and content or thematic analysis (Silverman 2001). Qualitative analysis first emerged as a method of quantifying units of broken down text into single words (Berelson 1952) to establish consistency across groups of

individual coders. Criticised for the loss of meaning that occurs when interpreting single words in isolation from the main body of text, Altheide (1996), developed a way of facilitating contextual meaning by looking at emergent themes. This coding system is used as a basis for both constant comparative analysis (grounded theory) and content analysis (Silverman 2003). Although both employ similar coding there are distinguishing features. In grounded theory (Glaser & Strauss 1967) analysis involves constantly analysing, interpreting, comparing to literature and revisiting the field in an iterative manner such that meaning is reapplied and 'tested' in its natural setting. Content analysis on the other hand, does not 'test' data in this way instead analysing, interpreting and comparing all data at the same point in time typically after completion of the data collection period (Miles & Huberman 1994).

5.8.1 Metaphor identification and analysis

While reading through the transcripts from individual interviews, it quickly became clear nurses were using similar language to express certain aspects of their work associated with setting priorities. Metaphors are examples of how similar or different words or phrases can be used to project the language of one thing onto another in the form of mental images or models (Woods et al 2002). Moser (2000) sees metaphor analysis as an extension of content analysis, whereby categories or themes are developed, coded, and frequencies counted. Various authors have analysed metaphor use when researching general practitioner practice (Aita et al 2003) or consultations (Skelton et al 2002), emotional work of hospice nurses (Frogatt 1998), process of labour in childbirth (Machin & Scamell 1997) nurse-patient intimacy (Savage 2001), and nursing research language (Kangas et al 1998). In others, metaphorical images

conveyed the ‘moulding’ and ‘shaping’ of student nurses (Inbar 1996), night nurses as ‘owls’ and day nurses as ‘larks’ (Humm 1996), theatre nurses as ‘hostesses’ for surgeons (Timmons & Tanner 2005), and health care provision as a ‘factory’ (Mustacchi & Krevans 2001). These authors all agree metaphor added depth and meaning to the phenomenon under investigation by allowing the researcher to share the same conceptual images with others. Within nursing the emotional work undertaken by hospice nurses in dealing with bereavement was described as both a ‘drain’ and a ‘burden’ (Frogatt 1998). The same nurses described managing and controlling their own emotions by ‘switching’ on and off.

These studies also show how difference in metaphor use is evident where different groups of people are involved (Machin & Scamell 1997; Skelton et al 2002). For example, Skelton et al (2002) reported doctors used many more metaphors associated with the ‘body as machine’ image than patients (20 versus 7 per million words), while patients used a wider range of vivid metaphors than doctors to describe their visit (95 versus 51 per million words). These differences may in part be explained by Turner (1974) who suggested metaphorical images reveal the cultural values and the assumptions which may underpin them. This implies cognitive thinking and language are closely connected (Lakoff & Johnson 1993). Schmitt (2005) provides a set of rules governing the determination of a metaphor from text when.

1. a word or phrase can be understood beyond the literal meaning in the context of what is being said
2. the literal meaning stems from an area of physical or cultural experience (source)
3. the source can be transformed to a second, often abstract area (target).

In his study, Schmitt (2005) provides an example of how this is achieved. When asked by the doctor 'How are you?' the patient's phrase 'bubbling over with life' is identified as metaphor (rule 1). The bubbling of water (source) can be transformed to the patient's expression of emotion (target) thus completing rules two and three. Expressed differently the target area (emotion) is directed by the source (bubbling of water). Other words are identified in the same text describing the same target =source rule. Therefore 'bubbled over with life', 'she effervesced as she told her story', and 'then the dams burst' described moving liquid as emotional energy ('running', 'overflowing', or 'pressurised'). This process described by Schmitt will be followed to identify source and target words and phrases in transcripts of nurse interviews in the current study. These metaphors will be used superficially to report the emphasis of nurse' own accounts rather than provide any in-depth analysis. It is recognised this may be an area worthy of further exploration in its own right in the form of a post-doctoral investigation.

5.8.2 Data analysis tools

Some authors (Johnson 1995, Holloway & Wheeler 1996, Polit & Hungler 1997, Pope 2005) reported how manual coding of qualitative data using traditional pen and paper methods was a time-consuming, arduous and often messy business. According to Polit & Hungler (1997) one interview transcript can result in 20 pages of text to be coded. Post-modern authors reveal how the computer has provided an alternative to address such issues of time, activity and brain power (Kelle 1998). As a result large bodies of text can quickly be reduced, coded, retrieved and frequencies determined at the press of a button allowing more time to be spent in interpretation (Kelle 1998). As a consequence there is less possibility of fatigue or error thus improving the reliability

of codes. A further advantage is that large amounts of data can be stored electronically and results in a precise recorded code or data trail (Field & Morse 1996). However, the final choice appears to be a matter of preference for some individuals since some people may prefer the thought processes involved as they manually sort through data chunks. Several qualitative software packages are available such as QualPro, Ethnograph, N-Vivo, NU*DIST and ATLAS-ti. This type of software has basic open and axial coding functions as well as other advanced functions such as concept mapping. While the University of Stirling provides free access and training to all students for the NU*DIST software, the ATLAS-ti was the preferred choice since the researcher had previous knowledge, training and experience of using this software package during prior time spent as a research assistant on various projects.

The following sections describe the methods of analysis used in this study for observation and interview data. As two different types of observation in the preparatory and main stages of observation work were undertaken, different means of analysis were used.

5.8.3 Preparatory observation work

No formal analysis was undertaken in any of the preparatory observation sessions as the sole intention was to test and make any modifications to the means of data collection method in addition to understanding the different contexts. However, once observation data were summarised, themes of predominant nurse activity or behaviour together with any aspects of nursing work that might be connected to

nurses' prioritising and decision making were derived. Any other interesting interactions or events were also noted that might help to place the context and location of observed phenomenon.

5.8.4 Main observational study

Content analysis was used for analysing individual observation and interviews. Field notes made during individual observations were read over several occasions, summarised and codes added to the side of each page to highlight text where it was felt relevant. This meant specific information could be easily traced and retrieved later if required. In particular, analysis was guided by looking at the types of patients and tasks attended to by nurses, and the sequence or order in which these were performed. The data were re-examined to look for common patterns of nurse behaviour at all three sites. This examined similar tasks performed by nurses, as well as for evidence that nurses in different wards may prioritise certain types of patient or task differently. After reading each of the three field notes for each participating nurse, these were summarised to reveal the main characteristics or conditions of the patients she was caring for at that time, and the order in which patients and tasks were attended to. An example of a field note summary is illustrated in Appendix 14.

5.8.4.1 Content analysis of interview data

The computerised software package for qualitative data analysis, 'ATLAS.ti' version 3.0 (Scientific Software Development 2001) supported the content analysis of the semi-structured nurse interviews. This treats each interview transcript as a separate 'hermeneutic unit'. After the verbatim transcription of interviews, individual

interviews were suitably prepared for analysis by transforming each individual file into a ‘text with line breaks’ format as suggested by the manual. This format allowed the application of codes or themes to specific numbered lines of interview text where appropriate, and the cutting and pasting of sections of text into several file sections. Figure 5.5 and 5.6 illustrate two examples of this process using extracts taken from transcribed interview data.

Particular attention focussed on explanations provided by the nurse when probed for further information about specific items that arose, or justifications or rationale for decisions made, during the times observed. The Atlas.ti software also counts the frequencies of each coded text or phrases (Table 8.0, page 172) within the transcripts allowing an appreciation of the importance or strength of feeling shown by nurses towards certain aspects of nursing care and decision making.

Figure 5.5 Example 1: Transcribed extract

Line number	Transcribed interview text (ID code 1C surg)	Codes applied <i>1= personal views</i> <i>2= assessing priority</i> <i>3= clinical reasoning</i>
163	It is not easy. I would say that I do this without thinking, If a patient	
164	is looking for attention but not needing it I find that difficult...but you know	
165	there is something else going on with them psychologically so you have to em....	
166	take that into account. But then another patient needs to get to the toilet	
167	and for all it is not a psychological need it is in the long run	
168	because if you need to go to the toilet and can't get in there they end up	
169	emotionally upset...so it's a matter of prioritising all the time-on the spot!	

Figure 5.6 Example 2: Transcribed extract

Line number	Transcribed interview text (ID code 3C gyn)	Codes applied <i>1= strategies</i> <i>2= assessing priority</i> <i>3= knowledge</i>
43	You have a little plan in your head...so I go	
44	in <i>(to see the patient)</i> , sort out the tablets, start the procedure off, and give	1
45	a little time to then pop back in later and say “have we discussed	2
46	the contraception you’ll be on?” Shall we have a little talk now while nothing’s happening?	2
47	once they get the pain, then we get the tears because they	3
48	didn’t expect to feel as much pain	3

Chapter 6 Study 1: Preparatory Pilot Work

6.0 Revisiting the aims of preliminary field work.

As mentioned in the previous chapter, this preliminary pilot work was essential in getting a sense of the different environments in which nurses provide care. As very little is known about what it is that gynaecology nurses actually do, without the opportunity to take a ‘detached’ approach in both a spatial and cognitive sense, it would be unlikely that accurate interpretation could be made.

6.1 Contextual features identified from preliminary observations

From the free field notes made during each observation it was possible to summarise common features as illustrated in Table 6.1.

Table 6.1 General ward information

	WARD TYPE			
	GYNAECOLOGY (Fife)	GYNAECOLOGY (Tayside)	SURGICAL (Fife)	SURGICAL (Tayside)
Total trained Nurses (excluding night staff)	17	6	16	19
Maximum Bed Occupancy	24	8	16	24
Number of Surgeons	9	2	7	3
Operating Days	Mon-Fri am Mon, Wed, Thu pm	N/A	Mon-Fri am/pm	Mon, Tues, Wed am/ pm
Average staff per shift	4 trained 2 untrained	4 trained 1 untrained	4 trained 2 untrained	4 trained 3 untrained
Average Patient Caseload	5	1	8	7
Nurse- Led Clinics	No	Yes	No	No

These data indicated that although the numbers of trained nurses per shift on all four wards were similar, the average number of patients in nurses’ caseloads were not, and

varied from one to eight patients. In addition, the acute gynaecology and surgical wards cared for patients 24 hours per day, seven days a week, while the nurse-led gynaecology ward operated on a Monday to Friday basis only, between the hours of 8am and 6pm. Any patient needing additional care beyond this time required transfer to the acute gynaecology ward for overnight observation.

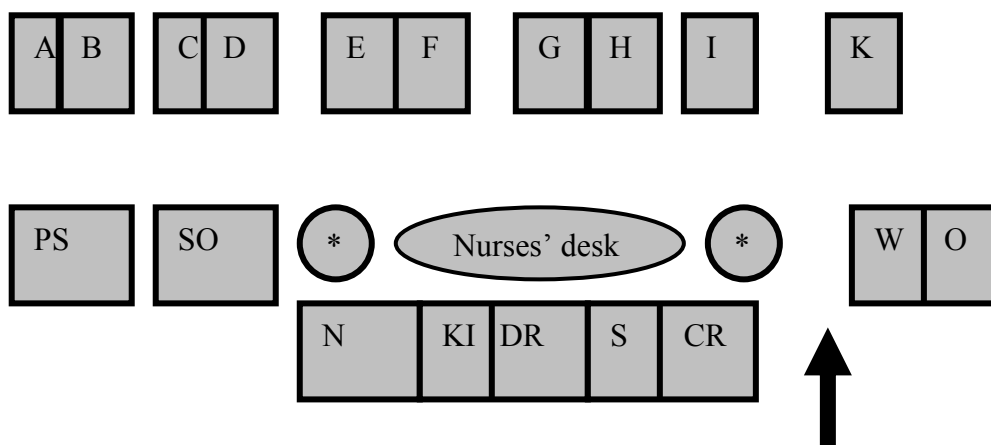
The three acute wards had a mixture of multiple four or six-bedded rooms and four to six single-bed side rooms where patients were nursed according to their condition or dependency, or type of surgery. In the nurse-led gynaecology ward there were only single-bedded side rooms with en-suite facilities. Of those three acute wards, one surgical ward differed from the others as it was the only ward to accept patients 'boarded out' from other wards and specialities. During observations, the majority of patients boarded were from medical or orthopaedic wards. In general, patients in beds or rooms nearest to the nursing station were most dependent, meaning nurses could easily monitor their condition. In contrast, most independent patients were typically placed in beds or rooms the furthest away from the nurses' desk or station, such as those nearing discharge from hospital. This information was kept in mind when considering how nurses prioritised patients.

6.2 Physical layout descriptions

A map of the physical layout of each ward was drawn at the first preliminary observation session, to allow a physical trace of all the nurses' movements between patients and locations in the ward during subsequent analysis, and an appreciation of the environment in which the nurse worked. This provided a reasonable way of re-tracing not only the nurse's steps but also the types of patient conditions, and patient

tasks attended to by the nurse during the times observed. Three of the wards had a traditional layout with rooms arranged in a linear formation from the ward entrance. The remaining ward had rooms arranged on three or more sides of a central doctor and nurses' preparation and examination rooms. Sitting in a location central to ward activity during each of the preliminary observation sessions in the four wards, free field notes were made of the movements, interactions, and conversations of nurses. Supplementary information such as the 'when, what, where, and with whom', was also recorded at this time.

Figure 6.0 Diagram of ward floor plans- gynaecology ward example



Key to symbols:	
Single side rooms = C, D, E, F	S = Sluice
4-bedded rooms = A, B, G, H, I	CR= Coffee Room (nurse)
PS = Patient Sitting Room/ TV Lounge	W = Waiting Room
SO= Ward Manager Office	O = General Office
N = Spare nurse room	* = Small seated desk areas
KI = Kitchen	DR= Doctors Room

This information was used when reading and interpreting interview transcripts. This served to remind the researcher of the events, times, places, and nurses involved.

The next chapter presents the main study.

Chapter 7 Study 1: Results of Main Observation Study

7.0 Introduction

This chapter presents findings from the main observational study, where participants were observed for six hours in total. This begins with demographic details of the sample of nurses obtained in this study. The results are briefly summarised at the end of this chapter as a synthesis of the key points from both observation and interview findings are discussed in Chapter 8 in order to provide coherence.

7.1 Sample demographics

From a total of 58 potential participants 18 nurses volunteered to take part in this study. The following table represents the breakdown of this final sample by respective sites (Table 7.0). Nurse participants ranged in both level of experience and grade. Junior ‘D’ grade nurses were generally the least experienced, and senior ‘E’, ‘F’, or ‘G’ grades the most experienced nurses.

Table 7.0 Sample characteristics and ID codes

SPECIALITY	CODE	GRADE	PARTICIPANTS (N=18)	
Surgical	1A	E	5	
	1B	D		
	1C	D		
	1D	F		
	1E	D		
		4A	E	4
		4B	D	
		4C	G	
4D		F		
Acute Gynaecology	2A	G	6	
	2B	E		
	2C	D		
	2D	F		
	2E	E		
	2F	D/E		
Nurse-led Gynaecology	3A	D	3	
	3B	E		
	3C	G		

7.2 Pre-observation briefing

Immediately prior to each two-hour observation session with individual nurses, the nurse was asked to provide some background information relating to the current status of the ward in terms of numbers of staff, number and location of patients in the caseload, the location of her patients and the nature of their condition. This information, which helped to give clarity to the context and the content of nurses' work at that time, was recorded on the front of the booklet in Appendix 4.

7.3 Themes derived from observation data

By observing the actual work that nurses did, it was possible to follow patients through different parts of their journey, at pre-admission clinics, time of admission to wards, before and after surgery, and in some cases, to discharge from hospital. This made it possible to examine how individual nurses assessed and managed patients and priorities over both the short and longer term. From the observation summaries, field notes and comments, the following common features were identified among nurses from the different wards (Table 7.1).

These themes shall now be discussed in relation to the different types of ward where nurses were observed caring for patients. This compares and explores nurses in nurse-led wards with those in acute gynaecology, and both types of gynaecology nurse with surgical nurses' prioritising.

Table 7.1 Common features identified from observation data

Staffing	Shortage of staff Skill mix Experience
Type of patient	Boarders Demanding or difficult patients Quiet patients Vulnerable patients Age of patient Patient condition Dependency scores Reason for admission/ surgery
Emotional distress	Anxiety Crying or weeping Regret or guilt Indecision
Physical distress	Pain Bleeding Trauma
Interruptions	Telephones, patient buzzers, equipment alarms People (colleagues, patients, relatives)
Knowledge	Knowing patients Knowing colleagues Knowing protocols and surgeon's regimes
Information transfer	Handover report Written and face-to-face communication
Personal views and values	Patients Events Procedures Surgeon's regimes

7.4 Staffing issues.

This first theme is split to make the distinction between gynaecology and surgical nurses.

7.4.1 Gynaecology wards

During observations of nurses, conducted over the months of June to September 2004, the researcher gained a sense of the dynamics in each of the gynaecology wards. Firstly, in the nurse-led ward there were fewer trained nurses compared to the acute ward, which had a larger quota of trained and untrained nurses. While the nurse-led ward only operated on weekdays Monday to Friday, the acute ward nurses

in gynaecology cared for patients seven days per week. The philosophy behind nurse-led care is to relieve the burden of caring for certain groups of complex patient conditions in large, acute wards (Richardson & Cunliffe 2003). One might imagine therefore that nurses in acute gynaecology would have an easier time during the week when all the TOP patients were in nurse-led ward, but this did not seem to be the case. On one occasion, a woman undergoing a TOP at the mid-trimester gestation of pregnancy (>12 weeks), whose procedure had not reached its conclusion before the nurse-led ward closed for the day, was transferred to the acute gynaecology ward for an overnight stay. This turned out to be a critical incident since the woman eventually passed the foetus, but which showed signs of life. One of the nurses in the acute gynaecology ward had to be treated for shock and disbelief. The nurse's decision to send the patient was questioned as they felt they were neither skilled enough, nor had the time to care for such women. Furthermore, nurses did not have a lock on the sluice door to keep patients from walking in with specimens and seeing what the nurses had to keep there on such occasions. Not only did this event have implications for priority setting, but also for the protocols of care for such women. Before the last observation was completed, this event resulted in a major re-evaluation of both ward protocols, nurse skills training, and risk management procedures.

While the nurse-led ward had a formalised system to match staffing levels with fluctuations in demand, much of which was given at short notice owing to the nature of the process, the acute gynaecology ward did not. This meant nurses had to cope in any situation with the resources they had available. As some of the observations of nurses were conducted during the main summer holiday season, there appeared to be problems on the surgical ward (Fife) arranging replacement cover. This had an effect

on nurses' priority setting in the acute ward as nurses on certain shifts had to take over other nurses' responsibilities in addition to their own, with many working extra shifts or hours.

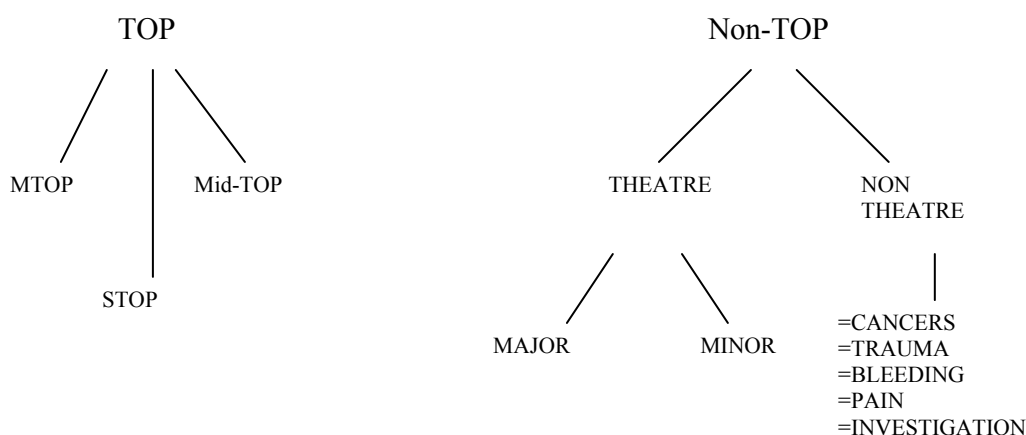
7.4.2 Surgical wards

Issues related to nursing resources appeared to be worse in the surgical wards, which appeared to have a continual problem with two or more nurses absent from work due to illness. One nurse had to have her observation rescheduled three times as a result. Nurses were observed to spend a lot of their time giving out patient medications and preparing special intravenous infusions. This did not involve only one nurse but two, or sometimes more depending on what was being prepared. This meant the other nurses were being distracted from their own patients to help the nurse prepare these drug solutions. According to the hospital's policy folder, to which several of the junior and senior nurses referred, this was a legal requirement. Occasionally, some of the senior nurses had to take on an additional role, acting as the on-call 'coordinator' for all the surgical wards on that particular floor of the hospital. When this was the case, it appeared as though time was not their own, for they immediately had to respond to other ward problems before even having time to get to know the problems associated with patients in their own ward.

7.5 Type of patients

A summary of patients comprising each of the nurse's three caseloads are broadly defined in Appendix 15. Figure 7.1 is representative of the types of conditions all of the nurses in acute gynaecology cared for while being observed by the researcher.

Figure 7.1 The range of patient conditions in nurses' patient caseloads



Nurses from the acute gynaecology ward cared for most or all of these conditions. In contrast, the nurse-led gynaecology nurses cared only for those on the left of the diagram, and surgical nurses only those represented on the right.

Nurses in one of the surgical wards were often observed caring for medical 'boarder' patients as well as surgical patients in their caseload. Boarders tended to be older patients awaiting social care arrangements to be finalised before they could be discharged. This did not appear to bode well with senior nurses who, on two occasions confronted the bed manager to make it known this practice was interfering with nurses' ability to care for their surgical patients. However, the outcomes of such discussions could not be ascertained.

The majority of senior nurses in charge of their shift were observed to ease the workload by apportioning patients such that each nurse had at least one dependent patient (such as a post-operative major or a cancer patient), as well as some who were

more able or altogether independent, to look after. This shaped the way in which individual nurses organised their own caseload of patients. Some preferred to give highest priority to their sickest patient while others preferred to prioritise the opposite way around and gave priority to the more able patients in order to spend the most time, and concentrate on the care of, her most dependent patient. In the surgical wards, nurses also used a formal dependency scoring mechanism (Appendix 16). Nurses would mark the total patient score next to each patient's name on the whiteboard near to the nurses' desk area. This immediately drew nurses' attention and may have assisted nurses to identify patients who might have needed higher priority than others. Considering the evidence from the triage assessment scores discussed earlier (Travers 1999), nurses were not always observed to give priority to those with the highest scores as sometimes young or old patients, difficult or manipulative patients took precedence. In the current study, more than one nurse from the acute surgical ward gave priority to a patient with psychiatric problems who had been in the ward for some weeks, who rang her buzzer constantly for attention, manipulated staff, phoned police, and interfered with her surgical wound. In the acute gynaecology ward nurses were observed to attend to very young girls who were having a termination and older ladies who were embarrassed about their condition. In the nurse-led gynaecology ward however, nurses only had one or at most two patients to look after at the one time. In summary, patient caseloads in the acute gynaecology and surgical wards were distributed in such a way that each nurse had:

- at least one or two patients of higher dependency
- all lower dependency patients plus additional responsibility for dealing with any emergency cases

- a mixture of both high and low dependency cases

7.6 Emotional and physical distress.

In all of the wards there were patients who experienced physical or emotional distress during the times nurses were observed. In the surgical wards, nurses appeared to pay more attention to those patients in physical distress. Only in one observation session did one of the senior nurses leave what other tasks she was doing to attend to a patient (a post-operative mastectomy case) having an emotional and tearful moment. There were other sessions where patients clearly appeared to be trying to get the nurse's attention, one who had a 'pained' expression, and an older patient who had just had eye surgery and could not see well. However, the nurses concerned paid attention to other patients who required pre-operative checks to be completed.

In contrast, in the gynaecology wards, there were many occasions where patients were either in distress as a result of surgery or were admitted as an emergency with acute pain or bleeding. One other emergency patient admitted with a post-operative complication appeared highly distressed. In such situations where the nurse was unable to attend to her other patients, the nurse delegated to her colleagues or else other colleagues took over her patients without being asked to do so. This suggests nurses in the gynaecology ward were used to dealing with such emotional and physical distress.

In both gynaecology wards, but not in any of the surgical wards, there were patients who required emotional support as a result of the intense emotional feelings that were causing them pain. Nurses appeared to attend to such patients as priority regardless of

whether they were caring for major post-operative patients at the time. These tended to be patient having a TOP. Age did not appear to be discriminatory factor as both young teenagers and older women in their thirties and in some cases, their forties, experienced regret or felt guilty about having, or having had the TOP procedure. Nurses appeared to spend a great deal of time with such cases, in some instances over 50 minutes. However, other women, such as those who were having an MTOP on a recurrent basis, did appear to interfere with priority status. On three different occasions, a few nurses were observed to spend less time with such patients as they did with other MTOP patients who did not 'abuse' the system.

On most occasions women in the acute gynaecology ward were admitted for the MTOP procedure at weekends when staffing levels appeared fine, but on others that occurred on a week day this seemed to cause more of a problem for not just the nurse but her colleagues who already seemed under pressure, taking patients back and forth to theatre, or hurrying up and down the ward to locate the person in possession of the ward keys, in order to obtain drugs or equipment from locked cupboards or trolleys.

In the nurse-led gynaecology ward, the atmosphere was one of calm and relative silence in comparison to the acute wards. Most of the nurses that were observed in this ward spent more time providing emotional care, both as a routine form of support and counselling, and deeper emotional assistance. This 'enhanced' emotional care was provided to certain patients who sought TOP for example, because they had been the victim of the 'date-rape' drug, or were from a different religious culture that had strong views and severe sanctions for women who became pregnant.

7.7 Frequency of interruptions

It was also noted that all of the acute ward participants had to deal with frequent interruptions from a variety of sources as they attempted to care for the patients they were responsible for looking after. As illustrated in Table 7.2, the number of interruptions varied according to different ward sites.

Table 7.2: Range in number of interruptions per ward

WARD SPECIALITY	RANGE (per 2-hour observation) 0-30
ACUTE GYNAECOLOGY (Fife)	3—30*
NURSE-LED GYNAECOLOGY (Tayside)	0—4 ~
ACUTE MIXED SURGICAL (Fife))	3—17
ACUTE COLORECTAL/ SURGICAL (Tayside)	1—13
<i>* Highest number of interruptions observed ~ Least number of interruptions observed</i>	

From Table 7.2, it can clearly be seen that nurses in the acute gynaecology ward and the mixed surgical ward had the widest range and the highest number of interruptions. In contrast, the nurse-led gynaecology ward and the acute general surgical ward had a narrower range, and the least number of interruptions. A breakdown of actual numbers of interruptions that individual nurses received per observation session is given in Appendix 17.

Nurses who were working closest to the nursing station or desk appeared to bear the brunt of interruptions since they were the first to be captured by anyone entering the ward looking for assistance. Interestingly, none of the nurses in the nurse-led ward received any interruption from other people, other than their own nurses. In part, this may have been due to its geographical isolation from the main wards in the hospital. This may also have been due to the fact that the ward organisation and daily management ensured that no persons could enter the unit without their permission to

do so, unlike in the general gynaecology and surgical wards, where there was constant movement in and out of the ward.

7.8 Knowledge and information transfer

For at least one of the three observations, individual nurses were observed as they arrived on duty and were about to receive a handover report. This became the starting point of the observation session. Nurses were briefly asked at the end of this report to state her intended priorities for the following two hours and for the remainder of the shift in general. On many occasions in all of the acute wards, with the exception of the nurse-led wards, nurses rarely achieved their plan of intention, especially on days when surgery was scheduled to occur and they were busy organising patients to and from the operating theatre, performing information checks or monitoring vital signs, pain or bleeding. In between times, nurses were observed to have periods of what could be described as frenzied activity writing and updating information in various sources (in nursing notes, charts, whiteboard, or computer) after such checks has been completed.

Some nurses in all of the acute wards immediately consulted other information sources, or visited certain patients before deciding on priorities. This suggested the nurse perhaps needed to make a visual confirmation of the information provided at handover. This behaviour was observed mainly in the nurses with the most experience, who were Grade 'E' and above, as opposed to junior staff nurses, who appeared to immediately go to the patient or patients whom the nurse at handover had emphasised as priority. In such instances, it could be said the junior nurses perhaps took information at face value whereas the more senior nurses did not. This means

nurses may base their priority setting on select information. On numerous occasions, nurses in all the acute wards (but most notably in surgical wards), nurses frequently talked aloud as they pulled scraps of paper from their pocket to evaluate what they needed to do next, while others went to look at the patient name board to do so. None of the nurses from the nurse-led ward used any such strategy. Therefore, this indicates nurses working in busy dynamic environments might need to have a strategy to assist in evaluating the nurse's priorities or work in progress. This behaviour was common in both experienced and junior nurses but appeared dependent on the bed occupancy, and whether surgical theatre lists were scheduled for that day.

7.9 Personal views and values

At the end of some of the observation sessions, nurses felt compelled to talk to the researcher about some of her patients and the way she dealt with them. In a sense, this might have been because she felt she was going to be judged in some way by the researcher. However, it appeared to be more about confirming or justifying why she had acted in a certain way. Nurses in the nurse-led ward had no formal handover but were noted to discuss the following day's expected admissions at the end of each day, when nurses planned which patients would be allocated to certain rooms and which of the nurses on duty would care for them. One nurse agreed to take responsibility for a patient with a mental health problem since the other nurses were a bit reticent about dealing with her emotional issues and she had previous experience of this kind of nursing. Nurses appeared to be able to speak freely about their prejudices and feelings to one another without retort. The way this information was managed, meant that nurses might have been less likely to be biased in their approach to patients or in their

priority setting since the other nurses had relieved them of their source of bias. Nurses in acute gynaecology were not able to achieve the same.

7.10 Summary of observation findings

As the main focus of this study was to explore priority setting in the context of gynaecology nursing, and how nurses in different contexts prioritised a patient caseload, the following comparisons are made:

1. comparing priority setting when nurses only cared for MTOP patients in nurse-led and acute gynaecology wards
2. comparing priority setting when nurses cared for MTOP and non-MTOP patients in the acute gynaecology ward
3. comparing priority setting when nurses cared for non-MTOP patients in acute gynaecology and acute surgical wards

7.10.1 Caring only for medical TOP patients in acute and nurse-led gynaecology

In the nurse-led ward, nurses cared for women on a one-to-one basis and so were rarely observed having to prioritise between other patients in the same way as nurses did in the gynaecology ward. From observation data, experienced nurses were observed to give initial attention and more frequent visits to women who had no-one to support them during the MTOP procedure. Others, such as one woman who kept telling the nurses she did 'not want to be here' received the least visits by the nurse. This suggests that just as on the nurse-led wards, certain TOP patients in the acute gynaecology ward received a higher priority than others by virtue of their perceived physical or emotional condition or social situation.

7.10.2 Caring for TOP and non-TOP patients in acute gynaecology

When the acute gynaecology ward was 'busy', nurses tended to spend less time in emotional care provision. During observations at such times it was noted how certain nurses spent time initially with women, but would then return frequently to check on their well being, thus spending shorter, but more frequent 'bursts' of time with such patients, in order to split attention between her non-MTOP patients. As the TOP process neared conclusion, nurses returned to spend more time with the woman once more. At such times it was noted the patient was often in pain or bleeding heavily, and required assistance from the nurse. One experienced gynaecology nurse was observed caring for a woman who complained of pain and nausea. The nurse on this occasion appeared to give priority to the patient's emotional needs before dealing with the patient's physical symptoms. This seemed to signal enhanced priority status once more. At this time the nurses' tasks switched from merely assessment to one of emotional engagement and physical intervention, giving pain relief, and subjecting a manual search of bedpan contents to look for confirmation that the procedure was completed. After this, attention turned to completing various nursing notes, organising antibiotics, analgesics, and contraceptive supplies for the patient in preparation for discharge.

When patients were pre- and post-operative, requiring major or minor surgery, nurses did not appear to show any indication that prioritising their patients was a problem. However, there were other occasions where all a nurse's patients were of equal status (same post-operative day or same classification of surgery). When observed with such patients, one inexperienced and one experienced nurse from the same

gynaecology ward appeared to work in a logical sequence, commencing with the first patient encountered, and working their way around the remaining patients in a clockwise fashion. This would seem to concur with Wedell (1997) who demonstrated that individuals are likely to choose at random when tasks are of equal status and switch to 'routinised' working as discussed on page 76.

When one senior nurse cared only for patients at theatre that same day, she explained how she prioritised patients in terms of the order in which they returned to the ward from the theatre recovery room. This could indicate a specific strategy was used by the nurses in situations when there was little to distinguish between alternatives (patients), to aid or guide the priority setting process. This being the case, when there was no systematic or routine admission or preparation of theatre patients at weekends, were nurses consistent in their approach to setting priorities or did this differ and how?

Nurses in all three acute wards, but not in the nurse-led ward, had to deal with emergency cases over and above their own caseload of patients. During observations, as one might expect, most nurses always gave priority to emergency admissions, often having to temporarily readjust existing priorities in order to do so. However, not all emergencies were associated with acute admissions but occasionally arose in the ward from situations that could otherwise be described as 'crises'. On one such occasion, a TOP patient who suffered major blood loss, caused such a state of alarm among nursing staff that the experienced nurse involved in her care spent the majority of the observation session dealing only with this.

7.10.3 Caring for a diverse range of non-TOP patients in acute wards

When there were no MTOP patients to care for, gynaecology nursing work in both the acute gynaecology and surgical wards focused specifically on patients according to the days that had passed since surgery, referring to patients as ‘first day hysterectomy’ or ‘second day mastectomy’. This numbering applied to the patient’s surgery appeared to equate to the priority given to the patient. In both acute ward contexts, nurses performed much of the same work, by monitoring vital signs, intake and output, managing pain relief and wound care. In both types of ward nurses also received direct referrals from General Practitioners (GPs), which meant any ‘emergency’ patient arriving to be seen by the doctor on an outpatient basis, could happen at any time during their shift, regardless of whether or not it was a theatre day. In the surgical unit in Fife, most of the emergency cases were also patients who had sustained serious facial trauma, but there were also people sent from GP or the accident and emergency ward to have urgent eye assessments or treatments.

Over and above patients in surgery, nurses in both wards also cared for patients with a range of cancers of different grades and bodily locations. Nurses appeared to spend only brief encounters with such patients until there were enough nurses to give the patient a bed bath or shower, or assist with a wound dressing. On two occasions one patient was left until after nurses’ tea breaks by which time most of the important interventions had been achieved. Nurses differed in their approach to patients since nurses in gynaecology spent time with patients before tea breaks and returned to provide support to patients who were in need, such as one patient with a large ovarian tumour. This is indicative of different weighting to emotional and physical tasks.

7.11 Conclusion

From the observation data, there were many similarities between nurses approach to setting priorities but equally there were many similarities. This difference was most predominant between the nurse-led and the acute gynaecology ward. Although nurses in both nurse-led and acute gynaecology wards cared for women having a MTOP procedure, they may have followed the same protocols or guidelines of care, yet there were vast differences in both the organisational and nursing approaches to patient care. This is not to say any of the patient care provided was better or worse, only that contextual differences may have been partly responsible for influencing nurses' priorities. For nurses in the nurse-led ward looking after women was made easy by the fact they could care for women on a 'one-to-one' basis, unlike those in the acute ward. In essence the nurses there had few real priorities, at least with respect to establishing relative priority between patients. The nurses from the acute gynaecology ward were disadvantaged because they were expected to care for women having a MTOP regardless of other circumstances. While MTOP patients were admitted wherever possible at weekends when the ward was supposed to be quieter, and no surgery was planned, in many instances, it was still a problem for nurses who had first or second post-operative patients to care for at the same time.

The majority of the nursing work in the gynaecology ward appeared to revolve around preparation of patients before, and assisting recovery after surgery on predetermined days of the week. As one might expect, the majority of tasks therefore, were largely predictable, of a routine nature, and related to specific time points during a patient's stay on the ward. There is a possibility that certain parts of the MTOP procedure could also be considered 'routine' including emotional care. For example,

counselling regarding the use of contraceptives may have been routine while other parts such as attending to crying or distress, may be non-routine. The next chapter presents the results from the nurse interviews.

Chapter 8 Interview Results

8.0 Introduction

This chapter begins with a revision of how the key themes were obtained from nurses' transcripts. This is followed by the use of metaphorical language during narratives. The key themes that emerged from analysis of the interview transcripts are then explored.

8.1 Codes and identified themes

The application of 'filters' to the data aided the retrieval of specific text. For example, one or more codes of interest allowed all interviews with codes of *diversity of patient* and *emotional aspects*, to be filtered by *ward type* or by the relevant nurse's speciality of *gynaecology* or *surgical*. This reduced the amount of time spent analysing each single code separately and reduced the data into more manageable chunks of information thus aiding subsequent interpretation (Miles & Huberman 1994, Kelle 1998, Silverman 2003). In this study, analysing the text in the context of 'gynaecology' or 'surgical' gave different meanings to priority setting. This helped provide a deeper insight into the world of gynaecology and surgical nursing work, in particular the nature and meaning of priority setting in surgical-based wards. After listening to taped interviews and reading interview transcriptions over several occasions, six main themes emerged relating to the setting of priorities. Each theme was divided into several sub-themes as illustrated in Table 8.0. Master code 'families' were created from all previously coded data

that appeared to cross over themes, thus making it easier to analyse ward or nurse similarity or difference, and aided quicker retrieval of large bodies of text.

Table 8.0 Thematic framework

THEMES	SUB-THEMES	Number of occurrences
Type of ward	Diversity of patients	23
	Nurse autonomy	31
Setting priority	Assessing priority	106*
	Influencing priority	75*
	-Interrupted work	20
	-Time available	36
	Use of Strategies	29
Decision-making	Clinical reasoning	32
	Clinical judgement	38
	Knowledge	31
	Experience	50*
	Knowing the patient	26
Emotional aspects of caring	Counselling	16
	Emotional distress/ support	38
Physical aspects of caring	Pain	8
	Bleeding	2
	Interventions	13
Personal	Personal views/values/opinions	73*
	Personal characteristics	13

For instance, the code *bleeding* was associated in nurse interviews to emotional, physical, and influencing factors with regards to prioritising care, therefore this code appeared in two different code families, those being ‘*aspects of priority-setting decisions*’ and ‘*emotional and physical care components*’ (Table 8.1)

Table 8.1 Examples of code families

CODE FAMILIES/THEMES			
Aspects of priority-setting decisions	Emotional and physical components	Individual ward differences	Priority-setting
CODES			
Bleeding	Bleeding	Assessing priority	Assessing priority
Counselling	Counselling	Autonomy	Autonomy
Delegating	Emotional care	Clinical reasoning	Physical aspects
Emotional care	Influencing priority	Delegating	Emotional aspects
Influencing priority	Judgement	Diversity	Experience
Interrupted work	Knowing the patient	Experience	Influencing priority
Knowing the patient	Pain aspects	Judgement	Interrupted work
Pain aspects	Personal views	Personal views	Knowing the patient
Personal views	Physical aspects	Type of ward	Knowledge
Visual aspects	Time		Strategies

The frequency with which these themes occurred also aided analysis by giving some indication of how important these topics were perceived. The four most common themes (indicated in the table by an asterisk) in order of the most to least frequent were: assessing priority, influencing priority, personal views, values or opinion, and experience. These themes are used to interpret nurse transcripts.

8.2 What is priority-setting?

From the analysis of the interview data, and in support of the earlier observations, it was possible to summarise the findings in such a way that would reflect Hendry's model (Figure 8.1). These were also based on the main questions that guided the interpretation of data, such as how do gynaecology nurses prioritise patient care? what is priority setting and what does it achieve?; what does it require?; and what are the main influencing factors? From the content and thematic analysis of data, the four most frequent narratives relating to (a) assessing priority (b) influencing priority (c) personal views and (d) experience are presented.

8.2.1 Assessing priority

The assessment literature within nursing is linked to the patient's condition and diagnostic judgments (Crow et al 1995, Offredy 1998, Bucknall 2000). In much the same way, the nurses in medical wards upon whom Hendry's model of priority setting was based, focused on patient care plans and the resolution of symptoms associated with medical illness. In the current study, rather than assessing 'illness', gynaecology nurses focused on 'wellness', two very different concepts. For patients admitted for gynaecological surgery, the assessments performed by nurses appeared

to have less to do with problem solving and more to do with following procedural guidelines or surgeons' regimes of care or treatment. This assessment therefore centred around wound care, pain and bleeding:

“It depends on the nature of the task. I have a (wound) dressing that is going to take half an hour. If it could wait until I’m going to be free and it is intact and dry, then I’ll leave it. If it is leaking all over the place then I’ll do it and all the little things (tasks) will have to wait” (Ward manager 4C, Surgical)

This suggests priority may be assessed according to the type or location of each patient's wound(s), the amount of time required to dress the wound, and the number of nurses it would require. During one observation, on which the above quote is based, the nurse asked one of the patients to wait for wound care attention until there were enough nurses to assist, in this case until nurses' tea breaks were completed. Although the nurse may have perceived one patient's wound to be priority, other circumstances clearly needed taken into consideration.

In general, nurses from acute gynaecology spoke of having set routines or tasks to do at certain times, particularly determined by protocols of care established by individual surgeons, each having their own idiosyncrasies of what that care should entail:

“I have to go and do theatre patients because if the surgeon wants a set of obs (vital signs) done and I haven't done them, he'll shout at me, whereas the lady from the medical ward won't. So I gave her second priority” (Junior nurse 1E, Surgical)

For this particular nurse, performing routine pre-operative assessments were quite

clearly what the surgeon wanted done at a specific point in time, but which the nurse thought had less importance or priority status than the medical ‘boarder’ who needed to go to the toilet. This indicates the nurse may have seen routines as a particular form of determining priority in surgical-oriented wards, providing order or structure. This was echoed by one of her colleagues who admitted:

“I hate routine, but we need routines in hospital...I’d love to say to patients to eat when they want, do anything they want, but we just can’t. We have to follow a routine so that if we are not up to date by a certain time or within reason...for the comfort of the patient of course...or if things go pear-shaped, then you don’t have so many things to worry about or too many pieces to pick up.... so I am always conscious of keeping ahead of the game”

(Senior nurse 1E, Surgical)

Main assessments of patients began at the first point of contact with nurses, i.e., on admission to the ward. Nurses from the nurse-led gynaecology ward tended to give priority to patients according to their arrival time on the ward, initially at least:

“I prioritise by which case is most urgent, but initially it is by who came in first or second....but even that can change depending on presentation. If I’m dealing with room one who has come in first, and the second one comes in and says to me she needs something for pain as she is sore, then I will go and deal with them. Priorities are assessed minute by minute here”

(Experienced nurse 2C, nurse-led Gynaecology)

“When I am looking after a termination patient, I see them first because you know they will need psychological support or they may be in pain....’cause things can change quickly with these clients you know. They can be comfortable one minute and then suddenly develop pain and bleeding”

(Junior nurse 2C, acute Gynaecology)

One experienced staff nurse in gynaecology liked to “*get the bed-baths out of the way*” while any ‘major’ post-op patients were eating breakfast because it allowed her to move on to other important tasks that needed doing. Her rationale for prioritising patients in this way was to get as much of the physical tasks completed and get ahead of her list of priorities before the expected arrival of new elective admissions. This was not confined to the more experienced nurses as one junior nurses also expresses a similar preference:

“First thing in the morning it is a case of balancing who do I go to first- do I quickly dash around the post-op patients, so that I can admit my medical (TOP) in....because it can take half an hour making sure she is alright, getting her sorted out and that.....so generally juggling things around”

(Junior Nurse 2C, acute Gynaecology)

However, other nurses recognised that while certain routine but nevertheless essential tasks were required of them in the initial early stages of the TOP process, the nature of the process was not as predictable as the outcomes of care for those having surgery.

“We react to things as they happen here. Although the patient’s (vaginal) bleeding in room 2 was fine, you might think we would have stopped monitoring it, but half an hour later it changed and she actually had that massive bleed. The nature of our nursing means it can drastically change in a short space of time, so we need to be flexible”

(Experienced nurse 3B, nurse-led Gynaecology)

Routines appeared to interfere with nurses’ ability at times to give equal attention to

MTOP patients and patients with other gynaecological conditions

“It gets frustrating sometimes because you have situations where four people need something at the same time, and you have to decide which comes first. I don’t really like doing that because it might be two hours before I can get to the fourth person on my list of priorities.”

(Junior nurse 1A, Gynaecology)

8.2.2 Influencing priority

In Figure 3.1 (page 55), the outer area surrounding the inner ‘macro- and micro-level’ in Hendry’s priority-setting diagram represents the main factors that influenced the prioritising process. The factors reported by nurses in the current study are given here but are compared with Hendry’s model later.

8.2.2.1 Available resources

The number and skill mix of nursing staff appeared to be a common source of frustration for many nurses, with the notable exception of the nurse-led gynaecology ward. Nurses perceived that this had a major influence upon the ability to prioritise effectively and efficiently. Nurses in the nurse-led gynaecology ward had a formalised system to match staffing levels with fluctuations in demand that was not apparent in any of the other three wards, all of which experienced problems with staff sickness, or unfilled nursing posts, to some degree or another during the times spent there:

“ Staffing levels have been fine today but other days they are not, and it makes prioritising difficult because you have so many priorities that you have to attend to one at a time”

(Junior nurse 2F, acute Gynaecology)

“We only have three members of staff here today and I have ten patients to look after on my own. Four is normally the minimum we try to have on shifts. More trained staff would definitely help because a big issue right now is the amount of IVs we have to do”

(Experienced nurse 4A, Surgical)

“I think prioritising, no matter what ward you are on, depends on how busy or how highly dependent your patients are, how many staff you have, what the skill mix is, and can have a huge influence on how you prioritise your care”

(Experienced nurse 4A, Surgical)

There were other similar occasions when the nurses in charge of the wards had to act as coordinator between other wards in addition to her existing role. According to the nurses, having overall responsibility for other wards also meant having to keep abreast of potential problems in their own ward and deal with them accordingly:

“ I always let my colleagues know that I might be called away, and have to stop what I’m doing to attend to staffing or bed issues elsewhere but it doesn’t affect what I am doing with the patients that I have. In an ideal world, we would always take patients of lower dependency when we are coordinating but it depends on the actual patient dependencies at the time, and the experience and skill mix of the nurses on duty”

(Ward manager 4C, Surgical)

This nurse thinks it does not affect her patient care but since she may have to delegate work to her peers while sorting out other ward problems, the patient sees several nurses during the nurse’s shift. What are not known are the patient’s feelings about this situation. For all nurses, prioritising patients according to the level of care they required was essential for dealing with diversity in any surgical-oriented ward

“You can’t have four nurses on a ward of 30 patients and not prioritise, you absolutely have to. You have to divide the patients out, and by doing so, you are prioritising.....we are using a dependency scoring mechanism that helps to prioritise. I don’t think you could work at all without prioritising”

(Ward manager 4C, Surgical)

This was very different to the nurse-led ward, which appeared to have no such need:

“Down here patients have one-to-one care. Upstairs in gynaecology you can be one nurse with ten patients. It is more difficult to deal with emotional issues on a gynaecology ward because you just don’t have the time to sit with the patients unless there is a quiet spell”

(Experienced nurse 3B, nurse-led Gynaecology)

Therefore in the nurse-led ward, emotional care appeared to be a ‘built-in feature’ of their ward design, which may have made prioritising easier or more efficient than in the acute wards.

8.2.2.2 Contextual features

The culture of the ward and the type of environment in which patients were cared for, according to Hendry’s model has the potential to influence priority setting. One junior nurse described how she perceived working in gynaecology:

“We have a wide range of patients in here: palliative care patients, post-op patients, miscarriage patients, TOP patients. In dedicated gynae (cology) you can be tuned into their needs all the time, whereas in here you have too many other things going on, so priorities change all the time”

(Junior staff nurse 2F, acute Gynaecology)

For one highly experienced nurse, this ‘atmosphere’ in gynaecology was unique:

“I have worked in both surgical and gynaecology wards. In gynaecology it is friendly and we try to keep it more relaxed, so that people can open up a little, and then we can deal with the psychological issues. I think in general surgical wards the atmosphere is totally different, and its not that patients there don’t need psychological support, but in a way it was because you were much too busy because of the pace of the ward itself”

(Ward manager 2A, Gynaecology)

For the ward manager of the same ward, this ‘atmosphere’ was attributed to the ability of nurses to set priorities more effectively than nurses in acute wards:

“We have time to do that (provide emotional care) whereas in the (acute) gynaecology ward they do not. That’s why our unit works so well, because we can give added support that is just not possible if you are working on a busy gynaecology or surgical ward”

(Experienced nurse 3B, nurse-led Gynaecology)

One might presume that nurses working in a nurse-led gynaecology ward, in an apparently more relaxed environment, and little patient diversity, would be less hard worked than nurses on the acute wards. According to the ward manager this appeared to be a common fallacy which she was keen to address:

“Others think that because we only have eight beds here that we can’t possibly be busy. It can be busy and mentally demanding. It can never be as physically demanding as working in a main gynaecology ward because we don’t have (patient) washes, wound care etc, but mentally, it can be more draining. You can have just one patient to look after and be drained for the rest of the day”

(Ward manager 3C, nurse-led Gynaecology)

Surgical nurses also spoke specifically about how accepting medical ‘boarders’ into the ward, affected the way they prioritised patients and tasks:

*“Medical and surgical patients are very distinct and have different needs which you have to adapt to. I think every member of staff found that very difficult when it came to prioritising, because we are not **geared for** medical patients, we are geared for surgical patients that go to theatre, have their operation, and four or five days later, go home. I find medical patients harder to prioritise but that’s because I’m not sure about their needs”*

(Junior nurse 1E, Surgical)

8.2.2.3 Patient features

Nurses were asked to explain how certain events and people had an affect on the way they prioritised patient care. Most nurses described at least one patient characteristic that influenced the way they personally prioritised. Nurses in the medical ward in the study by Hendry (2001) identified certain patient characteristics as problematic such as manipulative and demanding patients. It is always possible that nurses can make wrong judgements about patients based on first impressions (Stockwell 1972, 2000). One senior nurse admitted she had possibly been misguided about patients in the past:

“Some are very quiet and so you think they won’t need you but when you look into it, they really do need you....So, you just have to work out who needs you most psychologically”

(Ward manager 3C, nurse-led Gynaecology)

This suggests that patients who kept silent, or who had a reserved or quiet nature, may have needed something urgent or have been ‘suffering in silence’ but could be

overlooked by nurses, as was the case for patients in the study by Smith (1992) In contrast, the opposite was also true when nurses gave higher priority to patients who were loud or very vocal or else very demanding of nurses' time. This concurs with Hendry when some patients showing this behaviour were observed to receive greater attention from the nurses. Personalities also influenced the way nurses may have thought about their patients:

“I have to say that not every medical TOP patient is the same. Just like the other patients in the ward they can fluctuate from time to time and today their personalities are all different; one speaks about her personal life, one has no-one in with her for support and is lonesome, and the other just doesn't want to be here”

(Senior nurse 2D, acute Gynaecology).

However, how patients were perceived to cope with pain or emotions appeared to have a significant effect on setting priorities: During observation of the nurse with TOP patients, some of these patients were more upset, and on one particular occasion, in obvious emotional distress. When asked about this, the ward manager explained how finding time to sit and talk with patients can be a problem for some nurses:

“We have time to do that (provide emotional care) whereas in the (acute) gynaecology ward they do not. When we have to transfer patients there at the end of the day, patients notice the difference. I know because when we go up to check on them the next day, they'll say they haven't seen a soul....and that's why our unit works so well, because we can give added support that is just not possible if working on a busy gynaecology or surgical ward”

(Ward manager 3C, nurse-led Gynaecology)

This was also identified as a problem for one nurse in the acute gynaecology ward who thought that:

“At weekends you don’t have as many acutely ill patients in your caseload as during the week. They are still cared for, but it is the psychological care of patients at the weekend, that’s the time-consuming thing. They don’t need as much physical care as emotional support”

(Experienced nurse 2E, acute Gynaecology)

At interview surgical nurses stated they perceived a conflict or tension between the psychological care that is expected patients should receive, and that which they were able to provide:

“I feel that the emotional needs don’t get the same amount of attention in the ward. I know if I sit down and broach this subject I am opening a can of worms and it might take me twenty minutes that I don’t have right now. What is important for me is to acknowledge to the patient that I don’t have time but I will get back to her. I do think that we prioritise our physical care over people’s emotional needs.”

(Senior nurse 4D, Surgical)

The notion of “opening a can of worms” may have influenced the priority assigned to emotional tasks or patient situations. If so, then one may surmise that tension may have been more pronounced when making decisions regarding relative priority between attending to physical and emotional care needs of MTOP patients.

8.2.2.4 Interruptions

During observation, nurses were often interrupted as they attempted to provide care to patients. Therefore nurses were asked at interview to elaborate, and if they

influenced their ability to prioritise, or keep track of planned order of work:

“I’ve had a horrendous shift today. I couldn’t get my work done. We were short of staff and I had the ward keys. I had my own eight patients, but there were also umpteen patients for theatre and every time I went to do something I was pulled away....can you do this....can you do that....can you take this phone call...and then everything stops for the doctors’ ward round....You just seem to be chasing your own tail to catch up”

(Experienced nurse 1A, Surgical)

“The doctors often want you to go with them right away and you feel you have to leave whatever it is you are doing. You lose concentration. Then there is constant interruption for the ward keys, or to check antibiotics, or no one is free to take a patient to theatre so you have to go yourself. A lot of the time you are just putting off what you are doing to go and do something else for other people”

(Junior nurse 2F, acute Gynaecology)

“I kept getting sidetracked by something else going on, or someone else coming in and asking me to go and do something or other. I ended up going away and forgetting I was doing something important for another patient. With the best will in the world you do forget!”

(Junior nurse 1E, Surgical)

One gynaecology nurse stated chaos and interruptions were the most troublesome at certain times of the day, especially during the early morning and early afternoon shift when theatre patients were dealt with as priority:

“First thing in the morning it’s a bit of a guddle, because there are post-op patients who need drips and PCAs (patient controlled analgesia devices) looking after, and a hysterectomy who needs sedation, medication, and so on, and you can’t get on with things”

(Experienced nurse 2E, acute Gynaecology)

It appears as though any priorities that individual nurses from the acute wards may have had before the interruption, ended up delayed, required reassessed, or else forgotten about altogether.

8.2.2.5 Personal views

Certain patients who were more well known to the nurses, such as patients with multiple or repeated readmissions, or had been in the ward for a long spell of time, were clearly more well known than those nurses had just met for the first time.

Fostering a relationship with patients may be beneficial to priority setting since there is more opportunity for shared decision making and tailoring care activities to match individual needs than when there is little or no such relationship (Radwin 1996). However, this did not always have positive benefits as one nurse reported at interview. Here she describes her feelings towards certain patients:

“Being truthful when I realise this is their fourth or fifth (TOP) I find it difficult to give them priority. I think though I am angrier at us, because we have failed in some way if they keep coming back here”

(Senior nurse 2D, acute Gynaecology)

This nurse, one of the more senior nurses on the acute gynaecology ward, was annoyed when patients appeared back for the same procedure time and time again, but even more annoyed at the sense of failure that this invoked. The nurse linked this sense of failure to the emotional care and psychological counselling that patients receive at this time, blaming failure on the fact that these patients do not

‘open up’ and disclose how they are feeling. However, as nurses had only six hours, the duration of the patient’s stay, in which to build up trust and encourage this ‘opening up’ process and to foster a nurse-patient relationship, it is not surprising that some found this difficult, more so when the nurse had to divide her attention between other patients at the same time.

“ (elective) gynae patients are in for a number of days so they might have a few emotional issues that appear at different times, whereas with medical TOP patients, who are only in for a limited period of time, there is the fact they have had to make this decision, automatically think you are going to judge them, have to get over that hurdle and then face the trauma of the procedure and the after-effects. It really is quite draining for them and for you, so it is really is important to try and connect with them and support them throughout that whole journey”

(Senior nurse 2A, acute Gynaecology)

8.2.2.6 Experience

Throughout the literature on decision making and nursing assessment (Chapter 4), and in Hendry’s model of priority setting, nursing experience and expertise was repeatedly linked to cognitive and physical performance. Nurses were therefore asked at interview to define what they perceived priority setting was, and how they went about it. Two ward managers from the surgical wards said:

“I think its second nature. Over years and years of experience, I now come in and automatically prioritise patient care ...so I think its personal ability more than anything else, although some parts you do learn through experience. You can be qualified for ten years and still not be able to prioritise effectively”

(Ward manager 4D, Surgical)

“There are times when it is just intuition. There are times when it’s very much a planned situation.”

(Ward manager 4C, Surgical)

For one nurse in gynaecology, experience was perceived to play a big role in her approach to priority setting

“I think a lot of it depends on, at least for me, experience, and the experiences I have had in the past with patients”

(Senior nurse 2D, acute Gynaecology)

To other nurses, being aware of their own inexperience meant they were less than keen to include certain elements of work in their set of priorities:

“The other nurse is better with eye patients than I am so I often delegate to her”

(Junior nurse 1E, Surgical ward)

This means nurses do not just delegate because they have too much work, but perhaps also because of the content of that work, and what it will involve for the nurse personally.

8.2.3 Other key findings

The previous chapter findings indicated that nurses were using various strategies that may have helped them in setting priorities. Consequently, nurses were asked at interview when, and for what reason during observation, they had evaluated priorities. Most nurses agreed the patient handover report was the point in time when they felt the priority-setting process was initiated:

“The shift handover is when you are first conscious of deciding your priorities. Then you go round your patients and it may change slightly depending upon your perspective. Someone may have been pain free with the previous nurse and then suddenly they are not and that can shift your priorities right away”

(Junior nurse 1B, Surgical ward)

This indicated priorities may not be stable but subject to change, depending on the individual perspective. At interview nurses described other specific times or events in the shift that prompted reassessment of priorities:

“At tea time when the patients are all at their meals I can take five or ten minutes to think ‘right, what have I done? And is that in the same order that I intended to do it in the first place?’ Sometimes I’ll change my priorities again at 8pm once the visitors have gone home”

(Experienced nurse 2B, acute Gynaecology)

“When the patient’s care changes or their condition deteriorates, or when I feel that we are giving care that is not effective”

(Senior nurse 2D, acute Gynaecology)

“The (doctors’) ward rounds help to get your priorities mapped out-like knowing which patients are to be discharged or have their drugs re- evaluated”

(Senior nurse 1D, Surgical)

Nurses were asked to explain how strategies they used at the handover helped them manage or track priorities in this way:

“I don’t know about other people...but I don’t use a piece of paper like others do, like at the report I don’t write it all down. I remember the main points but then I have to keep going back to the board, and think okay I’ve done this, done that, they have been for this or that, I need to go and do thisI am conscious that I do this”

(Junior nurse 1E, Surgical)

“There is so much going on it is virtually impossible to remember everything. I actually write boxes on my notes and these boxes are my priorities-things that

have to be done within the next couple of hours. I always said to myself I would never go by my notes but I mean there is so much change on this ward that I have to.....keeping organised that's top priority!"

(Junior nurse 1C, Surgical)

It is interesting that it is two junior nurses who used such detailed strategy. Although experienced nurses also kept notes for referring to during their shift, they rarely used them, but instead stopped frequently to look at the whiteboard or in acute gynaecology, on the master patient list held at the nurses' station. Other nurses gave details of how, when they received information about patients, it was not enough to begin to establish priorities:

"Sometimes, I'll do what I'm told (needs done) at handover, but usually I'll wait and see for myself then decide what I will do first"

(Experienced nurse 2B, Gynaecology)

One of the most experienced surgical nurses had very strong feelings about the quality of the information provided at the handover report:

"Some nurses give you every bit of information whether it is relevant or irrelevant, and they make it sound like they have the most ill patients on the ward. So sometimes the handover can be a waste of time...we don't get facts-relevant facts, like "I need this, this, this, and that, patients haven't had this or that done, this patient is in pain etc". You get some people who make a whole huge report out of one patient who really only needs a few things done"

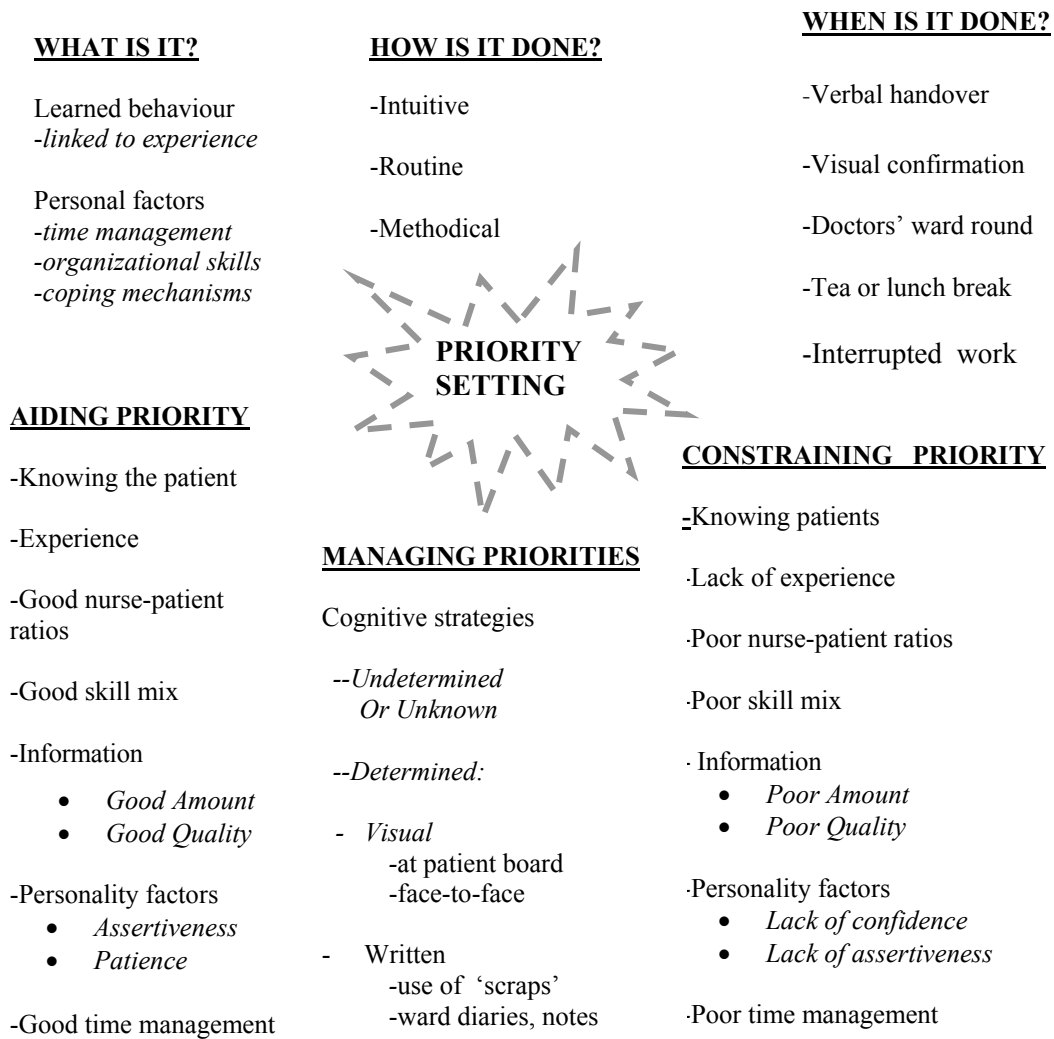
(Ward manager 4D, Surgical)

Therefore, with the exception of the nurse-led unit, the handover was the point in time when most of the nurses began the process of setting priorities for patient care. However, both the amount and the perceived quality of the information appeared to

influence how the nurse then used this to determine what her priorities actually were. This may therefore vary from one individual to the next, and more importantly, possibly in the short space of time between one individual handing patient care responsibility over to the nurse coming on duty for the next shift. Regardless, this may be an indication of cognitive differences in information gathering, analysis and interpretation such that some individuals require more information, or visual as well as verbal information, to initiate the priority process.

Priority setting at such times could best be described as directly linked to patient outcomes such that a nurse evaluated priorities of patient care in terms of future goals or expected plans of action. Following a doctor's ward round of patients, most nurses re-evaluated their list of priorities, since new tasks for patients (that were not included in her original list provided at the start of the observation session), required to be done. In stating when a specific task was urgent, the doctor may have aided this re-evaluation. This appeared to be a consistent approach among all nurses with the exception only of the nurse-led ward nurses. Their senior nurse stated how, unlike the acute wards, there was no daily patient ward round performed by doctors, whose specific requests determined the next set of priorities for the nurses. However, as each nurse worked independently with one patient it may not be an issue for them. During interview, all nurses were asked to state which, if any of the following strategies they typically used to prioritise patients in their caseload: by patient condition, by task or intervention, or both. Gynaecology nurses typically preferred to prioritise by patient condition and surgical nurses by both task and patient condition. Figure 8.1 provides a diagrammatic representation of the main themes arising from interviews with nurses.

Figure 8.1 Main themes derived from nurse interviews



8.3 Nurses' use of metaphor

Figure 8.2 illustrates the eight different metaphors identified from transcribed interview data following the procedure suggested by Schmitt (2003).

Figure 8.2 Summary of metaphor use from interview transcripts

Priority as:		(n= number of associated words or phrases)	
• path/ journey	(n=17)	• ergonomic load	(n=12)
• battle	(n=5)	• machine	(n=12)
• game / play activity	(n=7)	• movement/ liquid	(n=5)
• puzzle	(n=5)	• container	(n=5)

8.3.1 Priority setting as a path or journey

Of the 17 text examples taken from interview data, four were related to time, seven to direction, and six to change of direction (Figure 8.3). In the main there were differences in how nurses from different wards used metaphorical language to describe the various factors associated with priority setting.

Figure 8.3 Priority setting as a path or journey

<i>Get bed baths out of the road</i>	Gynaecology nurse 2E (Fife)
<i>Still going ahead but takes time to get there</i>	Gynaecology nurse 2E (Fife)
<i>We stay behind to catch up on things</i>	Gynaecology nurse 2E (Fife)
<i>We sort of go through the journey together</i>	Gynaecology nurse 2A (Fife)
<i>I sort of use it as a guide</i>	Gynaecology nurse 2A (Fife)
<i>I'd have to put that ahead</i>	Gynaecology nurse 2D (Fife)
<i>If you then you get sidetracked</i>	Gynaecology nurse 2B (Fife)
<i>If you distance yourself it is easier</i>	Surgical nurse 1D (Fife)
<i>It helps to get your priorities mapped out</i>	Surgical nurse 1D (Fife)
<i>Have to be guided by your patients</i>	Surgical nurse 1D (Fife)
<i>I was always getting sidetracked</i>	Surgical nurse 1E (Fife)
<i>Sometimes I lose my train of thought</i>	Surgical nurse 4B (Tayside)
<i>I tended to get waylaid a bit</i>	Surgical nurse 4A (Tayside)
<i>You get waylaid with A, B or C</i>	Surgical nurse 4A (Tayside)
<i>Its going through a set of steps</i>	Surgical nurse 4C (Tayside)
<i>Need to know how to pace your day</i>	Surgical nurse 4C (Tayside)
<i>A lot of 'D' grades pick up on our way of prioritising</i>	Surgical nurse 4D (Tayside)

Surgical nurses from Fife tended to associate priority setting with maps, guides, plans and strategies. In other words these nurses described priority setting in terms of planning, measuring and preparation. In Tayside this was described not in terms of planning but in the 'doing of', that is the actions or strategies involved in the actual process of setting priorities. Those surgical nurses emphasised steps, pacing and the 'picking up' of speed and knowledge.

Gynaecology nurses from Fife tended to discuss priority setting in slightly different terms, describing being either 'ahead' or 'behind'. For nurses in this ward, rather

than describing plans or actions, priority setting is associated with uncertainty. From the context alone it is not possible to know whether this means nurses thought in terms of being proactive or reactive towards prioritising. This could mean these nurses place more emphasis or importance on the use of strategies to help them deal with expected or unexpected aspects of practice. It is interesting to note that none of the gynaecology nurses from the nurse-led ward in Tayside used any metaphorical language. One common thread ran throughout the theme of this particular metaphor, that being as most nurses described getting ‘waylaid’ or ‘sidetracked’ at some point in the priority setting process.

8.3.2 Priority setting as a battle

Only four nurses used this particular metaphor. For these nurses, priority setting appeared to be associated with negative or extreme aspects of work or priority setting (Figure 8.4).

Figure 8.4 Priority setting as a battle

<i>If you are pre-warned it helps</i>	Gynaecology nurse 3B
<i>Sometimes it is a bit of a struggle</i>	Gynaecology nurse 2D
<i>It is torture!</i>	Surgical nurse 4A
<i>Plan goes up in the air</i>	Surgical nurse 1D
<i>All blown out of the sky</i>	Surgical nurse 4A

These words may perhaps describe an internal mental struggle or the external struggle to cope with the physical aspects of their work. Plans which these individuals make or may have made, at some point ended up being altered owing to forces unforeseen or unexpected. This metaphor describes the tensions between the physical and mental elements associated with prioritising patients or tasks. For the

two gynaecology nurses this image does not appear to be as vivid as it is for surgical nurses, the two on apparently opposite ends of a continuum from no impact to maximum impact.

8.3.3 Priority setting as a game or play activity

The text provided here is connected with motion activity for example, swinging, bouncing, chasing, juggling and so forth.

Figure 8.5 Priority setting as a game or play activity

<i>That makes it a totally different ball-game</i>	Gynaecology nurse 3B (Tayside)
<i>Try to bounce things back to people</i>	Gynaecology nurse 2A (Fife)
<i>Getting into the swing of your day</i>	Gynaecology nurse 2D (Fife)
<i>Generally juggling things around</i>	Gynaecology nurse 2B (Fife)
<i>It's an emotional roller coaster</i>	Surgical nurse 1C (Fife)
<i>Chasing your tail to catch up</i>	Surgical nurse 1A (Fife)
<i>Using priority as a baseline</i>	Surgical nurse 4D (Tayside)

Three of these are related to solitary activity normally performed by one person such as being on a swing, juggling or a dog running in circles chasing its own tail. The others meanwhile suggest activity shared with other people such as being on a roller coaster or playing ball games such as tennis, basketball or baseball. This could describe the ups and downs of nursing work where nurses are multi-tasking a variety of patient-related interventions in a limited or set time frame, some of which may be shared with others. Nevertheless, the words used in the text also describe negative aspects associated with work and connected to priority setting such as not being able to catch up with goals, expectations or completing tasks.

8.3.4 Priority setting as puzzle

In using similar words such as becoming ‘bitty’ or disjointed’, all nurses here conveyed the notion of fragmentation within work-related physical or mental activity.

Figure 8.6 Priority setting as puzzle

<i>Kinds of muddles things up a bit</i>	Surgical nurse 1B (Fife)
<i>It can get quite ‘bitty’</i>	Surgical nurse 1D (Fife)
<i>Becomes a bit disjointed</i>	Surgical nurse 4B (Tayside)
<i>Always trying to readjust</i>	Surgical nurse 4A(Tayside)
<i>A bit of a ‘guddle’ today</i>	Gynaecology nurse 2B (Fife)

This image follows through in that when the component parts become muddled the ‘whole picture’ can look different or distorted in some way or another (‘disjointed’). If parts do not ‘fit’ they may need readjusted. In much the same way as a person builds up a jigsaw puzzle by opening the box, locating and assessing the relevant bits of the puzzle to assemble the picture in its true form, the same could be true of a nurse’s priority-setting process. If this is the case, the priority-setting process may require internal and external information cues to manage priority setting. However, there is no suggestion in either the text, or in the context in which it is derived, that solutions cannot be found or the puzzle abandoned, meaning nurses may have strategies for dealing with this.

8.3.5 Priority setting as ergonomic load

The image conjures up various aspects of activity that may be reliant on laws of gravity. This implies that any pulling, pushing or overstretching may tip the balance one way or another resulting in a positive or negative effect. Others describe how perceived responsibility for patient ‘load’ is carried throughout the shift and beyond.

Figure 8.7 Priority setting as ergonomic load

<i>Nobody on earth is going to shift me</i>	Gynaecology nurse 3B (Tayside)
<i>When it is busy you get a little stretched</i>	Gynaecology nurse 3A (Tayside)
<i>Get in and pull my weight</i>	Gynaecology nurse 2A (Fife)
<i>It can knock things off</i>	Gynaecology nurse 2D (Fife)
<i>Its about getting a happy balance</i>	Gynaecology nurse 2B (Fife)
<i>Its balancing who do I go to first</i>	Gynaecology nurse 2B (Fife)
<i>I got pulled way to do something else</i>	Surgical nurse 1A (Fife)
<i>Now I am pushed more to prioritise</i>	Surgical nurse 1A (Fife)
<i>I'll carry it over to my next shift</i>	Surgical nurse 4D (Tayside)
<i>Sometimes I carry a priority around with me all day</i>	Surgical nurse 4A (Tayside)
<i>Sometimes when the ward is heaving</i>	Surgical nurse 4A (Tayside)
<i>I suppose I should say the physical and emotional needs weigh the same</i>	Surgical nurse 4D (Tayside)

One describes the ward in physical terms as ‘heaving’ and from the context of that nurse’s interview it is possible to define this as if the ward were so overloaded with patients it was about to burst, and the nurse so overloaded with things needing done or re-prioritised that she might also not be able to cope effectively with additional demands.

8.3.6 Priority setting as machine

This particular metaphor is used by nurses when describing how they dealt with establishing and managing priorities when their work involved physical and emotional care elements.

Figure 8.8 Priority setting as machine

<i>There are times when I am not actually switched off</i>	Surgical nurse 1C (Fife)
<i>There are other things I need to slot in</i>	Surgical nurse 1C (Fife)
<i>More important things spring to mind</i>	Surgical nurse 1C (Fife)
<i>I tend to do that on automatic pilot</i>	Surgical nurse 1E (Fife)
<i>Because they are tuned in to patients needs there</i>	Surgical nurse 1C (Fife)
<i>My experience and knowledge help me to function at a different level</i>	Surgical nurse 4C (Tayside)
<i>Other tasks shift as priorities change focus</i>	Surgical nurse 4C (Tayside)
<i>We don't always have a spare(person)</i>	Surgical nurse 4D (Tayside)

<i>They are geared up for that whereas we are not</i>	Gynaecology nurse 2A (Fife)
<i>In tune with patient needs</i>	Gynaecology nurse 2F (Fife)
<i>Have to kind of split yourself up</i>	Gynaecology nurse 2D (Fife)
<i>I'm much more in tune with psychological needs</i>	Gynaecology nurse 2B (Fife)

Nurses used words or phrases suggestive of a technical or mechanical process. For some this meant a systematically thought-out process which could be operated by different functions such as switches, cogs, gears, spares and springs. In the text from one surgical nurse's interview data, rather suggesting a manual process and switching emotions and priorities on and off, the notion is introduced that it may be connected to an override system or 'automatic pilot' to allow easier control of the process. This suggests priority setting may operate at different levels as well as having different functions.

8.3.7 Priority setting as movement or liquid

The text within Figure 8.9 is highly suggestive of priority setting components as being in a 'liquid' state.

Figure 8.9 Priority setting as movement or liquid

<i>That's what it boils down to (routine care)</i>	Surgical nurse 1C (Fife)
<i>One minute everything is swimmingly fine then it changes and its all up in the air</i>	Surgical nurse 1D (Fife)
<i>There is a constant moving around of priorities</i>	Surgical nurse 4A (Tayside)
<i>Mentally it is more draining (emotional work)</i>	Gynaecology nurse 3C (Tayside)
<i>I often jump in there with two feet</i>	Gynaecology nurse 2B (Fife)

In a liquid form particles or ions are constantly and freely moving around but can change in consistency when other variables such as temperature are introduced into the equation. When heated, liquid boils or reduces down and when cooled ice or condensation forms. In the second piece of text taken from one surgical nurse in Fife, priorities are described as rapidly changing, altering in state from liquid to gas

in form (swimmingly fine → up in the air). In its liquid state water can be poured into, and drained from, a container. In the last two examples in the previous table, nurses describe how emotions may also be considered liquid in nature. Put into context within the interview as transcribed, the same gynaecology nurse (ID code 3C) described how emotion work was found to be particularly ‘draining’ and requiring maximum mental ‘input’. It is fair to propose that, similar to the process taking place when water is changed from one state into another, that energy is also involved. Likewise the notion of energy is suggested in the final example whereby this nurse feels she is often ‘jumping in with both feet’. By jumping into a pool of water the energy acting on the liquid causes ripples, splashes and a displacement of amount of water in the pool itself. Based on this same image, jumping into priority setting with both feet may well mean the nurse has to deal with the adverse consequences or ‘ripple’ effect upon her work and working environment including the most important of all, that of her patients.

8.3.8 Priority setting as container

When discussing aspects of work involved in priority setting, nurses described the emotional and physical components associated with patient-care interventions or task-related activities (Figure 8.10).

Figure 8.10 Priority setting as container

<i>They are more likely to open up with you</i>	Gynaecology nurse 2A (Fife)
<i>Have to really pull into yourself to ask who do I prioritise first?</i>	Gynaecology nurse 2D (Fife)
<i>There is more emotional input involved</i>	Surgical nurse 1E (Fife)
<i>I know I am opening a can of worms here</i>	Surgical nurse 4C (Tayside)
<i>I put a lot of my shift into that one individual</i>	Surgical nurse 4C (Tayside)

In this context, the image describes the following sequence that would take place when opening a can of juice for instance:

Open up (can) → put in (straw) → pull out (liquid) → draw into (swallow).

According to nurses' expressions concerning dealing with patients' emotions and 'emotion' work, this could possibly be expressed in a different form:

Draw into → put in → pull out → open up

One gynaecology nurse (ID Code 2A) described how she thought it necessary to "build up a trust" with patients requiring emotional care, especially for women having MTOP. 'Drawing' such a patient close to develop a trust between nurse and patient, and 'putting in' one's time, knowledge and effort could be associated with 'pulling' or encouraging a patient's feelings out into the open to enable the nurse to provide the right level of support.

To an extent therefore nurses have a degree of control over this process, deciding who will receive emotional care at any one time. As the surgical nurse (ID code 4C) reported above, knowing a patient has a particular personal or clinical problem may in fact influence who, and how far they feel comfortable 'drawing' a person in, or investing time and effort, when their own clinical time is limited. If so, this particular nurse intimates emotional care is likely to be put lower down her list of priorities.

8.4 Significance of metaphor to describe nursing work

Across all metaphors, one gains a sense of constant movement and/or flux. Most of the words and phrases can be associated with prioritising and coordinating the tasks involved in making and planning for a journey, such as when driving a car or riding a bicycle. The metaphors represent the challenges of such a journey: organising where you want to go, and what you must do or avoid, being able to reach the final specified destination. One has to consider the mechanics, function and performance of the car and its driver. Of course depending on whether the individual in charge of the vehicle is a novice or experienced driver, will influence or affect how this outcome is perceived, or when it is actually achieved. While keeping ahead of the many tasks associated with patient care, and the movement of patients in and out of the system is considered an essential component in providing effective organisation of patient care, it was also perceived by many of the nurses to be a challenging and frustrating process. Like learning to drive, some individuals found the process of priority setting easier than others. Each individual may have their own personal style; some cautious, some taking risks, some preferring to drive or work fast and others slow, some easily distracted and others very focused. The discovery of the various metaphors was useful in helping to understand how nurses felt about setting priorities in addition to observing what they did, and asking nurses how they did it.

8.5 Discussion

In the introductory literature review of this thesis, it was suggested gynaecology nursing work was different to that in other wards similarly dominated by surgical regimes and interventions (McQueen 1997). In gynaecology wards where MTOP cases were cared for, it was suggested this ‘medical’ procedure may be at odds with ‘surgical’ procedural care, and has possibly impacted on the relative priority-setting

process that nurses performed on a daily basis to maximise efficiency and quality of patient care. Using a combination of unstructured observation and semi-structured interview, this first study found that while many of the pre- and post-operative preparations or interventions involved in both wards were common features of both types of nursing practices, there were also some distinct differences, which could possibly have accounted for some of the variance in certain nurses' approach to priority setting.

Consistent with the priority-setting evidence presented in Chapter 3, patients with the most urgent or important needs took precedence. However, individuals differed in their perceptions of what aspects of care constituted 'urgency' or 'importance'. In the wards involved in this study, most of these needs were related to the types of surgical treatment required, and reliance on routines and regimes of care. However, individual nurses held different perceptions about this. Some of the nurses perceived routines as a guiding force that helped structure priorities, others as a hindrance to the priorities they saw as more genuinely important. For example, prioritising appeared to be based on 'urgency' in ensuring patients arrived and were collected from the recovery suite by the nurse when alerted, or in emergency situations. Prioritising was based on 'importance' needs when specific tasks or interventions, rather than the patient, were involved. Importance was also perceived by nurses when determining priority between those who had major and minor surgical operations, major perceived as the most important.

Priority setting was performed within similar temporal constraints and deadlines demanded by individual surgeons and, or the management of operating theatre list

‘slots’. Nursing care interventions, and the time and resources available, altered according to whether it was a week or weekend day, which in turn influenced how nurses approached prioritising their patient caseload. Compared to the ‘organised chaos’ observed during weekdays, Saturdays and Sundays could best be described as relaxed and patient tasks or interventions performed at a more leisurely pace. The different pace of work permitted more time for the nurse to give higher priority to emotional care issues than was possible during the week, both to patients recovering from surgery, and those with more complex emotional issues such as cancer and MTOP patients. This time also appeared to be when the nurse herself, rather than the surgeon, was in control of any priorities.

Certain aspects of controlling or managing priorities were perceived at times to be difficult, especially in making decisions between physical and emotional tasks, and between ‘desired’ interventions and interventions desired by others. There was a strong emphasis in nurses’ language regarding attending to patients’ emotional needs, and the tensions this brings when prioritising between physical and emotional care giving. Different nurses described these as; ‘juggling’, ‘organised chaos’, fine ‘tuning’ or a ‘balancing act’, thus providing further evidence in support of other studies where the exact same terms have been used to describe these elements associated with nursing care provision (McQueen 1997, Bolton 2001, Henderson 2001, Irurita & Williams 2001, Hendry 2001, Waterworth 2003).

In the main, surgical nurses were observed to only attend to the psychological needs of patients when asked to do so or when in obvious distress, deciding to give this care if it were not considered time-consuming. Gynaecology nurses however,

appeared to provide this emotional care to patients as a continuous process alongside physical care, from initial admission through to discharge.

For all acute ward nurses certain priorities regarding interventions, patient dependency, and recovery or progress, had a level of predictability. Less predictable outcomes, such as the uncertainty surrounding the ‘completeness’ of the termination procedure, or the amount of bleeding or physical and emotional pain experienced by women going through the termination process, appeared to complicate priority setting. In such cases, individual gynaecology nurses seemed to prefer to keep a very watchful eye on women, and fragmented other work so that they were ready to intervene immediately when a problem arose. This process of ‘watchful waiting’ was also reported by Hendry (2001) as a particular phenomenon of nurses’ priority setting in medical specialities.

Nurses in the acute gynaecology ward who only had two or three MTOP patients in their caseload generally managed to prioritise care more easily and effectively, than when this included patients with other gynaecological conditions. It would be logical to assume that if nurses had less patients to care for, the easier it would be to set priorities but this was not always the case since some nurses had fewer patients than others, but the patients they sometimes had required more complex or intricate interventions or nursing care, than patients in other nurses’ caseloads. On days where nurses considered there was a higher number of complex cases to manage, ‘knowing patients’, ‘knowing tasks’, and ‘knowing colleagues’ appeared to be determinants in the prioritising process. This resulted in some tasks or patients being deliberately avoided or else delegated to colleagues who were seen as more

skilled (nurse code 1E, p184), confident or assertive, indicating personality traits may have an important role in the process. Certain nurses in each of the wards involved in this study reported being more confident and assertive, which were acknowledged at interview as valuable skills in priority setting. When having to juggle various tasks differing in complexity, it appeared easier if there was an obvious disparity such as between major and minor cases. However, for tasks or task attributes perceived as equal, nurses reported being unable to distinguish priorities as readily and chose to start randomly with the first patient encountered in a room. This corresponds with Hendry (2001), who found student and junior nurses resorted to this type of behaviour. However, in the current study, this was not only limited to those with less experience since experienced and senior nurses were also observed to do this.

This study found that nurses in both gynaecology and surgical wards focused on certain kinds of information such as medications and patient discharge information during handover reports. Other studies have also shown how physical aspects of care and treatment interventions are generally given higher priority during such reports than psychological and emotional care interventions (Hardey et al 2000), and appeared task- rather than patient-centred (Payne et al 2000). This study, at least in the case of gynaecology nurses found evidence to the contrary, since emotional care was given high focus when caring for MTOP patients.

Nurses employed various strategies that enabled them to organise care appropriately on different occasions, for instance, one for dealing with demanding patients, one for complex tasks, and another for dealing with interruption. Nurses both described

and were observed to use various different aids to identify and keep track of priorities. Such strategies as using visual symbols or verbal prompts may have helped to prevent the nurses lose focus on the patients or patient tasks deemed the most important, or on theatre days, the most pressing. Similar strategies were also identified in previous studies as essential 'guides' to planning patient care (Taylor 2000), and more specifically, as reminders of imminent 'time-based' goals (Meecham & Leiman 1982). At certain key points in time during their shift (such as tea or lunch breaks), nurses in the three acute wards evaluated their priorities. These breaks offered nurses time to think and 'catch up' with what they had already managed to do and what they had yet to achieve. Nurses also reported the handover report was beneficial to the process after returning from days off or annual leave, mostly to catch up on patient progress and missed events.

Although the majority of nurses appeared to manage to prioritise effectively without any major affect on patient care, the potential for a negative outcome should be recognised. As was evident from interview data, it appears certain patients or tasks that nurses perceived to have a positive influence were those considered manageable and able to be completed. In contrast, those perceived to have a negative influence were those that were considered unmanageable and unable to be completed. Not being able to complete one's priorities seemed to have had an emotional affect on some nurses who spoke of going home feeling guilty or frustrated. Others had no such regret since they were satisfied that any tasks or pieces of work left undone would be reassigned to the next day's assessment of priorities. This suggests nurses also consider alternatives they cannot achieve as much as they do the ones they can achieve in the time available, during priority setting.

Some nurses thought the ability to prioritise effectively varied among individuals, being 'second nature' or 'natural' for some and 'hard work' to achieve for others. Nurses across wards appeared divided between whether it was a learned behaviour or an intuitive response, mainly the junior inexperienced nurses to whom setting priorities was still a relatively new challenge. Despite priority setting being considered a key skill of nursing it is not yet a formal taught component in nurse education in Scotland, at least according to Hendry (2001).

If a nurse is expected to learn the process of priority setting through repeated exposure to a clinical environment, one would consider an individual with the most experience as being a paragon of this particular skill, and thus an 'expert'. It is generally assumed from literature related to expertise that an individual should be expert in every single aspect connected to the work they do. However, one highly experienced nurse from this study gave examples of her peers who were equally or more experienced, or had been qualified longer, that she perceived as being unable to prioritise their workload neither in their role as coordinator or their role as ward manager (Section 6.3.5.1: nurse 4D). This suggests that some nurses may be naturally better at choosing, using, and ordering the right information, or else have been taught how to prioritise effectively. This leads one to consider that individuals may also think about tasks differently or possess different cognitive or personal abilities and traits that act as 'enablers' of prioritising.

8.5 Implications for this study

This study has shown how the organisational culture and environment plays an important role in the priority-setting process, setting the scene for individual

differences in the use of information, knowledge, and strategies. More importantly, different wards emphasised physical and emotional patient-care tasks in different ways, so that priorities were not only objectively but subjectively driven. How individuals think about work in general is therefore an important factor in priority setting since this, together with certain personal characteristics such as assertiveness, experience, and empathy, may govern how the individual nurse assesses, reacts to, and evaluates information relating to physical or emotional nursing situations.

8.6 Methodological critique

Observation provided an excellent source of rich data and insight into ‘real-time’ nursing routines, working patterns, sequencing of patients or interventions, and clinical environments in which nurses operate. This gave an appreciation of the differences in complexity, use of time, and nurse-patient relationships involved. One major dilemma occurred when emergency admissions arrived on the ward. On such occasions, it was not appropriate to spend time with the patient for consent (as was the case with other patients), owing to their unstable condition. In such instances the nurse approached the patient for consent for the researcher to be present. As such patients were typically in a distressed state upon admission, verbal rather than written consent was taken as consent to proceed with observation.

Regarding interviewing participants, although management gave consent to interview nurses on the ward, there were three occasions where there was reluctance to release participants for longer than ten to fifteen minutes owing to staff shortages and sickness. The nurses concerned were only asked the main questions as there

was little time for probing questions. This limited the information that could be obtained, but did not adversely affect any conclusions. However, this indicated that alternative ways would need to be found as to how best to explore the thinking processes involved in choosing between patients and tasks that would avoid detracting nurses from patient care. It was thought the best way was to gain information from nurses away from the pressures or constraints of the workplace. Although these two methods, observation and interview, provided rich data regarding priority setting, it did not reveal as much information as expected about how nurses thought about alternatives when receiving patient information at handover, or when determining relative priority between patients.

8.7 Aims

The aims and objective of Stage 2 of this study is therefore to explore if, and how, individual differences may have an affect on individual nurses' priority setting in different clinical environments. This looks in particular at the role of an individual's internal constructs to explain priority-setting behaviour.

Chapter 9 Study 2: Priority Setting: Internal Constructs

9.0 Introduction

The first part of this thesis considered the role of contextual and patient factors on nurses' decision-making and priority-setting processes. Through nurses' self-reports, and by observation, the factors enabling and constraining priority setting were identified, as well as the various strategies individual nurses used to ensure, maintain, or maximise the efficiency and quality of patient care. This suggested that although the majority of nursing interventions were similarly surgically focussed and although surgical wards had patients requiring emotional care (such as breast surgery patients) gynaecology nurses emphasised emotional aspects of care differently from nurses in surgical wards. This occurred despite the fact that surgical nurses had specialist nurses who dealt with emotional care and support for these patients when gynaecology nurses did not. Results also indicated that in acute gynaecology wards where there were more patients, and in situations involving complexity or larger caseloads of patient diversity, nurses had no list of priorities but tended to prioritise work in small 'bursts'. Where there were less patients in a nurse's caseload (acute gynaecology) or only one or two patients to care for (nurse-led gynaecology), it may have been easier to plan or map out priorities. In situations where there were no obvious distinguishing patient features, patients perceived as 'equal status', it appears no plans were made at all, only random selection, whereby nurses chose to start work with the first patient encountered. All nurses in this study agreed they had received no formal instruction on setting priorities during nurse training, but had had to develop this 'skill'. Nurses reported how they had learned to

set priorities in two ways: for some this was seen as having been learned over many years practical experience of managing a patient caseload or a full ward of patients, while for others it was perceived as an innate ability stemming from personality traits, especially confidence and being assertive, orderly, and autonomous. In terms of delegating work to others as part of the priority process, a nurse who is confident in her ability and approach to others may be more effective in dealing with emotional patient issues, than a nurse with low levels of confidence or an introverted personality rendering him or her shy and reserved. Conversely, it may be the case that some women patients may feel more comfortable in the presence of an introverted nurse than a nurse who is too assertive and ‘overbearing’, especially when discussing their intimate personal lives or problems with a nurse she may never have met before. While the first study explained many of the external influences involved in priority setting (such as the many and varied demands of consultant doctors or surgeons whose regimes of care guided nurses’ priorities on certain days of the week when surgery was scheduled), many other questions remain unanswered concerning the internal cognitive functioning of the individual decision maker. For this reason, it was decided to explore in more detail what stable qualities or personality traits may determine how a nurse acts or behaves in similar situations but in different ward settings, and how preference for different kinds of task or nursing activities may influence how nurses think about approaching the often diverse caseloads of patients they are required to manage, in an attempt to unravel the priority-setting process further.

9.1 Personality and decision making

An introduction to individual differences, personality and performance was briefly presented in Section 4.4.3.1. This described how an individual differences approach focused on skills, knowledge, experience, competencies, and intelligence over and above personality traits alone.

The findings of Study 1 suggested how internal constructs, together with external situational factors, including the dimensions just described, may be influential in the determination of a nurse's priorities. Even thirty years ago, authors recognised that how individuals behaved in particular situations depended on the actual or perceived external situation and the internal cognitive situation, i.e., values, affect, and individual traits of personality (Vernon 1969). A dispositional approach to personality theory emphasises how the structure of the stable traits or characteristics of an individual are responsible for consistency in observed behaviour (Cooper 2002). However, this implies a nurse would behave in accordance with her dominant traits across all nursing situations. For example, a nurse may be conscientious and over-zealous in her interactions with colleagues, doctors and patients, when in fact they may only be so in certain kinds, but not all situations. Consistency in behaviour is more likely to be a consequence of how the individual nurse processes information in situations being dealt with at the time, and then adapts to the experience (Carver & Sheier 2000). As an example, this could mean that in situations where the nurse is delegating to junior nurses she may be conscientious and overzealous, but when providing emotional support to a vulnerable patient she may not.

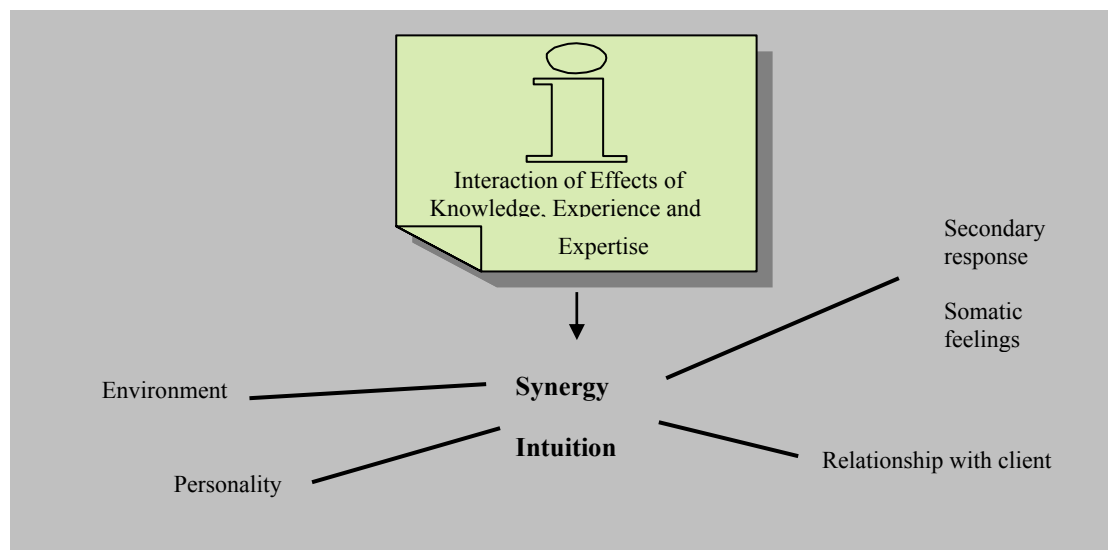
This link between internal characteristics and external performance or behaviour have been associated with the novice-expert framework (Benner 1996), and the use of intuition (Benner 1996, McCutcheon & Pincombe2001). From their survey and focus group interviews of over 200 nurses, McCutcheon & Pincombe (2001) suggested intuition was:

“a complex interaction of attributes, including experience, expertise, and knowledge, along with personality, environment, and the presence or absence of a nurse-client relationship”. (p345).

The fact that these attributes are clearly linked to affect (Figure 9.0) cannot be ignored. If nurses experience conflict or tension between physical and emotional aspects of nursing work, then one may surmise a nurse’s behaviour may in part be governed by dominant personality traits in any situation where emotional issues exist. According to Mellers and McGraw (2001), how an individual anticipates the affect of the emotions involved in any situation, may act as a guide to the final choices that are subsequently made.

If, as suggested in Section 4.4.2, emotions have an important role in decision making, then it may be they have an equally similar role in priority setting, since nurses in Study 1 emphasised how they frequently juggled emotional and physical tasks to ensure priorities were met. Figure 9.1 shows links between personality, nurse-patient relationships and emotion.

Figure 9.1 The relationship between intuition, personality, and feeling
(adapted from McCutcheon & Pincombe 2001).



9.2 Emotions and 'emotionality' in decisions

Emotion is therefore both an individual *and* organisational-centred construct (Wang & Ahmed 2002). Emotions in the workplace have been acknowledged by many authors to influence the decision-making process in people-oriented service environments such as health organisations (James 1992, Bolton 2000, Henderson 2001, Mann 2004, McCreight 2005) and non-health organisations (Hochschild 1983, Leidner 1993, Mulholland 2002).

Many areas of nursing work now require nurses to become 'emotionally' engaged with their patients, for example, when breaking bad news, dealing with loss or bereavement, or providing emotional support during gruelling or invasive treatments and procedures for illnesses such as AIDS or cancer (Smith 1992). In terms of any effect on decision making, it was suggested that emotional work can be exhausting not only for patients but for nurses involved (James 1992). Putnam &

Mumby (1993) describe this as the ‘emotionality’ associated with emotion work. One study reported how female rather than male doctors were perceived by female patients to best understand the problems associated with womanhood by virtue of their empathy and ‘emotionality’ as a member of the same sex (Swanson 1997, page 229). In practical terms, female doctors’ experiences of the mismatch between such patients’ expectations of the consultation, and what they could realistically provide in the limited time slot available for the actual consultation, were perceived as emotionally draining and at times stressful. This is in agreement with others who have suggested emotion is a by-product not only of the content of the task, but also the temporal demands of a task (Fine 1996). If providing empathy and understanding is emotionally draining for female doctors on a one-to-one basis with patients, what then of female nurses who are dealing with more than one patient simultaneously in emotion-laden environments such as the gynaecology ward?

Emotionality is defined in an online dictionary as the ‘emotional nature or quality’ of a person, task or event (www.thefreedictionary.com), and is associated with sensitivity, empathy, warmth and compassion (Scott 2000). These definitions describe the ideal qualities that other authors have associated with nursing work (Morse et al 1992, McQueen 2000, Zhang et al 2001, Wilson 2002), and tended to be described as ‘soft’ traits associated with females rather than the ‘hard’ traits generally associated with males. It is therefore no surprise that authors have demonstrated how females tended to use an emotion-focused style of coping and males a ‘detached’ rational style of coping when managing not only stressful but complex situations (Folkman & Lazarus 1980, Endler & Parker 1990, Matud 2004).

In contrast however, female midwives were reported to adopt what the other authors have described as a ‘male-style rational detachment’ to avoid becoming emotionally involved with a patient’s situation (Henderson 2001). Why do nurses try to avoid emotional aspects of patient care when this is an integral part of their work? According to Folkman & Lazarus (1980) individuals adopt different strategies to deal with emotion work. For example, if a problem-focused coping strategy is adopted, a nurse may deal with the situation directly whereas in adopting an emotion-focused strategy the nurse may avoid a patient or task that might be distressing or redirect attention away from the most distressing part, such as turning a blind eye to a patient who is upset. Either way, this could affect how nurses judge patients with and without emotional care issues, and have a direct or indirect effect on priority-setting behaviour at work.

9.2.1 Emotionality and performance

If, based on the preceding information, individual nurses who have low ‘emotionality’ towards emotional decision-making tasks were to have a choice to care for patients in situations likely to invoke strong emotional response, then like the individuals in Soane and Chmiel’s (2005) study, nurses with high Conscientiousness may be more likely to adopt a risk-aversion strategy. This could potentially lead to such nurses avoiding a situation or delegating emotional work to others. Conversely, if high on traits of Extraversion and Openness, they are more likely to positively engage in that clinical encounter. For some nurses this deliberate selection of engagement or detachment is often seen as essential protection from many of the stressful, emotional, or threatening situations encountered during the course of his or her shift (Henderson 2001).

How individuals think about the emotional and physical elements connected to a situation, person or task in any clinical setting may therefore have an effect upon the information or cognitive strategies used, and thus affect the outcome of any patient decisions made (Christianson 1993, Matthews & Deary 1998, Socan & Bucik 1998). According to Matthews and Deary (1998), differences in cognitive information processing means individuals with an extroverted personality are 'geared to respond', while introverts are 'geared to inspect' information about situations, people, and tasks. This may mean individuals behave and act in accordance with the different traits, extroverts 'jumping in' with little thought and introverts 'analysing' or thinking a situation or problem through before acting. One must proceed with caution since it is unlikely that only those individuals with introverted personalities analyse a situation. This suggests why individuals are how they are in a situation cannot simply be explained by their personality traits, but also their own unique way of thinking, their individual 'signature' (Socan & Bucik 1998). Personality traits, as fixed constructs, can therefore only partly explain differences in how individuals determine or judge priority. However, one study suggests another internal construct, known as 'thinking style', acts as a 'bridge' between personality and cognition (Sternberg & Grigorenko 1997), so may be pertinent to priority setting.

9.3 Implications for this study

Based on the literature reviewed, if conscientiousness is predictive of the affective and emotional control and agreeableness with a nurturing or caring personality, then this should be important in nursing work, especially where that involves making

decisions in task situations with emotional content. There was also some evidence that planning is linked to a conscientious personality. If part of setting priorities is linked to planning goals or tasks at work, then this suggests some may be better at prioritising than others. How the individual perceives emotional content this may influence the plans made or the strategies used to deal with people or tasks. Much of decision-making research focuses on good or bad decisions, unlike thinking styles which, rather than measure optimal performance, examines 'typical' performance. Since it is not yet known who make good and bad priority setting individuals, knowing typical nurse behaviour in organising patient care, would be beneficial. Therefore the influence of personality traits and thinking styles are worthy of further exploration.

9.4 Aims of Study 2

The aims of this second study are:

- to explore and examine factors within the individual decision maker, focusing on two psychological constructs-stable traits and fluid thinking styles, which explain nurses' priority setting.
- to examine the relationship between nurses' personality factors, thinking styles, and how gynaecology nurses prioritise people, situations, or tasks with emotional content.

9.5 Research questions

Based on literature, both personality and thinking style appear to have an influencing role when making decisions concerning the tasks an individual undertakes, the information used, and the order in which they are performed.

Study 2 focuses on the initial assessment of prioritising and planning of work, reported in Study 1 as initially taking place at the time of the handover report. The following research questions emerged from the literature:

1. How do nurses prioritise emotional factors of patient care in relation to physical factors?
2. How do both the constructs of (a) thinking styles and (b) personality traits relate to the emotionality connected with setting priorities for patients?
3. Does this priority-setting process differ between gynaecology nurses and nurses in other wards?
4. What influence might other factors such as experience or grade of nurse have upon this process?

9.6 Hypotheses

Based on the literature, the following hypotheses were tested in Study 2:

1. there ought to be an association between emotionality and the priority status of patients or tasks.
2. if thinking styles are in part socialised, all nurses in wards where pre and post-operative surgical care are involved, ought to elect a thinking styles preference for tasks that are structured or the 'norm' of that style of nursing practice.
3. personality traits should show a relationship with the thinking style profiles of nurses.

9.7 Methods

Various methods were considered for Stage 2 of this study ranging from using simulated or real handover information, think-aloud or vignettes. The thinking processes of individual nurses involved in handover information would be unlikely revealed through a qualitative approach alone. However, including a thinking style measure in conjunction with a means of rating or measuring priority ought to provide insight into the types of information nurses focus on when making decisions about alternatives. Hendry (2001) asked nurses to prioritise specific elements of care within simulated patient cases in the form of vignettes as a stand-alone method and in conjunction with think-aloud technique. This method was not considered an option for this study since it is time consuming with each individual varying in the amount of time required to process information. Consideration was also given to the possibility that nurses might be wary of discussing emotional aspects of care either for fear of revealing any personal biases that might end up in reports to management or in published study results. The difficulty associated with asking managers to allow the nurse release time from her duties in order to participate was considered a potential problem. During Stage 1 it became obvious that nurses' time was often precious and pressurised. For this reason, the use of think aloud was rejected. The option of case vignettes however offered a viable means of portraying real life prioritising based on clinical and related information. Unlike Stage 1 which adopted a qualitative approach, this second study used a quantitative approach to explore relationships between internal constructs and priority setting. This study involved a larger sample of nurses from different wards, other than those used in the first study.

Vignettes were incorporated into a cross-sectional, structured, postal questionnaire containing other measures for thinking style and personality.

9.7.1 The application of vignettes to capture clinical realities

One of the main problems associated with investigating naturally occurring phenomena such as priority setting is how to control for extraneous variables such as interruptions (Fonteyn & Fisher 1995). While this is easy in scientific experimentation it is less so in a real-life setting. Therefore, many authors who have used vignettes have done so to simplify the complexities that surround much of real-life situations (Corcoran 1986, Lamond & Farnell 1998, Hughes & Huby 2002), or researching sensitive moral or ethical topics (Weisman & Brosgole 1994), both of which may compromise the integrity of research. In nursing, vignettes were presented in the form of written text (Offredy 1998, Hendry 2001) and visual or electronic images (Gould 1996, McKinstry 2000, Baxter 2005). These authors reported benefits of using vignettes in exploring doctor-patient (McKinstry 2000) or doctor-nurse practitioner consultations (Offredy 1998), and assessment of pressure areas and tissue viability (Gould 1996, Baxter 2005). Simulations may also use representations of real life cares or situations thus enhancing ecological validity.

Other authors point out it is not just characters or 'actors' in the vignettes to consider but also the participants or 'audience' receiving them (Weisman & Brosgole 1994). In their study of vulnerable children and young adults with learning difficulties Weisman and Brosgole (1994) reported difficulties interpreting and

retaining information when participants perceived the text in vignettes as too long. One of the main advantages of vignettes is the standardisation and consistency of information to participants therefore the information they contain must be relevant and meaningful. If a vignette were to contain every single component of the topic under study the text would be too long. Equally if it were too short it might not contain sufficient information or lose meaning. This means the selection or rejection of information from vignettes requires prior knowledge of what alternative elements are most important. To mitigate against researcher bias authors made use of experts in the relevant field to validate the contents of vignettes.

9.7.1.1 The application of vignettes for this study

In Stage 1 nurses experienced many interruptions during the times they were observed with patients (Section 8.2.2.4). Furthermore, since gynaecology nursing work involves caring for women having TOP or gynaecological examination, vignettes would be highly appropriate method since this would not involve further intrusion into nurses' or patients' personal space. Two of the main considerations were ecological and content validity. This was achieved by using actual patient information and patient cases recorded during Stage 1. This meant patient conditions, actual events or interventions witnessed could be represented for surgical and gynaecology ward types. The number of cases for inclusion in vignettes was also representative of the number of patients encountered in nurses' caseloads during Stage 1. As nurses' approaches to priority setting differed on theatre and non-theatre days, or when caring for MTOP and non-TOP, these were also included in case descriptions. Task complexity was reported in Chapter 3 to

influence priority setting therefore patient cases also contained complex or simple physical or emotional care elements.

9.7.2 Sample

A purposive, convenience sample was employed. The original sample of 18 nurses from Study 1, who gave consent to be contacted to take part in follow-up, were incorporated into a wider sample of nurses taken from all gynaecology and surgical wards. This involved twelve surgical and three gynaecology wards from the same three hospitals used in Study 1. This approach was selected for two reasons. Firstly, data from the questionnaire could be compared with data from Stage 1 so that the personality, thinking style and priority ratings could be examined for the original sample group. Secondly, it would allow comparison of Stage 1 nurses with all gynaecology and surgical nurses in the respective wards. However, owing to the poor response rate, this could not be achieved; meaning only the data from the second stage would be used in any analysis.

9.7.2.1 Inclusion criteria

All trained nurses of grade C (junior) to G/H (most senior) or similar banding, in either full-time or part-time employment in any of the twelve surgical or three gynaecology wards, were eligible to take part. Only trained nurses who had been employed by the respective hospital ward for a period of at least three months were included, to avoid including nurses 'settling in' to a new ward.

9.7.2.2 Exclusion criteria

Bank or agency nurses were not eligible to take part since they only worked temporarily or intermittently. Permanent night duty nurses were excluded as there was likely to be different priorities associated only with night work. However, nurses who worked on a day-night rotation basis were eligible to participate since they had regular experience of establishing priorities in both types of nursing shift patterns.

9.7.3 Procedure

Questionnaires were subjected to scrutiny from appropriate individuals acting as content experts to identify any problems. The revised questionnaires were hand delivered to individuals identified by managers at each site to take responsibility for distribution to potential participants.

Each ward received the number of questionnaires that matched the total number of nurses employed. Questionnaires were placed in A4 size plain brown envelopes containing one copy of the questionnaire (Appendix 18), colour-coded as an identifier of the type of ward to which the respondent belonged, together with an information leaflet (Appendix 18), a covering letter inviting voluntary participation (Appendix 18), and a stamp-addressed envelope for the return of the completed questionnaire. Return of the questionnaire implied consent had been granted. Nurses were given a period of six weeks to respond. Follow-up letters were sent as reminders at two- and four-week intervals, identified as a strategy by Breakwell et al (2000).

9.7.4 Data collection

At the time questionnaires were delivered personally by the researcher to the relevant managers at each of the hospital locations, they were also advised of the date for distribution. Individual nurses were then responsible for returning any completed questionnaire using the stamp-addressed envelope provided, and return of this envelope was taken as consent to participate. Data were collected during the period of October to December 2005.

9.7.4.1 Data collection instruments

A questionnaire was used to capture a profile of nurses' thinking styles and personality traits in relation to the kinds of tasks or activities they undertake at work. Existing measures of thinking style (TSI, SOLAT) and personality (such as the Myers-Briggs Type Indicator, the NEO-PI-R, NEO-FFI, Cattell's 16PF) were examined for suitability. The two demonstrated as being the most rigorously tested and thus demonstrated reliability were chosen for use in this study, these being the TSI and NEO measures. Data were collected by means of a self-report questionnaire which was divided into four separate sections to provide demographic information in addition to the priority-setting, thinking style, and personality scoring measures.

9.7.4.1.1 Questionnaire Section 1: demographic profile

This provided basic demographic details to form a professional career profile of individual nurses. Using an interval scale, nurses were asked to indicate the number of years since qualifying as a nurse as well as number of years in current post, previous experience in different ward types, and current role or grade. Despite the

fact that ward managers had identified the presence of male nurses employed on the wards, all respondents were female. Nurses were not asked to indicate their age since it was felt that other aspects such as experience and length of time since initial entry to the national nurse register were sufficient.

9.7.4.1.2 Questionnaire Section 2: Neo-FFI personality measure

This provided a personality profile of individual nurses. The shortened form of the NEO-PI, the NEO-FFI, measures five dimensions of personality, Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness (Costa and McCrae 1992). This is a 60-item questionnaire comprising five, 12-item scales for self-report using a five-point rating scale (ranging from strongly disagree to strongly agree). Correlations between the original and shortened form of the inventory have demonstrated appropriate reliability with alpha scores ranging from .68 (Agreeableness) to .86 (Neuroticism).

The professional manual for the NEO Five Factor Inventory (Costa and McCrae 1992) guided the scoring of items. Individual nurse scores were entered into the database and the scores for the corresponding number of the items tallied to obtain a total raw score for each of the five personality dimensions (Figure 9.2). These scores were standardised using t-scores corresponding to an adult female population, calculated from the profile sheet provided with the NEO Five Factor Inventory pack (Costa & McCrae 1992).

A Cronbach's alpha score was obtained for each dimension. With the exception of one dimension *Openness to Experience* (.36), the other four in the current study

achieved moderate scores indicating internal consistency, and were in keeping with alphas obtained in other studies thus indicating reliability of the instrument.

Figure 9.2. Aggregating items to obtain scores for NEO-FFI factors

NEO Dimension	Item numbers	Cronbach's α			
		McCrae & Costa 1989.	Gutierrez et al 2005	Egan et al 2000	Current study 2006
Neuroticism	1, 6, 11, 16, 21, 26, 31, 36, 41, 46, 51, 56	.86	.78	.87	.78
Extraversion	2,7,12,17,22,27,32, 37,42,47, 52, 57	.77	.80	.74	.67
Openness to Experience	3, 8, 13, 18, 23, 28, 33, 38, 43, 48, 53, 58	.73	.75	.72	.36
Agreeableness	4, 9, 14, 19, 24, 29, 34, 39, 44, 49, 54, 59	.68	.73	.74	.78
Conscientiousness	5,10,15,20,25,30,35, 40,45,50,55,60	.81	.78	.84	.82

9.7.4.1.3 Questionnaire Section 3: priority setting simulation exercise

This presented twelve case descriptions to nurses in order to simulate the content and order of patient information received in a real-life nursing shift handover, where nurses set priorities. These were derived from actual observations of physical activity and handover reports in Stage 1. Nurses from gynaecology and surgical wards received the same information to ensure consistency of information. This meant that all nurses would receive the same information in the same order as they did when listening to a handover report. Nurses ranked the order in which they would attend to each of the six patient descriptions in the two patient caseloads (gynaecology and surgical) presented, ranking a caseload of patients with conditions with which they were familiar or experienced, and one unfamiliar and less experienced.

During the previous observation stage, nurses were observed caring for certain groups of patients with specific conditions. Twelve patient cases, six for surgical and six for gynaecology were therefore constructed on the basis of those observations. As medical boarders formed a part of the nurses' patient caseload for only one out of the four wards (general surgical nurses), this type of patient was not included in any of the vignettes. Since it was hypothesised that there would be a difference between acute gynaecology and surgical patients in terms of the emotional components, within each vignette three of the six hypothetical patient descriptions emphasised physical interventions and the remaining three an emotional emphasis (Table 9.2).

Nurses received descriptions (Appendix 17, section 3) of each patient's age, condition, and stage of recovery or treatment. This asked nurses to read and study the vignettes carefully before ranking the order of priority or sequence in which they would attend to each of the six patients in each of the two caseloads. This represented the priority setting at macro level suggested in Hendry's model (Figure 3.1). Secondly, the nurse was asked to specify and rank the order of tasks she aimed to perform for each individual patient, using the patient descriptions provided in the text, to represent priority setting at micro level.

Table 9.1 Caseload vignette elements

<i>Patient case description</i>		<i>Patient case description</i>		<i>Physical Care Elements</i>	<i>Emotional Care Elements</i>
Surgical Caseload					
Case 1	Day 2 Post-op major	Appendicectomy	32 female	x	✓
Case 2	Day 5 Post-op major	Hemicolectomy	59 female	✓	x
Case 3	Day 3 Post-op major	Left Mastectomy	45 female	x	✓
Case 4	Day 1 Post-op minor	Ligation & Stripping of Varicose veins	35 female	✓	x
Case 5	Day 1 Post-op major	Open Cholecystectomy	53 female	x	✓
Case 6	Day 9 Post-op intermediate	Wide Excision of Melanoma- Right arm	75 female	✓	x
Gynaecology Caseload					
Case 1	Day 1 Post-op major	Total Abdominal Hysterectomy (TAH)	40 female	✓	x
Case 2	Day 2 Post-op major	Laparotomy & Reversal of Sterilisation	35 female	✓	x
Case 3	Day 3 Post-op major	Anterior & Posterior Pelvic Floor repair	62 female	✓	x
Case 4	Day 1 Post-op major	Laparotomy, TAH & Omentectomy	51 female	x	✓
Case 5	Day patient	Medical termination of pregnancy (MTOp)	30 female	x	✓
Case 6	Day patient	Medical termination of pregnancy (MTOp)	16 female	x	✓

Every effort was made to ensure the two vignettes were matched in terms of the types of conditions, stage of recovery, and interventions required. Vignette A and B comprised a mixture of patients, some requiring only physical care and others requiring both physical and emotional care (Table 9.2).

Table 9.2 Type of task elements involved in ‘emotional’ patient case descriptions

Priority Setting	Vignette A-Surgical Cases	Vignette B-Gynae Cases
Task Elements involved	Patient case no	Patient case no
Emotional	1, 3, 5	4, 5, 6
Physical	2, 4, 6	1, 2, 3

9.7.4.1.4 Questionnaire Section 4: thinking styles inventory

Using the TSI or Thinking Styles Inventory (Sternberg & Wagner 1991), nurses were asked to rate 65 statements. Respondents rated themselves on a seven-point scale in terms of how well each of the 65 statements described the way they would normally carry out tasks in general, from 1 (not at all well) to 7 (extremely well). If nurses do respond in different ways to tasks on the basis of perceived physical and emotional content, this will help identify whether any particular style of thinking was associated with nurses' priority setting in different gynaecology environments, or with other work-related variables such as experience or grade. This measure demonstrates good reliability and validity across cultures and situations.

9.7.4.2 Specific issues of reliability and validity

Various steps were taken by the researcher to ensure the questionnaire was as user-friendly as possible as well as containing relevant and appropriate length and content of information. This was achieved by the use of validated data collection instruments and having the content validated by other individuals prior to general use.

9.7.4.2.1 Preliminary testing questionnaire content

A preliminary assessment was required to give an appreciation of the estimated time it would take to complete the questionnaire, as well as perceived relevance of item statements to nursing work. For this purpose, members of university academic and research staff in the Department of Nursing were approached to identify individuals both in academia and clinical practice who they thought would be willing to act as content experts and test the questionnaire. According to Lynn (1986) a minimum of

three individuals ought to be used as content experts. Five expert nurses from gynaecology, surgical and academic nursing backgrounds agreed to participate thus meeting this requirement. Each was sent a copy of the questionnaire together with a blank page on which to summarise their opinion and experience of completing the questionnaire. Five of the six experts agreed the TSI was too long in the 104-item format provided. Two experts provided spelling corrections in the vignettes, and one offered suggestions that would allow the vignette to be read easier by participants. Following advice from the scale author Dr Sternberg, the shortened revised form with 65 items was used in this study.

In order to make the TSI statements more ecologically valid, certain words were replaced by more specific terms appropriate to nursing that corresponded with thesaurus alternatives but which did not alter the original meaning. The use of these word tags made it clear to individuals to interpret statements in relation to their working environments, a method used successfully by other researchers when encouraging a specific frame of reference to participants (Holtz et al 2003). Figure 9.3 provides examples of the original statements and their relevant replacements.

A total of 13 statements (items 2, 6, 9, 17, 19, 24, 27, 29, 32, 38, 48, 55 and 59) from the 65 item questionnaire, were altered in this manner. From the same expert nurses who reviewed the revised questionnaire, this was judged to be more amenable with, and directly related to, actual nursing work. The time taken to complete the questionnaire reduced from 60-90 minutes to 35-45 minutes.

Figure 9.3 Examples of altered statements in TSI-R Questionnaire

ORIGINAL STATEMENT	REVISED STATEMENT
24. I like to collect detailed or specific information for the projects I work on.	I like to collect detailed or specific information about patients in my caseload
48. I like working on projects that deal with general issues rather than nitty-gritty details.	I like working with patient caseloads that deal with general patient issues rather than with nitty-gritty details

TSI subscales comprised the three functions of legislative, executive and judicial styles, four forms of hierarchic, monarchic, oligarchic and anarchic styles, two levels of global and local styles, two leanings of liberal and conservative styles, and two scopes of internal and external styles, a total of thirteen styles in all. Individual scores for each style were obtained by adding up the responses nurses gave to the five statements corresponding to each particular style, and calculating the average score.

Cronbach's alpha coefficients provided internal consistency and reliability for each of the 13 subscales. Table 9.3 shows the styles and the relevant alpha scores. Alpha coefficients ranged from .42 (Monarchic) to .79 (Conservative) with a median of .69 (Judicial). Past studies using TSI have achieved similar reliability with alpha coefficients ranging from .44 to .78 (Zhang & Sternberg 1998), and .55 to .78 (Zhang 2005). Lowest alphas were predominantly for the Monarchic style, as was also the case in this study. Only five of the thinking style subscales in the current study achieved alphas greater than 70.

Table 9.3 Alpha coefficients for 13 thinking styles

TSI	Item Numbers	Zhang & Sternberg 1998	Zhang 2005	Current study 2006
Legislative	5, 10, 14, 32, 49	.71	.78	.71
Executive	8, 11, 12, 31, 39	.64	.60	.72
Judicial	20, 23, 42, 51, 57	.71	.71	.69
Global	7, 18, 38, 48, 61	.58	.70	.52
Local	1, 6, 24, 44, 62	.43	.69	.59
Liberal	45, 53, 58, 64, 65	.78	.82	.70
Conservative	13, 22, 26, 28, 36	.68	.77	.79
Hierarchic	4, 19, 33, 25, 56	.74	.77	.66
Monarchic	2, 43, 50, 54, 60	.46	.68	.42
Oligarchic	27, 29, 30, 52, 59	.63	.71	.71
Anarchic	16, 21, 35, 40, 47	.43	.55	.60
Internal	9, 15, 37, 55, 63	.78	.75	.68
External	3, 17, 34, 41, 46	.73	.71	.72

9.8 Ethics

The University of Stirling Nursing and Midwifery Departmental Research Ethics Committee approved the second stage of this study on 27 September 2005. Application was made to the Central Office for Research Ethics Committees (COREC), and reviewed by the Tayside Research Ethics Committee. This application was approved on 21 October 2005. Honorary contracts were secured, and studies registered with the local Research and Development office in both Fife and Tayside prior to commencing the study. All corresponding ethics documentation is located in Appendix 19.

9.9 Data analysis

Completed questionnaires were analysed using the Statistical Package for Social Scientists (SPSS) Version 12. Univariate analysis provided descriptive statistical information by exploring frequencies and distributions, means and medians, and

graphical information. Data were examined for the presence of outliers or extreme values and the presence of any skewed distributions. The study was initially designed to have a power of 80% to find a difference of at least one standard deviation. However, as the results were not normally distributed, and not transformed to normality, non-parametric statistical tests were employed, and so the achieved power will be smaller. An independent t-test was used to compare the mean emotionality scores for the two vignettes. Mann-Whitney tests were used to compare differences between surgical and gynaecology nurses, and between nurses with more or less than ten years nursing experience. Kruskal-Wallis statistic was used to test differences between the three subgroups of nurse according to grade (C-D, E, F-G). Inter scale and bivariate correlation analysis identified associations or relationships between personality and thinking styles, and between each of the styles with the emotionality scores obtained from priority rankings. Spearman rather than a Pearson test was used since data were non-parametric.

Owing to the poor questionnaire response, factorial and regression analysis were not used. The number of participants did not meet the minimum requirements (n=100) necessary for conducting such analyses (Munro 2001). Consequently, a careful examination of the factors identified in other studies of thinking styles research showed a moderate to high degree of consistency in the styles associated with each of the factors, and in the number of factors produced (n= 4-5). Using the results from a similarly designed study (Fjell & Walhovd 2004) using thinking measures on a sample which included hospital employees, the factors affecting outcome were identified a priori and their outcomes within the current study, examined.

Table 9.4. Five factors as identified by Fjell and Walhovd (2004)

Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Judicial Hierachic Liberal Legislative	Executive Conservative Monarchic	Anarchic Oligarchic	External Internal	Global Local

Table 9.4 describes these factors. These authors did not identify each factor by name. However, for the current study, the following thinking style descriptions associated with each of the five factors, as provided by the authors of the TSI (Sternberg & Wagner 1997), were used to interpret and identify those factors (Table 9.5).

Table 9.5. Identification of thinking style factors

Factors	Descriptions	Typology
1. Judicial	Like to evaluate others, are opinionated, critical	<i>'Leadership'</i>
Hierarchic	Natural ability to prioritise but do not always prioritise goals of organisation	
Liberal	Likes ambiguity and change	
Legislative	Likes to make own rules, decide own work	
2. Executive	Likes structured and ordered work, problem-solving, following rules	<i>'Work-focused'</i>
Conservative	Traditional approach, likes routine and stability or familiarity	
Monarchic	Single-minded, driven, focused on one task at a time	
3. Anarchic	Dislikes rigidity, takes a random approach to tasks	<i>'Prevaricator'</i>
Oligarchic	Likes multi-tasking, but has difficulty deciding priority of conflicting goals	
4. External	Extroverts, people-oriented, cooperative workers	<i>'People-Centred'</i>
Internal	Introverts, task-oriented, less comfortable socially	
5. Global	Doesn't like details	<i>'Wholistic'</i>
Local	Likes details but can occasionally ignore small details	

9.10 Questionnaire response

Nurses were given four weeks to return the questionnaire. It was originally intended that, after taking into account responses arising from reminder letters, all the completed questionnaires received by the end of a six-week period would form the final sample of nurses. However, after four weeks only eleven questionnaires were returned. Follow-up

telephone calls were made to the nurse in charge of each individual ward in the study. Because of the poor response, the researcher made a personal visit to each ward to distribute questionnaires. This generated a further twenty responses, giving a final total of only 31 returned questionnaires (Table 9.6).

Table 9.6 Distribution of questionnaire

Location	Gynaecology		Surgical	
	<i>Distributed</i>	<i>Returned</i>	<i>Distributed</i>	<i>Returned</i>
Fife	18	10	74	8
Tayside	22	7	104	6
Totals	40	17	178	14

The questionnaire therefore yielded a dismal overall response rate (n=14%). There appeared to be various explanations for this lack of response. Firstly, during the final collection of questionnaires from participating wards, the Tayside-based nurses on duty reported this was only one of three or more other studies in which they had been invited to participate at that time. Furthermore, one of these studies reportedly originated from their local university nursing department, to which nurses felt obligated to give priority. Thirdly, the fact that questionnaires were distributed in the months immediately preceding the Christmas holiday period in December, may have had an influence on the time nurses felt they had to commit to the questionnaire. In hindsight, response may have been linked to the use of a volunteer sample meaning there is also the possibility that nurses simply had no motivation or desire to participate in the study in which case a low response rate should have been given more consideration. In any study being undertaken as part of an academic qualification, and limited by time constraints, it is not always possible to delay data collection, as was also the case in this study. However, the impact this may have on the transferability and validity of the study is recognised.

9.10.1 Missing data

All except one of the returned questionnaires were fully completed. This particular individual completed the personality and thinking styles measures in Sections 2 and 4, but left the vignette section unmarked. For this reason, results were tallied with missing values excluded, and where excluded by substituting the means in the cells containing missing values. On comparison as there was very little difference in the results obtained, all subsequent analyses excluded the substituted scores.

9.11 Results

This section first presents descriptions of work-related variables from the introductory demographic section of the questionnaire. This is followed by the findings from the priority-setting vignette exercise to allow links with the other measures in this study to emerge in a logical sequence. As previously, the priority setting process is discussed in terms of Hendry's macro- and micro-level representation. Lastly, results from both personality and thinking style data are presented in conjunction with nurses' emotionality in priority setting.

9.11.1 Professional characteristics

9.11.1.1 Number of Years in current post

Table 9.7 Number of years in current post

Number of years in current post	Original frequency	Frequency after recoding of data
0—1	1	n=12 (39%)
2—5	6	
6—9	5	
>10	19	n=19 (61%)

Data were skewed towards those with over ten years experience working in the same ward. Recoding of categories resulted in two categories, those with less than ten years (0—1, 2—5, 6—9) and those with over ten years experience. This recoding approximates with Gilhooly (1990), who suggested it may take up to ten years to become experienced enough to be considered an expert in a relevant domain.

9.11.1.2 Current role or pay scale grading

Once again, data were skewed, with more C/D grade (n=11) and E grades (n=12) than senior nurses on F (n=4) and G (n=4) grades. Data for grades F and G were combined (n=8) to reduce the overall number of categories to three.

9.11.1.3 Experience and knowledge

When asked what other areas of nursing nurses had worked in since initial entry to the nursing register, ten nurses reported working in the same area since qualifying, eight nurses reported working in one other area, and nine nurses in two areas. Only four nurses had worked in three or more different types of ward.

Similarly, 72% (n=22) of nurses reported they were not in possession of additional professional qualifications, other than initial nurse registration. Fewer than 28 % (n=9) had two or more additional qualifications.

9.12 Priority setting exercise

Participants' rankings of the six hypothetical patients in each simulated caseload, one surgical (A) and one gynaecology vignette (B) are presented here (macro-level). This is followed by the same nurses' rankings for the order of tasks to be performed for each of the patients in the two vignettes (micro level). Nurses prioritised six surgical vignettes and six gynaecology vignettes. A count was then performed of the number of times an emotional task was given priority. Participants were asked to prioritise tasks in order from one to six but not all provided a full ordered 'list' of priorities. Taking the number of priorities completed in all questionnaires at least

the first three priorities could be accounted for. The overwhelming majority of nurses gave priority to a physical rather than an emotional aspect. Analysis of priorities therefore included the first three priorities ranked in order of importance or urgency by nurses. Thereafter a count was obtained for both the (a) first priority and (b) the first three, out of the six priorities (Table 9.8). Scores for each nurse were then related to other personality and thinking style measures.

Table 9.8 Summary of nurses' priority setting in relation to physical and emotional elements

Nurse ID	Nurse Scores for prioritising by 'Emotionality'			
	Vignette A- <i>surgical cases</i>		Vignette B- <i>gynaecology cases</i>	
	First priority Patients 1,3 5	First 3 priorities Patients 1, 3, 5	First priority Patients 4,5,6	First 3 priorities Patients 4, 5 ,6
1	0	0	0	3
2	0	2	0	2
3	1	2	0	3
4	2	4	1	2
5	1	2	2	3
6	0	1	1	1
7	2	4	1	3
8	0	0	0	1
9	2	1	0	1
10	1	1	0	2
11	1	2	0	1
12	0	1	0	2
13	0	0	0	3
14	0	0	0	0
15	1	2	0	0
16	1	2	0	3
17	1	1	0	4
18	1	1	0	0
19	0	0	0	3
21	0	0	0	1
22	0	1	0	1
23	0	1	0	3
24	1	2	2	2
25	1	2	2	3
26	1	1	2	2
27	1	2	0	2
28	0	1	0	3
29	0	3	0	3
30	0	0	0	3
31	0	1	0	3

9.12.1 Macro level priorities:

In Vignette A, the caseload of surgical patient cases, 23 out of the 31 nurses (75%) ranked the post-operative major surgery patient (case five) as their number one priority. In Vignette B, the caseload of gynaecology patient cases, there was less consistency of response. Rather than one patient being ranked highest by the majority, nurses assigned highest priority to two patients, case 4, the post-operative major patient (n= 10 nurses) and case 6, the MTOP patient (n= 12 nurses). As there was some lack of consistency or agreement among nurses regarding the order of priority for patients, the median ranked priority was calculated for each of the two vignettes (Table 9.9):

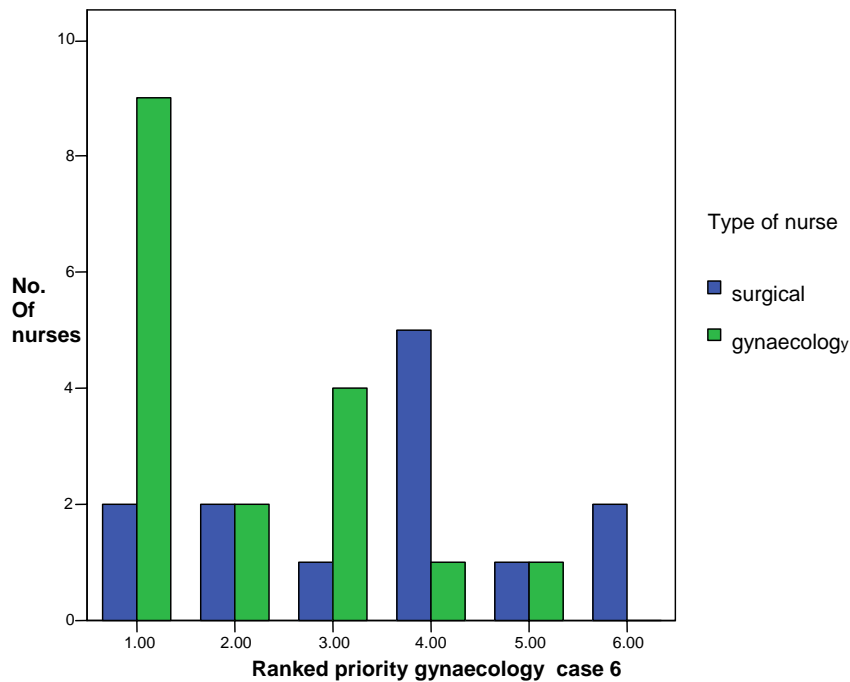
Table 9.9 Nurses' median priority in rankings of surgical and gynaecology patients

Median priority	Vignette A						Vignette B					
	By surgical patient case						By gynaecology patient case					
	1	2	3	4	5	6	1	2	3	4	5	6
All nurses	4.5	4	3	4	1	3	3	5	3	2	4	2.5
Surgical nurses	4	5	4	4	1	3	3	5	3	2	4	4
Gynae nurses	5	4	3	4	1	3	4	5	4	2	5	1

Using an SPSS filter to split the sample according to the type of ward to which they belonged, there were interesting findings. For the surgical vignettes, there was no real difference since the majority of both gynaecology and surgical ward nurses chose first post-operative day surgical patient (Vignette A, number 5) as their number one priority. This is clearly illustrated in Table 9.9. However, nurses' priority setting was less consistent for the gynaecology vignettes. Surgical nurses, as they did for surgical patients, also ranked the first day post-operative gynaecology patient (Vignette B, number 4) as top priority. Gynaecology nurses, ranked this

patient a close second to one of the MTOP patients (Vignette B, number 6) as illustrated in Figure 9.4.

Figure 9.4 Nurses' ranked order of priority: gynaecology patient (case 6 Vignette B)



9.12.2 Micro level priorities: considering 'emotionality'

Having established which of the patients in the two vignettes were given the highest priority, the same approach was taken concerning the rankings for the tasks associated with each of the patients. Each individual nurse's 'emotionality' score was determined as previously mentioned (Table 9.8). The mean emotionality score for both vignettes was explored in relation to how different subgroups of nurses performed on this exercise. Table 9.10 provides descriptive statistics for nurses working in gynaecology and surgical wards, and for nurses with less or more than 10 years nursing experience, as well as results of a parametric t-test to compare mean scores for each of the two subgroups of nurses.

Table 9.10 T-Test results by type of ward nurse and experience

Emotionality	N	Mean	SD	t	df	2-tailed Sig (<i>p</i>)
Vignette A (surgical)						
Surgical nurses	14	1.07	1.18	-1.129	29	.269 (<i>NS</i>)
Gynaecology nurses	17	1.52	1.00			
< 10 yrs experience	12	1.54	1.07	.804	29	.428 (<i>NS</i>)
> 10 yrs experience	19	1.21	1.29			
Vignette B (gynaecology)						
Surgical nurses	14	1.53	1.39	-2.172	29	.038*
Gynaecology nurses	17	2.41	1.18			
< 10 yrs experience	12	2.18	1.07	.527	29	.602 (<i>NS</i>)
> 10 yrs experience	19	1.94	1.22			

Those with less experience scored higher in both vignettes than experienced nurses although this did not prove to be of statistical significance. Only one significant result was obtained. Nurses who worked in gynaecology wards scored higher than did those from surgical wards, on both Vignette A and B. However, only Vignette B proved to be statistically significant for emotionality ($p=0.038$). Nurses from gynaecology ranked emotional aspects of care higher for both patients in Vignette A and B, whereas surgical nurses only ranked emotional care higher for Vignette A. As none of the analyses involving vignette A returned any significant values in terms of priority setting, a decision was made to focus only on the gynaecology caseload (Vignette B) in subsequent analyses.

9.12.2.1 The thinking styles of nurses

The five thinking ‘types’ demonstrated in the study by Fjell & Walhovd (2004) were used as a means of data reduction as described in Section 9.4. Means and standard deviations for each of these five ‘types’ is illustrated in Table 9.11, for the

whole sample, and for subgroups determined by type of ward nurse and level of nursing experience.

Table 9.11 Descriptive statistics for the five identified thinking style constructs

Nurse Sub-groups	Values	Factor 1 <i>Leadership</i>	Factor 2 <i>Work-focused</i>	Factor 3 <i>Prevaricator</i>	Factor 4 <i>People-centred</i>	Factor 5 <i>Wholistic</i>
All nurses N= 31	Mean	17.9	12.7	8.3	8.9	7.4
	SD	2.64	2.33	1.30	1.43	1.33
Gynaecology nurses	Mean	18.0	13.4	8.6	9.3	7.6
	SD	2.48	2.02	1.38	1.19	1.43
Surgical nurses	Mean	17.7	11.9	8.0	8.6	7.1
	SD	2.91	2.48	1.13	1.63	1.21
< 10 yrs Experience	Mean	16.9	12.0	8.3	8.3	7.2
	SD	2.76	1.90	1.00	1.24	0.92
> 10 yrs Experience	Mean	18.5	13.2	8.4	9.4	7.4
	SD	2.43	2.50	1.48	1.40	1.55

A Mann-Whitney test was performed for these five thinking style types firstly by the kind of ward nurses worked in, and secondly, according to level of nursing experience. No significant differences were found on any of these five factors between gynaecology and surgical ward nurses. Only Factor 4- the People Centred thinking type (external and internal thinking styles), demonstrated statistical significance between nurses with more or less experience (mean ranks 16.39, 15.38, $U= 65.5$, $p=0.048$). The Kruskal-Wallis test used to examine differences among nurses according to three professional grading categories (C/D, E, F/G), failed to return any significant differences

9.12.2.2 The relationship between nurses' thinking style profiles and personality

Bivariate correlation explored possible associations between these five thinking 'types' and the five personality traits. Only four correlations were identified as

significant. From Table 9.12, it is evident that only two of the five personality traits correlated with any of the five thinking style factors, these being the ‘Openness to experience’ and ‘Conscientiousness’ dimensions of personality. The Openness personality factor correlated with only one factor, the Leadership type, while the Conscientiousness trait correlated with three factors, those being the Work-focused, Prevaricator, and People-centred types, but not with the Wholistic type.

Table 9.12 Significant correlations between 5 thinking style and 5 personality types

	F1 Leadership	F2 Work-focused	F3 Prevaricator	F4 People-centred	F5 Wholistic
O	$r = .381$ $p = .034$				
C		$r = .432$ $p = .015$	$r = .420$ $p = .019$	$r = .422$ $p = .018$	

Correlations between thinking styles and personality factors in the current study were compared to those of Fjell and Walhovd’s study (Table 9.13). Correlations with values greater than 0.3 were interpreted as meaningful, since it was recognised that as a small sample, some correlations of moderate size may not have returned statistically significant values, when in fact they might well have, had a larger sample been involved.

Table 9.13 Comparison of correlation coefficients by study

* p= <0.05 ** p= < 0.01	A= Current study B= Fjell & Walhovd (2004)	N	E	O	A	C	
	Leadership	A	-0.28	0.28	0.38*	-0.30	0.35
		B	0.28*	0.28*	0.16	-0.35**	0.33**
	Work-focused	A	0.00*	0.04	-0.17	-0.01	0.01*
		B	-0.04	-0.19*	-0.35**	-0.04	-0.04
	People-centred	A	-0.26	0.17	0.20	-0.01	0.42*
		B	0.10	0.14	0.18	-0.04	-0.29*
	Prevaricator	A	0.03	0.20	0.21	0.41	0.42*
		B	0.00	-0.30**	0.02	-0.45**	0.02
	Wholistic	A	0.20	0.12	0.16	0.00	0.14
		B	-0.01	0.06	0.11	-0.04	-0.14

The overall pattern of the data in Table 9.13 is similar, although four correlations between items in this study and those of Fjell and Walhovd, differed by ± 0.20 . This can be explained by the differences between the small sample used in this study, and the sample of around 100 nurses used by the above authors. The majority of correlations reported in Table 9.13 for the current study (row A) were in a positive direction, where individuals high in any of the identified thinking styles were associated with high levels of the personality traits, and low scores on thinking style with low levels of personality traits.

Correlation analysis was once again used to establish relationships between the five thinking types (Leadership, Work-focused, Prevaricator, People-centred and Wholistic) and nurses' 'emotionality' in relation to vignettes. Figure 9.5 shows factor three, the 'Prevaricator' thinking type, was the only construct not to produce any significant correlations, positive or negative with emotionality. The Leadership type produced a coefficient value on the border of statistical significance ($p=.050$).

Table 9.14 Bivariate correlations: TSI, NEO-FFI and 'emotionality

Bivariate correlations of internal constructs	Prioritising by emotionality		
	Spearman co-efficient	Significance 2-tailed	Significance 1-tailed
TSI			
Leadership	.355*	.050	.025
Work-focused	.358*	.048	.024
Prevaricator	.321	.079	.039 (NS)
People-centred	.364*	.044	.022
Wholist	.447**	.012	.006**
NEO-FI			
Neuroticism	.152	.416	.208 (NS)
Extraversion	.213	.093	.125 (NS)
Openness	.227	.219	.109 (NS)
Agreeableness	.202	.276	.138 (NS)
Conscientiousness	.421*	.018	.009**

9.12.2.3 The relationship between nurses' personality and priority setting

From the correlation matrix of these variables, only one of the five factors of personality (N, E, O, A, C), was significantly associated with the nurses' emotionality scores. No significant relationship was found between emotionality and Neuroticism, Openness to experience, Agreeableness, or Extraversion. Only the Conscientious personality trait was found to have a relationship with emotionality in judgement decisions (Spearman coefficient 0.421, $p=0.018$). This relationship was also positive indicating individuals who give higher priority to emotional tasks also tended to be high in Conscientiousness. Once again, the alternative interpretation is that low scores on Emotionality (and thus high physical task priorities), were associated with low Conscientious personality.

9.12.3 Discussion of questionnaire results

9.12.3.1 Key findings

It was hypothesised that different nurses would prioritise their caseloads in different ways, depending upon their personality traits and style of thinking about alternative patients and tasks. Gynaecology nurses were suggested in Stage 1 to focus more on the emotional aspects associated with patient care in comparison with nurses from other surgical wards, when making decisions about priority. Nurses from gynaecology wards assessed more emotional tasks than surgical nurses when making decisions about priorities, and this difference was shown to be statistically significant. When looking at nurses' scores based only on the patient or task ranked as highest priority, most nurses similarly ranked physical elements of care, especially pain and vital signs. Significant relationships were also found between nurses' use of emotionality in decision making and four out of the five thinking style types. Nursing experience was demonstrated to have a significant relationship with the People-centred thinking type, but not with emotionality or priority setting.

There was both consistency and inconsistency in the priority-setting exercise, which showed gynaecology nurses to give higher priority to emotional aspects of care and patients with emotional needs, than did surgical nurses. The first two hypotheses were therefore proven. For the priority-setting exercise, most but not all surgical nurses gave highest ranking to first-day post-operative patients. When it came to deciding the priority of post-operative patients relative to MTOP cases however, this seemed to cause them a problem. The majority of gynaecology nurses tended to rank the post-operative patient as secondary to the patient having a MTOP. This

suggests surgical nurses might have had difficulty in deciding relative priority between physical and emotional tasks.

The majority of surgical nurses gave very little priority to patients or tasks which involved emotional elements of care. However, on the occasions where surgical nurses did rank an emotional task as a priority they ranked surgical cases rather than gynaecology cases. This was highly suggestive of domain-specific decision making behaviour (Thompson & Dowding 2001). Gynaecology nurses however, tended to give higher ranking not only to emotional patient conditions with which they were familiar (Vignette B cases), but also to those with whom they were unfamiliar (Vignette A cases). Hypothetically, if emotional care or physical surgical interventions were truly domain specific, gynaecology nurses ought to have ranked only gynaecology cases as surgical nurses did. The fact that they ranked emotional tasks associated with patient conditions in both surgical and gynaecology vignettes suggests there are two possible explanations. Firstly, it may be that gynaecology nurses, like surgical nurses, had experience and knowledge of the basic or advanced pre- and post-operative regimes of care that surgical nurses may be unlikely to have had concerning MTOP procedures. As such, surgical nurses may simply have underestimated the importance of the emotional care in such cases.

Secondly, it may be that nurses who prioritised emotional aspects more often were predisposed towards people or tasks requiring emotional involvement. There is another third possibility, which although tentative, proposes that since gynaecology nurses differed significantly in the use of emotionality from surgical nurses, it could

be argued they are more likely to be attracted to nursing specialities that ‘fit’ with their own preferences. This is not entirely unthinkable since research has demonstrated this person-environmental ‘fit’ with other internal constructs identified by the literature as closely intertwined with personality, these being cognitive (Furnham 1992, McCutcheon & Pincombe 2001) and thinking styles (Sternberg 1997). A recent cross-cultural investigation of relationships between personality traits and work values lends evidence in support of this hypothesis (Furnham et al 2005).

Emotionality in decision making was unrelated to work-related variables such as length of nursing experience or grade, indicating other factors may be responsible for exerting an influence on priority setting. When correlated with the five thinking profiles only the prevaricator type (Oligarchic, Anarchic) had a non-significant relationship with emotionality. Oligarchic and Anarchic styles as ‘forms’ of mental self-government, are directly associated with priority setting through the ordering or sequencing of tasks. However, in combination, these particular styles are concerned with indecision in prioritising, or not setting priorities at all but taking an opportunistic and reactive approach. This hardly describes how a nurse that needs to help vulnerable patients takes ‘control’ during an emotional procedure such as TOP. Conversely, it should not be dismissed entirely since this could also suggest dealing with the fragility and uncertainty of a woman’s emotions during such a procedure may mean it is not possible to plan when support is needed, and may lead to a nurse’s preference for a reactive approach.

Although the Leadership type (legislative, liberal, judicial, hierarchic) yielded a value on the border of statistical significance, its clinical significance and relationship with emotionality was still considered since this may have been important. This particular thinking construct, concerned with norm-favouring styles emphasising structured work, strict codes or rules of task engagement, and evaluation, does not at first appear to correspond with emotional work. One would expect emotionality to conflict with the norms associated with the highly structured regimes of care associated with pre- and post-operative nursing tasks. However, given deeper consideration, nurses interviewed in the preceding study considered emotionality as a ‘norm’ of gynaecology nursing practice, especially when caring for certain types of patient, such as those women having MTOP. Based on this evidence, it appears to be the case that nurses tended to give higher priority to emotional issues where this was a norm of their area of clinical practice (especially the nurse-led gynaecology ward).

There was also a significant association between emotionality and the Wholistic type (global, local styles). The global thinking style is concerned with seeing the bigger picture. In terms of emotional tasks or situations, both are important in gynaecology nursing, since to be able to deal effectively may rely (a) on the nurse’s ability and awareness of not only the procedural and physiological facts surrounding TOP, but also (b) the wider social, psychological, and clinical significance. Gynaecology nurses interviewed in the first study spoke of their concerns in helping the patient to decide on the most appropriate form of TOP for them personally, as well as the side effects or wider impact of their predicament (such as the risks of

failing to consider a more suitable contraceptive, or the psychological impact from seeing the foetus that they have chosen to abort).

Nurses with a 'People-centred' thinking type (high internal and external styles) and a conscientious personality ($p=0.018$), showed an association with those who ranked emotional tasks higher than physical tasks in nursing situations. Individuals with internal and external styles, by virtue of the fact they are both people *and* task-oriented individuals, and have a strong sense of purpose, responsibility and duty, are suggested to be ideal qualities for effective priority setting in nursing, at least where emotional tasks or situations are involved. One may presume individuals with this thinking-style profile perhaps give added value in situations where emotional issues need addressed. This suggests that this style may be associated with specific features of gynaecology tasks and nursing interventions. However, it may also be the case that such an individual might feel more tension or possibly frustration should they not be able to attend to a patient's emotional needs because of other more pressing physical ones, and obligation to the organisation should have precedence. The design of this study means this view cannot be supported.

Nurses who gave more priority status to emotional aspects were significantly related to higher conservative, monarchic, and executive thinking styles (Work-focused profile). Those nurses lowest on emotionality were related to low legislative, judicial and global styles (Leadership). Having a natural predisposition to the use of emotionality in decision making may therefore be predominant in nurses who prefer familiarity of tasks, allowing them to focus on solving problems. Those with little or

no emotionality preferred to make their own decisions, to judge others' work, liked ambiguity but disliked detail.

The thinking types identified in this study appear to be closely linked in conceptual terms with nurses grouped by personality characteristics and behaviour in the study by Sand (2003). It is even more interesting that the 'Wholist' thinking type appears neither in the study by Sand (2003), nor in the current study where emotionality was correlated with the five factors of personality (Table 7.16). It is possible to argue this particular personality and thinking type might be redundant in terms of using emotionality in the priority-setting process. This may be useful for future research.

<u>Sand (2003)</u>	<u>Current study</u>
<i>'empathy'</i>	→ <i>'people-centred'</i>
<i>'discomfort-prone'</i>	→ <i>'prevaricator'</i>
<i>'service-minded'</i>	→ <i>'work-focused'</i>
<i>'dominant'</i>	→ <i>'Leadership'</i>

Characteristics of personality in this study also correlated with thinking types. Only two of the five personality traits proved to be significantly correlated to any of the thinking types. Leadership thinking types, who prefer to make their own decisions and control their own work and that of others, correlated with the trait of Openness to experience. Since people with an open personality like situations or tasks involving a challenge, this result is only to be expected. However, this is a cautious interpretation since the Openness trait had a low alpha coefficient (0.36). This means this particular item may not have been measuring openness but something else.

Conscientiousness was associated with Work-focused, Prevaricator, and People-centred types but not Pragmatist or Leadership types. Conscientious individuals are diligent and meticulous, who think before acting and like to plan their work accordingly to achieve outcomes. This being the case, the relationship of Conscientiousness with a preference for structure and individuals who are ‘driven’ to achieve or perform (Work-focused), a preference for any random or multitasking strategy that will achieve the desired outcome (Prevaricator), but not with individuals who are perhaps impatient and not willing to work on one task at a time (Leadership), offers reasonable and logical explanation. The association between the Leadership style and Openness in this study agrees with the Type 1 thinking styles reported by Sternberg (1997) and Zhang (2002), but not with Type 2, meaning it may be a reliable indicator or predictor of this particular individual thinking style.

However, the fact that the People-centred thinking type had a significant association with Conscientiousness was an unexpected finding. If conscientious individuals are focused on getting on with the work, it perhaps makes little sense they would prefer to focus on emotional tasks or situations which might distract them from achieving goals, especially those connected with surgeons’ regimes. Conversely, since Conscientiousness was more evident in gynaecology than surgical nurses, it may be the case that where emotion work is a ‘norm’ of work and thus one of the main goals to be achieved, nurses would be expected to be equally diligent about emotional as any physical-related goals or outcomes at work.

9.12.4 Conclusions

The evidence presented in Study 2 suggests that thinking styles research is a useful tool in the exploration of nursing work, meaning it may be applicable to many more areas of nursing practice. Although there has been considerable debate surrounding whether or not personality traits can be predicted by a person's type of work, evidence from this study suggests the contrary. A nurse's attitudes, values and personality are very important since the majority of nursing work involves interpersonal relationships with many different categories of individual, ranging from ancillary staff, to colleagues and patients, and physicians or surgeons. It is therefore surprising there is not more exploration of personality in nursing research. In terms of priority setting, the exercise proved useful in exploring how nurses may determine priorities using information at handover report. This was crucial in the identification of those aspects of patient care and task interventions that appear to be mainly responsible for influencing the priority-setting process in a different context. This study focused on the alternatives that nurses perceived as most important. In doing so, it perhaps missed the opportunity to also look at the factors which were perceived the least important, in other words the alternatives which are rejected rather than accepted. This may be worthy of further exploration in future research. One of the main limitations of this second study is the very small sample size. Further replication of this research on a much wider scale is therefore warranted to increase validity of results.

Chapter 10 Overall Discussion

10.0 Introduction

This thesis set out to explore the nature of nurses' priority setting in gynaecology wards, and to identify the external and internal factors influencing the priority-setting process. Using large-scale observations and interviews, and a cross-sectional survey of gynaecology and surgical nurses in different geographical areas of Scotland, the nature of gynaecology nurses' priority setting was revealed. The findings of both studies were structured using a framework based on information processing theory and the two-stage model of priority setting described by Hendry (2001). This study found that nurses in gynaecology emphasised the emotional or psychosocial aspects of care more than surgical nurses.

The focus of this research was to explore and investigate how nurses in different gynaecology settings prioritised a caseload of real and simulated patients, when this included MTOP patients and when it did not. In Study 1, the approach was threefold.

1. firstly, this examined nurses' priority setting in nurse-led and acute gynaecology wards when nurses' caseloads only included MTOP patients.
2. secondly, gynaecology nurses' caseloads that included non-MTOP patients in addition to MTOP patients.
3. finally, nurses with non-MTOP caseloads in acute gynaecology and acute surgical wards.

The second of the two studies examined whether individual differences in personality or thinking style could explain how nurses prioritised patients by the physical and emotional attributes associated with patient caseloads.

Study 1 found the information provided at the time of handover reports acted as a guide (mainly experienced nurses) or as a 'bible' (novice and less experienced nurses) for the initial determination of a nurse's priorities of patient care. Knowledge, the quality and amount of information, and personal skills and traits were perceived as important influencing factors.

Study 2 examined the use of handover information by presenting a simulated caseload to nurses and asking them to rank patients and patient tasks in the same order as they would typically do. Nurses' priority setting was then examined in relation to nurses' 'emotionality' and other personality traits and style of thinking for different patient or task situations. The two stages of Hendry's model are once again used to structure the presentation of the main findings.

10.1 Macro- and micro-level priority setting

Using the findings from both stages of this study it was possible to summarise certain key points associated with nurse's prioritisation decisions and strategies. These are illustrated in Table 10.0.

Table 10 Summary of nurses' key prioritising decisions and strategies

	Current Study			Hendry (2001)
Area of Focus	GYNAECOLOGY		SURGICAL	MEDICAL
	Acute	Nurse-led		
Handover report				
experienced	acts as 'guide'			
less experienced	acts as 'bible'			
Organisation of work				
experienced	Patient-centred (non-theatre days and with MTOP)	Patient-centred	Task-centred	Patient-centred
	Task-centred (theatre days and with non-MTOP)			
less experienced	Task-centred	Task-centred	Task-centred	Task-centred
Strategies				
Theatre days	(1) 'Urgency'			Not applicable
a	<i>pre-operative case</i>	<i>pre-operative case</i>	<i>pre-operative case</i>	
b	<i>post-op major case</i>	<i>medical TOP</i>	<i>post-op major case</i>	
c	<i>post-op minor case</i>	<i>post-op minor case</i>	<i>post-op minor case</i>	
(2) Impending deadlines				
a	<i>planned</i>	<i>planned</i>	<i>planned</i>	
b	<i>opportunistic</i>	<i>opportunistic</i>	<i>opportunistic</i>	
c	<i>planned</i>		<i>planned</i>	
Non-theatre days	(2) 'Time'			
a	<i>medical TOP</i>	<i>mid-late med TOP</i>	<i>post-op major</i>	
b	<i>post-op major</i>	<i>early medical TOP</i>	<i>terminally ill</i>	
c	<i>post-op minor</i>		<i>post-op minor</i>	
Anytime	(3) 'Complexity'			
1a	<i>complex ↔ simple</i>	<i>simple ↔ complex</i>	<i>complex ↔ simple</i>	<i>complex ↔ simple</i>
b	<i>simple ↔ complex</i>	<i>complex ↔ simple</i>	<i>simple ↔ complex</i>	<i>simple ↔ complex</i>
c	<i>equal = random</i>		<i>equal = random</i>	
2 a	<i>patient</i>	<i>patient</i>	<i>patient</i>	<i>condition</i>
b	<i>condition</i>	<i>task / intervention</i>	<i>task / intervention</i>	<i>task / intervention</i>
c	<i>task / intervention</i>		<i>condition</i>	<i>patient</i>
3 a	<i>task / intervention</i>	<i>task / intervention</i>	<i>task / intervention</i>	<i>task / intervention</i>
b	<i>patient</i>	<i>patient</i>	<i>patient</i>	<i>patient</i>
4 a	<i>Watchful waiting</i>	<i>Watchful waiting</i>	<i>Watchful waiting</i>	<i>Watchful waiting</i>
'Emotionality'				
High	●	●		
Mod	●		●	
Low				

As the first of Hendry's two-stage model of priority setting, in a real or simulated caseload, priorities were determined relative to each of the patients the nurse has responsibility for during her shift. Medical nurses and nursing students mainly prioritised in one of two ways; putting patient condition before task or intervention, or intervention before patient. Experienced nurses were more likely to base their prioritising according to a patient-centred approach, and novice nurses a task-centred strategy, although in exceptional circumstances (most notably when there were shortages of nurses) nurses of all levels of experience used a task-based prioritisation strategy. The current study found that in gynaecology wards, nurses favoured either a patient- or task-focused approach depending upon whether or not it was a week or weekend day suggesting the final choice of strategy was likely based on whether or not the nurse had patients going for, or returning from surgery on weekdays, and whether or not their caseload included any MTOP patients at weekends. A patient-centred strategy tended to be the norm at weekends based on nurses' perceptions of the time and emotional care involved with TOP patients, and a task-centred strategy was the norm during the week when, for the majority of the shift, the nurse spent time providing mainly physical interventions. These physical interventions were directly related to surgical pre- and post-operative regimes of care dictated by surgeons, and not, as suggested by Hendry's model, by diagnosis of symptoms. During week days, gynaecology nurses also had responsibility for other patients experiencing miscarriage of pregnancy or terminal cancer, who were reported as requiring both intensive physical and emotional care. Nurses perceived and experienced difficulty in prioritising between their needs and those of pre- and post-operative patients. This concurs with other studies that have reported similar tensions in gynaecology practice (McQueen 1997b, Bolton 2000), using the same

descriptor word ‘juggling’. Like the current study, these authors based their results on self-reports of nurses. However, as these studies were based in different parts of the country, it may increase confidence in the transferability of the findings to other contexts.

As one might expect, nurses mainly prioritised major complex surgical cases before simple, minor cases. However, this was not the case on actual operating days when minor patients were given attention according to the timing on the operation list. On such occasions, needs were determined by the routine operation list, and other patients were ‘slotted-in’ between dealing with theatre patients. Distinguishing between ‘urgent’ and ‘important’ needs in terms of prioritising was a common feature of gynaecology work. Nurses appeared flustered in adhering to the strict deadlines when preparing patients for theatre and in doing so, one nurse reported how she deliberately left a patient whom she personally thought had more genuine needs to take a patient to theatre, basing her decision on the perceived risks involved “*the doctor will shout at me while the patient won’t*” (Section 8.2: nurse 1E). Depending on the stage of a patient’s post-operative recovery, nurses appeared to weight priority according to the time since surgery. This helped to make their prioritising more efficient. One might assume that when less complexity and more time was involved, that nurses would be even more efficient. However, this did not appear to be the case, and many individual nurses attested to difficulty determining priority when patients or task were of equal status or importance, since there were no obvious disparities in condition, care or treatment upon which to judge importance. This corresponds with the findings of Hicks et al (2005), who found

nurses had difficulty deciding a plan of action when the task situation was neither complex or simple, and where neither analytic or intuitive strategies could be clearly useful.

Rather than having any planned priorities of care, some nurses in the first study resorted to routine basic activities, approaching patients in a systematic, regimented manner dealing with simple personal hygiene or medication needs. By and large, this is at odds with the individualised care paradigm which sees a nurse caring holistically for each patient as an individual person and not as a ‘just in time’ commodity (Wigens 1997).

Gynaecology and surgical nurses in this study often had demanding or difficult patients to care for, some with problematic social or psychiatric histories. Similar to nurses in Hendry’s study, demanding patients were often given highest priority in order to spend more time engaged in providing emotional care, or with theatre patients. Even if, as one ward manager explained, a patient is not liked personally, it is important to spend more time with them initially as a strategy for getting through all the goals that need to be achieved (Section 8.2, Nurse 4C). Given that providing emotional care and spending time with patients is normally associated with contemporary nursing practice (Mann 2004), this may explain why nurses in both Hendry’s study and the current study gave greater attention to problematic patients, which is contrary to seminal research on ‘unpopular’ patients as reported by Stockwell (1972, 2000). Further agreement was found with Hendry’s accounts of

setting priorities in that sometimes it appeared nurses had no prioritising strategy at all, preferring to work in a random fashion.

Some nurses preferred to exclude certain patients from their initial priority set, and adopted a 'wait and see what happens' approach. This tended to be the case when patients were nearing readiness for discharge, or when patients or situations were perceived as particularly difficult, complex or demanding by nurses. This is consistent with the literature on alternatives and decision making, where in situations of complexity there is an increased likelihood an individual will use intuition, reject negatively framed alternatives, and reduce the search and collection of information (e.g., Shafir 1993). In practice, this meant avoiding some patients or tasks. This appeared to be where subjectivity was involved, where during observation nurses appeared to prefer to attend to patients or tasks they knew better. In the case of nurses in the surgical wards, it was found to be more difficult to prioritise their care of medical boarding patients as they were unsure of their needs and medical treatments or equipment. They therefore gave priority to surgical patients whose needs they did know. Since boarding patients to wards outside the speciality they were being treated is an increasing trend and the source of much debate in healthcare, this practice may be a barrier to the quality of patient care and the effectiveness of a nurse's priority setting.

The majority of nurses gave priority to a physical intervention or task in the simulation exercise provided. Even although gynaecology nurses appeared to

prioritise emotional tasks more than surgical nurses, the first priority was generally given to a physical intervention. This does not mean they considered emotional issues any less, rather as one senior nurse reasoned, it is not possible to deal with a patient's emotional issues if they are in pain therefore the physical pain must always be dealt with before emotional pain (p 172). This was also found to be the case in medical nursing, since Hendry also described a senior student nurse who, in her verbal protocol, described giving high priority to tasks related to physical problems. Although his study found task-centred priority to be related to experienced nurses, this was not the case in the current study where priorities in surgical wards were first and foremost task-centred for senior, experienced *and* junior nurses.

10.2 External influencing factors

Once again, although different nursing specialities, there were many parallels between the two-stage model of priority setting and that of the current study's findings, most notably in terms of the influence of time, resources, and protocols or guidelines for certain pathways of care.

10.2.1 Time and resources

In Chapter 8, it was clear from the 31 nurses' own accounts that influencing external factors (such as lack of nursing staff, poor nurse-patient ratios and skill mix, or lack of time) were perceived to be largely responsible for their inability to achieve priorities. While the nurses in Hendry's study reported deadlines as having

a negative effect on priority setting, gynaecology nurses in this study had additional deadlines associated with planned surgery to incorporate into any decision making about priority. In addition, not only were there deadlines for surgical patients but deadlines for MTOP patients since a six-hour stay was expected to complete the termination process. During this time, a nurse had to gain the patient's trust, establish a bond, provide counselling and emotional support, and deal with the physical nature of the actual procedure. Nurses were observed to adopt strategies to deal with this. The experienced or senior nurses reasoned they would deal with a TOP patient first and then use a watchful waiting and frequent checks strategy to allow them to do tasks for other patients in between. This meant devoting time to the emotional care of women at the time when the expelling of the foetus was imminent, i.e., when the nurse was most needed. In the simulated exercises, the majority of gynaecology nurses also gave highest priority to one of the MTOP patients in their caseload, indicating this may be a common strategy, at least for this procedure.

Routine work associated with deadlines occasionally took priority over other physical or emotional work. Just as some patients were 'slotted in' among others, so was the case with certain tasks. Nurses took 'time out' to perform routine tasks for patients on a communal rather than individualised basis. For example, at specific times all patients systematically received medicines or had vital signs and wounds checked, regardless of whether other important tasks were perceived as needing to be attended to. This type of nurse behaviour has been the subject of many other studies, especially where nursing care is the phenomenon under investigation

(Bowers et al 1995, Idvall & Rooke 1998, Irurita & Williams 2001). Nurses in the current study appeared to have difficulty putting patients first where the tasks associated with surgeons' regimes or protocols of care tended to have strong influence upon any priorities. This often resulted in nurses attending to tasks or patients in an 'opportunistic' but fragmented manner, seeing to the needs of other patients in the passing, leading one to suggest individualised patient care may always be subservient to task allocation in surgical wards, at least on busy weekdays where theatre lists are electively planned and managed.

In terms of planned activity, these 'priorities' are consistent with arguments in healthcare concerning the existence of 'assembly line and conveyor belt' approaches regarding medical and nursing care (Wigens 1997). Staying with this analogy further, this 'just-in-time' production involves strategies such as balancing the flow of products through the system, coordinating each stage of progress through the line, but usually only involves repetitive tasks, to ensure optimal performance and reduce wastage. The parallels with surgical regimes of care based on the findings of the present study are obvious. 'Wasted time' was also a theme in other studies where in-depth examination of nursing care occurred (Waterworth 2003). In much the same way as goods on an assembly line, in conditions of 'lean staffing' it could be argued patients' priorities may have been accepted or rejected according to nurses' own importance beliefs, perceived time pressure and on the emotion and complexity associated with the task, patients involved, or both. Every individual patient differs in the number and complexity of their needs. Surgeons, acting as 'quality controllers', could be said to have dictated routines and deadlines

on nurses' behalf, acting as guides to prioritising. However, nurses appear to deal with this by anticipating times for interventions in accordance with surgeons' regimes but then controlling their own priorities in between. As such, both intentional and opportunistic elements of planning may be involved in the prioritising process.

10.2.2 Strategies

In the information and decision-making approaches to performance discussed throughout this thesis, different strategies are used to manage or cope with situations that vary in complexity or uncertainty. Gynaecology nurses in this study were no different. During reports nurses prepared paper scraps to jot down important information about patients which were then frequently used during the shift to reassess progress and evaluate priorities. Junior nurses tended to use the information provided by other nurses at the report as a 'bible' whereas the experienced nurses favoured a subjective as well as objective approach. Rather than rely on the information content, experienced nurses preferred to go into the ward and visually verify that the information matched that from the report. One very senior nurse was observed to instantly pick up on visual cues in this way by acting on experience rather than reports and immediately phoned a doctor to come and review the patient. Therefore priority setting is, as Castledine (2000) rightly warned (Section 1.1), an important nursing strategy partly responsible for the quality of any patient outcomes.

10.3 Internal influencing factors

10.3.1 Knowledge

Knowledge also appeared to be a major an influencing factor in setting priority in this study, as has also been the case in other studies (Offredy 1998, Hendry 2001). It is therefore suggested that having knowledge of the patient and the content of different tasks, the use of information derived from the handover report, ward rounds, and laboratory or other diagnostic tests, may singly or in combination, influence the priority that is given to patients in a nurse's care. For example, it was not simply knowledge of the patient's social and medical history, but also 'knowing the patient' in a holistic sense, 'knowing the task', 'knowing the time', and 'knowing one's limitations' that appeared to have had an important function in setting priority during ward observations of nurses.

10.3.2 Information processing

Overall, these findings suggested that how individual nurses processed information or made decisions about alternatives (patients or tasks) when setting priorities may have been be dependent on various dimensions in terms of:

1. How the patients or tasks were framed, for example, in terms of:
 - negativity
 - cleanliness
 - compliance
 - worth
 - desirability

2. How the following factors were perceived to have influence on a situation:

- time
- resources
- control or Autonomy
- consequences of perceived 'failure'

Using the previous analogy of a Just-in-Time (JIT) system (Beardwell & Holden 1997) to explain physical care interventions, the cognitions involved may be clarified. The routine of deadlines in nursing such as the time of operations, monitoring procedures, lunch breaks, doctors' ward rounds, or arrival of patients, appear to act as influencing factors. One author (Russ 1981) describes this in cognitive terms, demonstrating in her thesis how the 'arrival time' of certain information could be predicted and used to control or activate cognitive processing so that it became a more efficient processor of information. Could nurses predict in this way when theatre patients would need assistance? One wonders whether this process might be used to predict when the main priorities ought to occur and prioritise all other tasks relative to these. This may explain why priority setting appeared at times to be a random occurrence.

Cognitive control or preference was examined by measuring nurses' thinking styles in this study. These were context-specific to a certain degree since nurses' preferences were associated with the tasks specific to that speciality. For example gynaecology nurses tending to prioritise 'emotional' tasks more than surgical nurses. Individuals electing a 'Work-focused' style of thinking, and who prioritised emotional tasks tended to be low in conscientiousness. Similarly, the Leadership,

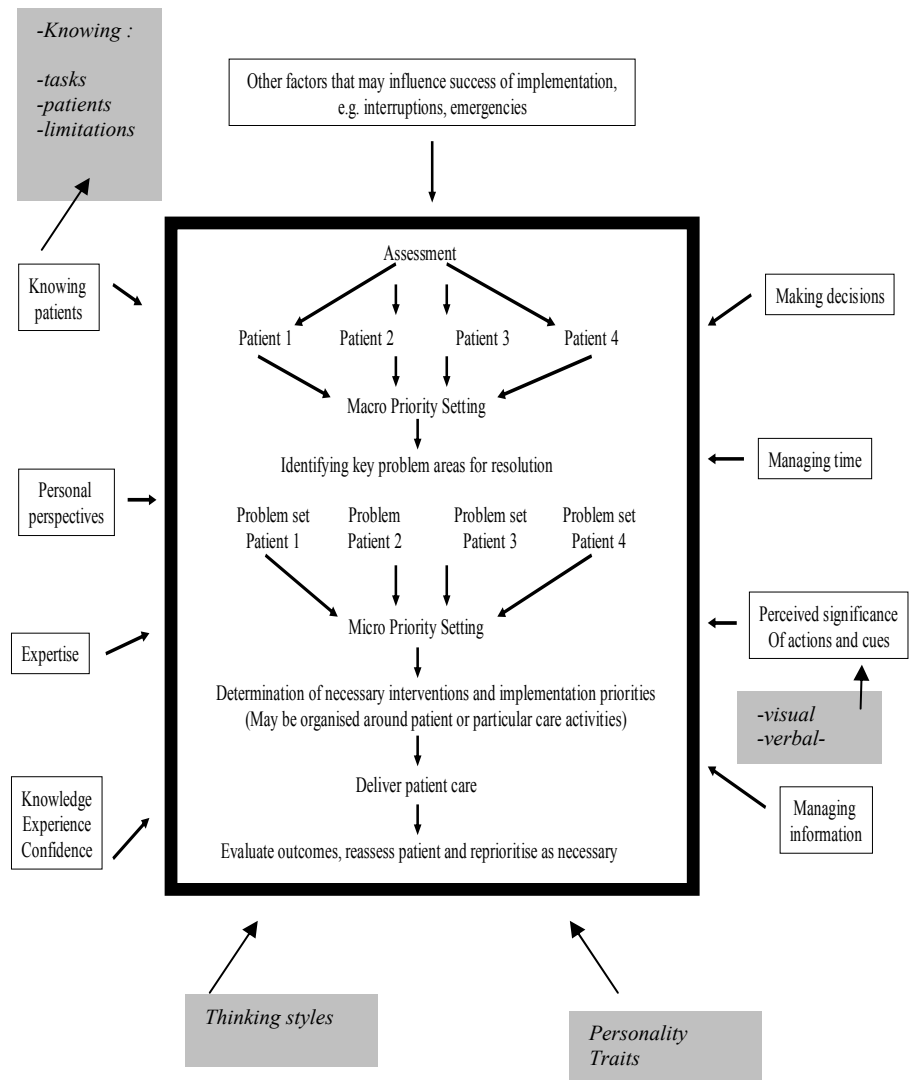
People-centred and Wholistic styles were associated with prioritising emotional tasks. This indicates that emotional work in surgical and gynaecology nursing is prioritised by those who prefer (a) structured tasks, rules *and* flexibility (b) extroverted *and* introverted personalities and (c) facts *and* wider detailed information search. Since conscientiousness correlated with four out of the five thinking types, this study demonstrates it to be a consistent dimension of personality as others have done previously (Witt 2002).

10.4 The two-stage model of priority setting in a different nursing context

Many of the factors that influenced medical nurses' priority setting in Hendry's model also seemed to influence nurses who worked in wards where surgical rather than medical treatments was the norm, including gynaecology. Hendry (2001) proposed the perceptions and values and knowledge of the nurse as key factors in the priority setting process. The same was true in the current study, where not only were nurses' values important but also their personality traits and cognitive-thinking styles. Whereas Hendry suggested nurses used different strategies to help them manage this process, the findings of this study suggest that nurses have preferred styles of thinking for certain types of task. Experienced nurses in the current study were identified as possibly more efficient at priority setting, using intuition more than novice nurses to assess information. In this respect, these findings are in agreement with the novice-expert differences in priority setting described by Hendry and others (e.g., Benner et al 1996). The current study identified the same major influencing factors and so Hendry's model could thus be considered as a good fit for priority setting in surgical as well as medical wards. However, there

were some exceptions. It is proposed that the nature of the task in gynaecology or surgical wards may influence priority setting, including physical or emotional, routine or non-routine tasks. Likewise, the cognitive-thinking style preferences of individuals may influence the kinds of task prioritised. These could all be incorporated into the 'other influencing factors' box within the model. Only one main criticism of this model remains, concerning the existence of feedback. In Hendry's model (Figure 3.1), the inner diagram represents a linear process from assessment through to evaluation of outcomes. The 'reassessment and reprioritising as necessary' component is suggestive of a feedback mechanism, although not explicit in the model. The current study identified how nurses reassess priorities both at specific time points during a shift, such as after ward rounds or tea breaks, and continually as other situations arise, such as emergency admissions, crises or interruptions. As such, nurses could be said to take both a reactive and proactive approach to priority setting. Intervening variables represented in the outer diagram can exert an influence at any point in the macro- and micro-level setting of priorities, prompting reassessment or evaluation at times other than those portrayed by the model. Figure 10 consists of a diagram which incorporates these findings into Hendry's original model (Figure 3.1), and alterations represented in the grey boxes.

Figure 10 Two-stage model of priority setting in surgical and gynaecology wards



10.5 Conclusions

The general hypothesis was that gynaecology nurses would focus on different aspects of care and use different information for priority setting in different ways from nurses in other specialities, because of the 'unique' nature and emotional content of gynaecology work. Although nurses in both types of ward cared for patients having surgery, it appears that gynaecology nursing may be indeed different because of the emotional content involved. While nurses move between patients of varying emotional and physical complexity, it may be the case that rather than nurses using strategies to help them cope, the adoption of a range of thinking styles in different patient situations may help them to address the demands associated with the different tasks and approaches required. Strategies may be used when a particular preferred style is not the most appropriate.

This study has achieved two accomplishments. Firstly, the Thinking Styles Inventory has been demonstrated as a useful tool in describing nurses' preferences for certain kinds of task, situations, and thus priority setting. Secondly, many of the thinking styles proposed in Sternberg's Theory of Mental Self-Government, and Costa and McCrae's five factors of personality, have been substantiated in this study. Cross-validation was accomplished through the use of several different tests of the same phenomenon or variables. The significant relationships found between the Thinking Style Types and personality traits, both in the computation of the zero-order and composite factor correlation matrices, appear to make logical sense in terms of describing nursing work. Very few surprising relationships were identified and most of the styles one would expect to relate to nursing work. However, what is

interesting is that while nurses in general share many common factors, there was evidence others were context-specific, indicating nurses working in gynaecology do emphasise the nature of tasks differently to their surgical counterparts. However, as thinking styles in particular are in part socialised, this too, is perhaps to be expected. Regarding the links between handover reports, priorities and planning, it appears nurses may choose to elect different strategies such as tactical (handover), operational (during her shift), or no strategy at all (opportunistic or random).

10.6 Limitations

Although this was a small study the results have shown how some aspects of this study should be interpreted with caution for several reasons. Firstly, the poor response rate resulted in a much smaller sample than was expected. Although power calculations indicated this sample was large enough for the different group comparisons, it was not large enough to meet the statistical assumptions for some of the tests such as factor analysis and regression. As a result of the small sample size this study can only therefore claim transferability rather than generalisability. Secondly, the measures used in this study were perhaps not the best for nurses, however there was no specific instrument available. Since this is the first time the TSI measure has been applied to a nurse-only sample frame, results are tentative rather than definitive. Participants in this study were also volunteers therefore one cannot rule out bias, whereby those who took part may have had particularly strong views on the phenomenon being investigated.

10.7 Implications for nursing

This study's findings have suggested priority setting may be context-specific, especially in wards where emotional tasks are a predominant feature of nurses' work, in acute but more so in nurse-led gynaecology wards. Although one would not expect personality traits to be specific to nurses in certain wards, it may be the case that nurses with certain personality traits and thinking styles gravitate towards working in clinical environments which appear to be best suited to these traits. Some gynaecology nurses who work in nurse-led wards may have self-selected into this context on the basis of their thinking styles and personality. These nurses were shown to provide largely emotional or psychosocial care and support to their patients in an environment in which the physical layout and flexibility in nurses' work patterns optimised patient experience and the nurse-patient relationship. Hiring or ensuring nurses have the appropriate 'fit' or can be trained to 'fit' clinical environments involving high emotions and emotionality of tasks has other wider implications since this may possibly serve to resolve personal or professional conflict or tension at work.

This also means there may be implications for nursing education. It makes sense that if a nurse works in a ward where her specific traits, skills and thinking styles are matched to context and activities, this may make for more effective priority setting and possibly be less stressful than in a ward where there is a mismatch. For students who are about to make the transition to trained staff nurse, knowing one's thinking style preferences, may help make the decision regarding which clinical environment to work in.

However, the possibility remains that knowing one's strengths and limitations as essential to making decisions about future career plans, as they are to setting priorities for patients for whose care a nurse is ultimately responsible. Although thinking styles may be only one of many other factors influencing priority setting, they may even, in an idealistic world, help ward managers to seek out nurses with the best possible 'fit' with the demands of the particular ward concerned.

10.8 Recommendations for future research

In order to validate these findings, this study requires to be replicated on a wider scale, to incorporate more nurses from a wider range of wards and hospitals. The evidence from this study would suggest that the importance of psycho-social and emotional factors in nurses' workload requires examined in more detail since there may be implications for nurses' training. For example, this would be beneficial in areas of nursing practice which focus on emotional work, such as gynaecology or oncology. This would also suggest that the care of women having a MTOP needs to be reassessed since the evidence suggests nurse-led care may provide the best choice for women. Individual and contextual differences, especially cognitive style needs examined in more detail to determine which aspects are most relevant to focus on in different contexts and settings. This would allow a comprehensive understanding of the role of context, thinking styles and the priority-setting process.

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APPENDICES

Appendix 1

Appendix 1: Search Strategy and Keyword

Search Terms	No. Hits	Database	Dates
<ul style="list-style-type: none"> ▪ Nursing and assessment ▪ Setting priorities ▪ Gynaecology ▪ Co-ordinat# care ▪ Nursing care and gynaecology ▪ Triage or assessment and priority or urgency and decisions ▪ Priority or urgency and decisions ▪ Ranking and problems or concerns ▪ Nursing and performance ▪ Triage assessment 	<p>206 48 1081 136 10 2 124 233 949 3859</p>	Webspirs	1990-2005
<ul style="list-style-type: none"> ▪ Task characteristics ▪ Clinical decision-making ▪ Task and clinical decision making ▪ Priorit# ▪ Information processing ▪ Management of care ▪ Decision and task or strategy ▪ Induced abortion or termination of pregnancy ▪ Nurs*and personality ▪ "personality traits" and nurse\$ 	<p>5 163 69 43 3870 87 115 22 1935 57</p>	Ovid	1986-2006
<ul style="list-style-type: none"> ▪ Triage nursing and assessment ▪ Priorities and decisions and performance ▪ Assessment and urgency ▪ Priority decisions ▪ Clinical reasoning ▪ Gynaecology and nursing care ▪ Alternatives and cognition 	<p>5 15 48 143 171 23 1888</p>	Ingenta	1997-2006
<ul style="list-style-type: none"> ▪ Priority-setting and nursing or patients and performance or task ▪ Priority-setting or priorities 	<p>87 10</p>	ASSIA (Applied Social Sciences Index and Abstracts)	1997-2006
<ul style="list-style-type: none"> ▪ Priorities ▪ Decision making ▪ Priorities and decision making ▪ Cognition and alternatives ▪ Clinical reasoning ▪ Decisions and emotion ▪ Personalit\$ and nurs\$ ▪ Personality and trait and nurse 	<p>2425 18447 85 156 171 182 25278 57</p>	PsychInfo	1995-2006
<ul style="list-style-type: none"> ▪ Induced abortion 	30	CAIRNS (Edinburgh University Library)	1990-2006
<ul style="list-style-type: none"> ▪ Induced abortion or termination of pregnancy 	184	Medline Cohrane Library	1990-2006
<ul style="list-style-type: none"> ▪ Termination of pregnancy ▪ Ward organisation ▪ Abortion 	<p>31 174 173</p>	British Nursing Index	1990-2006

Appendix 2

Royal College of Obstetricians and Gynaecologists (RCOG)

Guidelines for Induced Abortion (Organisations of Services)

- Abortion services should have local strategies in place for providing information to both women and healthcare professionals on the choices available within the service and on routes of access for the service.
- Any woman considering undergoing induced abortion should have access to clinical assessment
- Appropriate information and support should be available for those who consider, but do not proceed with, abortion.
- The earlier in pregnancy an abortion is performed, the lower the risk of complications. Services should therefore offer arrangements which minimise delay.
- Service arrangements should be such that:
 - Ideally, all women requesting abortion are offered an assessment within five days of referral.
 - As a minimum standard, all women requesting abortion are offered an appointment within two weeks of referral.
 - Ideally, all women can undergo the abortion within seven days of the decision to proceed being agreed.
 - As a minimum standard, no individual woman need wait longer than three weeks from her initial referral to the time of her abortion.
 - The assessment appointment should be within clinic time dedicated to women requesting abortion.
 - In the absence of specific medical, socials, or geographical contra-indications, induced abortion may be managed on a day-case basis.
 - An adequate number of staffed inpatient beds must be available for these women who are unsuitable for day-case care. In a typical abortion service, up to 10% of women will require in-patient care
- Access to services should be ensured for women with special needs
- As far as possible, women admitted for a termination should be cared for separately from other gynaecological patients

- Women having a second-trimester termination by medical means must be cared for by an appropriately experienced midwife or nurse. Ideally, they should have the privacy of a single room.
- Verbal advice must be supported by accurate, impartial printed information which the woman considering abortion can understand and may take away and read before the procedure.
- Information for women and professionals should emphasise the duty of confidentiality by which, as for any form of healthcare, all concerned with the provision of induced abortion are bound.
- Professionals providing abortion services should possess accurate knowledge about possible complications and sequelae of abortion. This will permit them to provide women with the information they need in order to give genuinely informed consent.
- After an abortion, women must be given a written account of the symptoms they may experience and a list of those that would make an urgent medical consultation necessary. Urgent clinical assessment and emergency gynaecological admission, must be available when necessary.

Appendix 3

Appendix : Observation Schedule

OBSERVATION SCHEDULE

Title: An investigation of the nature of clinical judgements and decision-making involved in the priority-setting of patient care by gynaecology nurses

Date

Time

Code

General description of background environment, staffing level and number of patients immediately prior to observation period

Appendix 4

Appendix : Observation Schedule

OBSERVATION SCHEDULE

Title: An investigation of the nature of clinical judgements and decision-making involved in the priority-setting of patient care by gynaecology nurses

Date

Time

Code

General description of background environment, staffing level and number of patients immediately prior to observation period

Appendix 5



**UNIVERSITY OF
STIRLING**

AEW/TI

12 January 2004

Audrey Morrison
Department of Nursing & Midwifery
University of Stirling
STIRLING
FK9 4LA

DEPARTMENT OF
NURSING AND MIDWIFERY

Professor Andrew Watterson
Chair, Dept Research Ethics Committee

University of Stirling
Stirling FK9 4LA
Scotland

Telephone: +44 (0) 1786 466340
Facsimile +44 (0) 1786 466333
E-mail: aew1@stir.ac.uk

Dear Audrey

An investigation of the nature of clinical judgements and decision-making involved in the priority-setting of patient care by gynaecology nurses: An exploratory study

Thank you for submitting your proposal, entitled as above, to the Departmental Research Ethics Committee on 5 January 2004. After further clarification I am pleased to advise you that the committee approved your proposal.

Many thanks

Andrew Watterson
Chair

Appendix 6

Audrey Morrison
Department of Nursing & Midwifery
University of Stirling
STIRLING
FK9 4LA

Date	20 April 2004
Your Ref	
Our Ref	GB/SB
Enquiries to	Sheena Baillie
Extension	8138
Direct Line	01592-648138
Fax No	01592-648060
Email	sheena.baillie@faht.scot.nhs.uk

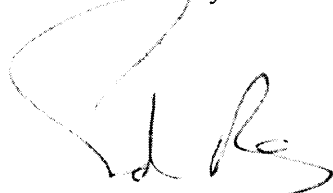
Dear Ms Morrison

Nurses decision-making in the patient care of termination of pregnancy

All submissions to Fife Local Research Ethics Committee contain a statement regarding "informing the relevant Medical Director about the proposed study". The reason is to ensure that there are no Clinical Governance issues for Fife Acute Hospitals (FAH) and to ensure also that the organisation is aware of what activity in terms of research and development is ongoing. Clearly some of such activity has resource implications for FAH and the Chief Scientist Office does expect us to inform them of these resource implications.

Having reviewed your documentation I am happy to approve this study on behalf of Fife Acute Hospitals subject to your being in receipt of an Honorary Contract.

Yours sincerely



GORDON BIRNIE
ACTING MEDICAL DIRECTOR

cc Mrs A Smit Fife Area Ethical Committee
Dr A Wood R & D Co-ordinator

Appendix 7

Personnel Department
Acute Services Division
NHS Tayside
Ninewells Hospital
Level 9
DUNDEE DD1 9SY
Telephone Number : (01382) 660111
Fax Number: (01382) 632098 or 496237
www.nhstayside.scot.nhs.uk

Ms Audrey Morrison
Balintore Cottage
67 Waggon Road
Brightons
FALKIRK
Stirlingshire
FK2 0EL

Date	08 December 2004
Your Ref	
Our Ref	PMcL/ve
Enquiries to	Vanessa Edgar
Extension	32578
Direct Line	01382 632578
Email	vanessa.y.edgar@tuht.scot.nhs.uk

Dear Ms Morrison

HONORARY HEALTH SERVICE APPOINTMENT AS A RESEARCH NURSE

I am writing on behalf of NHS Tayside (Acute Services Division) to offer you an Honorary Health Service appointment as a Research Nurse on the following terms and conditions:

1. This appointment is to NHS Tayside (Acute Services Division) and is effective from 16 August 2004 for a temporary period 3 months to 10 November 2004.
2. In the performance of any work you shall be responsible to Dr P Chien, Obstetrics and Gynaecology, Ninewells Hospital, during the course of your contract.
3. Whilst on NHS premises, you may become aware of information regarding Health Service Patients and may be party to information regarding Health Service Staff. This information must be handled with the strictest of confidence and must not be communicated to persons who do not require the information. Please sign the enclosed confidentiality statement (2 copies) and return one copy to myself, retaining the other copy for your own information.
4. This appointment will not include any payment of salary or expenses by NHS Tayside (Acute Services Division).
5. Whilst on NHS premises, you will be expected to conform to all NHS Tayside and Departmental policies.



Headquarters
Ninewells Hospital & Medical School, Dundee, DD1 9SY

Chairperson, Professor Jim McGoldrick
Chief Executive, Mr Gerry Marr
Tayside NHS Board is the common name of Tayside Health Board

A copy of this letter is enclosed, which you should sign in acceptance of the above conditions and return to me as soon as possible.

Yours sincerely

Patricia McLean

Patricia McLean
Employment Services Manager

Encs

I accept the conditions as detailed above

Signed *Audrey Williams* Date *30/01/05*

Audrey Morrison
Rm 3B158
Dept of Nursing & Midwifery
University of Stirling
STIRLING
FK9 4LA

Date 30 April 2004
Your Ref
Our Ref LM/HONAPPTAM/N,T&R
Enquiries to Louise Milne
Extension 8693
Direct Line
Fax No 01592 648088
Email louise.milne@faht.scot.nhs.uk

Dear Ms Morrison

**HONORARY APPOINTMENT
FIFE ACUTE HOSPITALS**

I am writing to offer you an Honorary (unpaid) research appointment within the Women & Childrens Directorate at Fife Acute Hospitals commencing 3 May 2004 for approximately 3 months in the first instance.

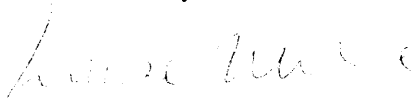
I can confirm that we have received a satisfactory occupational health report. I confirmed with Cath Cummings that a disclosure report was not necessary as you will not be alone with any patients.

During this appointment your supervisor will be Cath Cummings, Nursing & Midwifery Manager. Cath should arrange for you to be issued with an ID Badge on commencement of your appointment.

Your hours of work will be flexible to suit the needs of your project and should be agreed with your supervisor.

If you agree to accept this appointment on the terms set out above, please sign and date the pro forma on the attached copy letter and return to me as soon as possible.

Yours sincerely

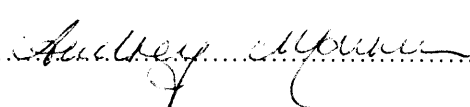


Louise Milne
Personnel Officer

DO NOT DETACH

PRO FORMA

I hereby accept the Honorary appointment offered to me by Fife Acute Hospitals on the terms set out above.

Signed  Date 5/5/04

✓

Appendix 8



**UNIVERSITY OF
STIRLING**

DEPARTMENT OF
NURSING AND MIDWIFERY

Department of Nursing and Midwifery
University of Stirling
Stirling
FK9 4LA
Scotland

Telephone: +44 (0)1786 466287
Facsimile: +44 (0)1786 466333

Date

Name of Consultant

Hospital Address

Title: Nurses' Decision-Making During Patient Care

I am involved in the above study and will be conducting part of my research in your area. In order to differentiate nursing care in gynaecology, it has been necessary to include a generic surgical ward for comparison. I am therefore requesting your permission to ask your patients' consent (as I have also done with consultant gynaecologists) to be observed as nurses who agree to take part provide nursing care. The aims of this study are:

- To investigate the nature of nursing work in gynaecology and the types of patient cared for.
- To investigate and describe the types of judgements or decisions made by gynaecology nurses.
- To explore how the nurse judges the alternative options and makes prioritising decisions for a number of patients.

This is an exploratory, qualitative study, which is concerned with nurses' decision-making and priority-setting of patient care when caring for a number of patients simultaneously. Although it is nurses who are the primary focus of the study, your patients may be indirectly involved, if the nurse responsible for the patient is being observed by the researcher.

Patients will be given information leaflets and will have access to the researcher to voice any concerns or ask questions. Posters will also be displayed in the patients' rest room with the permission of the ward manager. This aims to make every patient aware of the study in progress. . As they are indirectly involved, patients who are

happy to be observed will be asked to sign a consent form in the presence of their nurse, a copy of which will be filed in their medical records for reference. Even if they have given consent, an opportunity will also be given to opt-out of any nurse-patient interaction they feel uncomfortable about being observed.

I would be grateful if you could confirm to me that you are happy for your patients to be observed as part of this study. If you have any further queries regarding the study please contact me, or my supervisor, Professor Tricia Murphy-Black, whose details are given below..

Many thanks

Yours sincerely

Audrey Morrison
PhD Student

Academic Supervisor:

Professor Tricia Murphy-Black
Professor of Midwifery
Room 3T12
Department of Nursing and Midwifery
R.G. Beaumont Building
University of Stirling
Stirling FK9 4LA

Tel: (01786) 466347

E-mail: tricia.murphy-black@stir.ac.uk



**UNIVERSITY OF
STIRLING**

DEPARTMENT OF
NURSING AND MIDWIFERY

Department of Nursing and Midwifery
University of Stirling
Stirling
FK9 4LA
Scotland

Telephone: +44 (0)1786 466287
Facsimile: +44 (0)1786 466333

Date

Dr. (name)

C/o Ward 10
Queen Margaret Hospital
Dunfermline

Dear Dr (name)

Title: “Nurses’ Decision-Making in Patient Care”

I am involved in the above study and will be conducting part of my research in your area. In order to differentiate nursing care in gynaecology, it has been necessary to include a generic surgical ward for comparison. The aims of this study are:

- To investigate the nature of nursing work in gynaecology and surgical, and the types of patient cared for.
- To investigate and describe the types of judgements or decisions made by gynaecology and surgical nurses.
- To explore how the nurse judges the alternative options and makes prioritising decisions for a number of patients.

This is an exploratory, qualitative study, which is concerned with nurses’ decision-making and priority-setting of patient care when caring for a number of patients simultaneously. Although it is nurses who are the primary focus of the study, your patients may be indirectly involved, if the nurse responsible for the patient is being observed by the researcher. I am therefore requesting your permission to ask your patients’ consent to be observed as nurses who agree to take part provide nursing care.

Patients will be given information leaflets and will have access to the researcher to voice any concerns or ask questions. Posters will also be displayed in the patients’ rest room with the permission of the ward manager. This aims to make every patient

aware of the study in progress. . As they are indirectly involved, patients who are happy to be observed will be asked to sign a consent form in the presence of their nurse, a copy of which will be filed in their medical records for reference. Even if they have given consent, an opportunity will also be given to opt-out of any nurse-patient interaction with which they feel uncomfortable about being observed.

I would be grateful if you could confirm to me that you are happy for your patients to be observed as part of this study. If you have any further queries regarding the study please contact me, or my supervisor, Professor Tricia Murphy-Black, whose details are given below.

Many thanks

Yours sincerely

Audrey Morrison
PhD Student
(contact details on letterhead)

Academic Supervisor:

Professor Tricia Murphy-Black
Professor of Midwifery
Room 3T12
Department of Nursing and Midwifery
R.G. Beaumont Building
University of Stirling
Stirling FK9 4LA

Tel: (01786) 466347

E-mail: tricia.murphy-black@stir.ac.uk

Appendix 9

Appendix: Nurse Information leaflet



**UNIVERSITY OF
STIRLING**

DEPARTMENT OF
NURSING AND MIDWIFERY

Title of Study: Nurses' Decision-Making During Patient Care

Introduction

You are being invited to take part in a research study. Both your health service local research ethics committee and the Department of Nursing and Midwifery research ethics committee at the University of Stirling have approved this study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. If there is anything you are not clear about or you would like more information feel free to contact me. My contact details can be found at the end of the leaflet. Thank you for reading this.

What is expected of me if I choose to take part?

This study will involve me observing you, as you provide care for the patients whom you are responsible for at that time. I will be taking down notes as you are caring for your patients. Please be re-assured this is not to monitor, criticise, or report your performance in any way, but to focus on the kinds of tasks and decisions you make in connection with this work. You will be observed on three separate occasions, and each observation period will last for two hours. Observation times will be agreed in advance to coincide with your own shift patterns and days of work. Following one of

the observation periods I will be interviewing you. If it is not suitable for this interview to be carried out during your shift, a suitable time will be arranged to suit your home and work commitments. During the interview you will be asked some questions about the kinds of work you were observed to do, and the kinds of decisions you may have had to make in association with this work. Each interview is expected to last between 30-40 minutes and will be tape-recorded. A copy of each consultant's permission for his patients to be observed will have been placed in the patient's current medical records along with the patient's consent. I will be responsible for checking whether the surgeon/ consultants have given written approval. You will then be asked to place a copy of any patient consent forms into their medical or nursing notes, whichever is most appropriate.

What is the purpose of the study?

The study is exploring how nurses in general and specialist gynaecology wards and surgical wards prioritise patient care. This will involve exploring the kinds of work involved, the different types of patients and patient conditions that nurses care for as part of daily nursing practice, and how this has an effect on the clinical judgements and/ or decisions concerning priority-setting. Understanding how nurses determine priority-setting will also help us to improve patient care.

Why have I been chosen?

All qualified nurses on your ward are being invited to take part. This means that any nurse who is a permanent member of staff, and employed on nurse grade C-G (or equivalent scale) is eligible to participate in the study. Nurses working temporarily on the ward as agency or bank staff will therefore not be asked. If you have been, or are currently a subject in other research studies you may not be eligible to take part.

Do I have to take part?

A series of key meetings will be held over several days to explain about the study, and give an opportunity to ask questions. Contact details will also be given should you have any further queries or concerns after the meetings have ended. You will be asked to volunteer to participate. It will be your choice whether or not you are willing to participate or not. If you think you would like to take part, the researcher will make sure that you are aware of what is involved before you make a final decision. If, after you have given consent, you no longer want to take part in the study, you are free to withdraw at any time, without giving a reason. If you choose to withdraw all personal information will be destroyed.

Will my taking part in this study be kept confidential?

Any information you have provided during the course of this research study will be kept strictly confidential. No-one other than the researcher will have access to this information. Information will be coded in such a way that you will not be recognised personally from this data. All data will be stored securely in a locked filing cabinet to which only the researcher has access. Computerised data will not have your name on it, only a code and will be kept on a University network system that is password protected to the researcher. Once this study is completed, all data containing your personal details will be destroyed. All other coded data will be kept for a minimum time of five years, after which it will be destroyed.

What if something goes wrong?

If at any stage in this study you have experienced distress as a result of being observed, you will be given the opportunity to discuss this in confidence with a

trained support person. If you feel you become unduly distressed as a result of your experience as a subject in this study please contact the following individual who will be available to provide basic support. .Please make it clear to the individual that you are phoning in connection with the above study. If Rosemary is not available at the time of initial contact you will be asked to leave details of how she can contact you, or alternatively to call again later. You will be contacted within 24-48 hours. This service will be available for the duration of data collection on your ward.

Contact: **Ms Rosemary Fenton (01786) 466380**

This service will be available during office hours **9:00 -17:00 hours, Monday to Friday.**

What will happen to the results of the research study?

The initial results from this study will be used to construct a further stage to look at nursing decisions and priority-setting in more detail.

Thank you for taking part in this study

Contact for further information

<p>Researcher</p> <p>Audrey Morrison Department of Nursing and Midwifery University of Stirling Stirling FK9 4LA (01786) 466287 E-mail: Audrey.Morrison@stir.ac.uk</p>	<p>Academic Supervisor:</p> <p>Professor Tricia Murphy-Black Professor of Midwifery Room 3T12 Department of Nursing and Midwifery R.G. Beaumont Building University of Stirling Stirling FK9 4LA</p> <p>Tel: (01786) 466347 E-mail: tricia.murphy-black@stir.ac.uk</p>
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Appendix 10



NURSE CONSENT FORM

Title of project: Nurses' Decision-Making in the Patient Care of Termination of Pregnancy

(Please tick in box provided)

1. I confirm that I have read and understand the information sheet provided for the above named study and I have had the opportunity to ask questions

2. I understand that my participation is voluntary and that I am free to withdraw from the study at anytime, without giving reason

3. I understand that my identity and any information I give concerning myself or my patients shall remain confidential

4. I understand that the researcher shall observe me during the study and that the interview that I participate in will be tape-recorded.

I agree to take part in the above study

Name of nurse

Date

Signature

PhD Student

Date

Signature

(1 copy for nurse and 1 copy for researcher)

Appendix 11



**UNIVERSITY OF
STIRLING**

DEPARTMENT OF
NURSING AND MIDWIFERY

Postgraduate Research Room
Department of Nursing and Midwifery
University of Stirling
Stirling FK9 4LA Scotland

Telephone: +44 (0)1786 466287
Facsimile: +44 (0)1786 466333
E-mail: audrey.morrison@stir.ac.uk

TO: NURSE IN CHARGE

Research study:

An investigation of the nature of clinical judgements and decision making involved in the priority setting of patient care

Please could you display the enclosed posters, which are to inform staff of the final dates for return of completed questionnaires, in an appropriate area where they can clearly be seen by all trained staff in your ward (such as the duty room, staff sitting room, or nursing station).

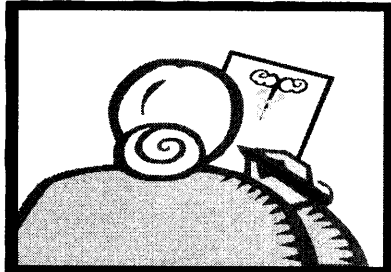
Many thanks.

Yours Sincerely

Audrey Morrison (researcher)

Nurses' Decision-Making During Patient Care

While you are staying in the ward you may see a researcher. If the researcher is on the ward, don't worry—she will make herself known to you.



**UNIVERSITY OF
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DEPARTMENT OF
NURSING AND MIDWIFERY

The researcher is only concerned with observing what the nurses are doing. However this may mean that you will also be observed if the nurse who is caring for you has consented to take part. You can decide whether you wish to be observed or not. All consultants have been approached for permission to include their patients. If your consultant has given permission, and you feel you would like to take part, the researcher will come and speak with you, and ask for your written consent.

If you have not yet received an information leaflet about the study and what it entails please take one from the plastic folder next to this poster. If this is empty please inform one of the nurses.

The researcher or her academic supervisor will be only too happy to discuss any concerns you may have.

Audrey Morrison
PhD Student
Department of Nursing & Midwifery
University of Stirling
(01786) 466287

Professor Tricia Murphy-Black
Professor of Midwifery
University of Stirling
(01786) 466347

Appendix 12



Title of Study: Nurses' Decision-Making During Patient Care

Introduction

You are being invited to take part in a research study. The local research ethics committee and the Department of Nursing and Midwifery research ethics committee at the University of Stirling have approved this research study.

Please take time to read the following information carefully and discuss it with others if you wish. If there is anything you are not clear about or you would like more information feel free to contact me. My contact details can be found at the end of the leaflet. Thank you for reading this.

What is the purpose of this study?

This study will explore how nurses make decisions and prioritise patient care for individual patients, and groups of patients as part of their working caseload. As it is the nurse who is the focus of the study, nurses from your ward are being invited to participate. As the researcher conducting the study will be required to observe the nurse as he/ she goes about her daily work, this will mean patients that are being cared for by the nurse at that time will also be indirectly involved. All consultant surgeons have been approached for permission to observe their own patients who will be involved in this way. If your consultant has not given permission you will not be eligible to take part in the study, and cannot be observed by the researcher.

How will I be involved?

If your consultant has given permission for his patients to be included, you will be approached by the researcher prior to the observation period and invited to be observed. If you would like to take part, you will be asked to sign a consent form to allow the researcher to observe the tasks the nurse does for you and the general interaction the nurse has with you and others. A copy of this consent will be kept in your medical notes. Remember the researcher is only interested in the work and actions of the nurse. Although the researcher will be in close proximity to the nurse and yourself, and will be taking notes throughout, none of your personal information is being recorded. You will not be able to be recognised from these notes by anyone, not even the researcher.

Even if you do agree to allow the personal tasks undertaken for you by the nurse to be observed, it is recognised there may be times when clinical situations involving intimate or sensitive procedures may have to take place. If you do not want to be observed at those times you are free to say to the nurse or the researcher who will make sure you are given complete privacy. Observations will be re-commenced only once you are happy for the researcher to resume observation.

What if something goes wrong?

If you feel you are unhappy about the conduct of the researcher, or you have experienced distress by the presence of the researcher you will have the opportunity to discuss this with a support person. These sessions will be kept confidential. If you feel you would like to discuss your experience with someone please contact the following individual, making it clear that you are phoning in connection with the above study:

Ms Rosemary Fenton (01786) 466380 (available 09:00-17:00 hrs, Mon –Fri)

Appendix 13



PATIENT CONSENT FORM

Title of project: **Nurses' Decision-Making During Patient Care**

(Please tick in box provided)

1. I confirm that I have read and understand the information sheet provided for the above named study and I have had the opportunity to ask questions

2. I understand that my participation is voluntary and that I am free to withdraw from the study at anytime, without giving reason

3. I understand that my identity and any information I give concerning myself or my care shall remain confidential

4. I understand that the researcher shall observe the nurse as she goes about her work, and that I may be observed while the nurse is providing care for me.

5. I understand that even though I agree to participate, I can ask not to be observed during intimate procedures, or any other type of care provided by the nurse where the presence of the researcher would make me uncomfortable.

I agree to take part in the above study

_____	_____	_____
Name of nurse	Date	Signature
_____	_____	_____
PhD Student	Date	Signature

(1 copy for patient; 1 copy for researcher; 1 copy for hospital notes)

Appendix 14

Code	Time of Day	Patient Caseload	Type <i>SR =side room MB=medical boarder</i>	Summary of observation session 1 : Surgical NE	Number of Interruptions
4B	Mid-Morning	9	Bay 3: <ul style="list-style-type: none"> • 2 High Dependency Unit (HDU) transfers • 1 pancreatitis for Endoscopy- (very ill) • 1 for Colonoscopy • 1 post-op major- for home soon Bay 4: <ul style="list-style-type: none"> • 1 post-op minor –exploratory surgery • 1 early Post-op major –day 1 • 1 post-op major –day 13 	Escorts patient to X-Ray then has tea break. Collects the patient from endoscopy suite and takes back to ward. Re-commences the patient's intravenous infusion and takes case notes to main desk to write update. Takes iced water to patient who has buzzed nurses complaining of 'bad taste' in mouth. Sees IV bag requires to be changed, checks patient ID and bag details with other nurse and changes over-resets pump. Takes details from doctor about a patient transfer from HDU-diabetic requiring sliding scale insulin regime and needs close monitoring- very ill with sepsis infection. Checks bed space in bay 1 has oxygen point and labels bed with patient's name. Doctor advises nurse that one of the other HDU transfer patients on the ward requires IV antibiotics so checks with nurse and takes to patient. Gives glass of water then writes in fluid chart. Goes to next bed and updates fluid chart there-informs patient her IV antibiotics are to be stopped and will continue with oral antibiotics now. Goes to bed 3 bay 4 to tell patient she will change wound dressing but is interrupted by arrival of HDU transfer patient. Receives verbal handover from HDU nurse re: central IV line, IV glucose and insulin regime, and catheter drainage and pain relief. Speaks with patient and relative then returns to clean and dress the other patient's wound. Takes a long time, as wound is complex and problematic. Goes back to endoscopy patient to check vital signs, give more iced water. Returns to new admission to check vital signs. Writes up nursing notes. Stops one of the doctors to ask her to prescribe more fluids for the patient. Phones physiotherapist to refer the patient for help with mobilisation as has been confined to bed for long time	4
4D	Late Afternoon	7 + Surgical Unit Coordinating duties	<ul style="list-style-type: none"> • 1 post-op major (home on pass) • 1 post-op major-malignancy • 2 early post-op majors (SR)- intensive care • 3 post-op majors –lessor dependency 	Helps to move beds around to cater for changed patient dependencies. Receives handover report from early shift nurses has one central line, 1 for chemotherapy, 1 immediate post-op major with IVL, catheter, oxygen therapy, PCA, colostomy and 2 wound drains, plus one on gastric feeding (very intensive workload). Receives management update in private from ward sister. Introduces herself to all her patients in turn. Collects iced water for patient in side room and renews the syringe containing analgesia, as this is empty. Updates patient's charts. Goes round collecting patient drug Kardexes to prepare all the due IV drug preparations. Looks up drug formulary as one of drugs is new to her, works out appropriate doses, checks it with other nurse before taking to relevant patients. Starts with side room patient who receives 1 bag of IV fluids and 2 bolus doses of antibiotics directly into the patient's IV cannula. Once completed, gives out patient medications from trolley. Returns to check IV pumps, checking amounts, rates etc and documenting on appropriate charts and notes. Takes phone call from one of other ward nurses who has problem with staffing and needs her advice.	2
4C	Late Morning	8 + Surgical Unit Coordinating duties	3 patients with MRSA-barrier nursed <ul style="list-style-type: none"> • 1 for further investigations- ? Malignant tumour • 2 post-op majors (SR) • 3 post-op majors • 1 post-op minor • 1 for colonoscopy 	Asks patient to lie flat, tilts bed backwards, and removes IV central line form patient's neck. Sends tip of catheter to the lab to check for infection. Checks IV drugs for junior nurse. Instructs the nursing assistant what she wants her to do in the next hour or so. Goes round patients to 'have a chat' to 'catch up' (works around from bed 1 to bed 6) Goes to see one of the post-op major patients to check her chest drain - large amount of bloodstained fluid in chambers (not good). Checks vital signs. Tells patient that X-Ray will be given shortly to check things out. Post-op patient in bed 3 complains of itchy rash and nurse gives her some calamine lotion to rub on her rash. Checks vital signs. Notices TED stockings to prevent thrombosis are bloodstained so replaces with fresh pair. Checks abdominal wound dressing and noted to have fresh soakage, and rectal wound to be 'a bit red'. On way to set up wound trolley she is interrupted to deal with staffing problems and bed moves for the surgical unit. Takes confused patient wandering around back to own ward next door. Returns to perform the wound dressing change for the patient and apologises for getting waylaid. Moves to bed 4 to check vital signs, and PCA pump. Decides to remove the catheter. Helps elderly patient to toilet then reattaches her to the IV pump. Asks nurse in the next bay if there are any suitable patients to fill the two empty bed spaces in her own bay to free up two more high dependency beds. Answers pager and deals with another ward's problems. Checks IV pump is the side room and changes over a new bag of gastric feed. Gathers staff together to wish an elderly patient a happy birthday.	7
4A	Late morning	6 + Surgical Unit Coordinating duties	2 patients with MRSA <ul style="list-style-type: none"> • 1 post-op major, personality disorder • 1 post-op major-going home next day • 1 post-op major –high dependency • 1 post-op major-requiring special feeding • 1 at theatre for colonoscopy • 1 for terminal care (malignancy) 	Completing tea break. Collects patient from endoscopy unit. Makes patient tea and toast on return to ward. Sorts out paperwork and writes in nursing notes. Asks specialist nurse to review the high dependency patient's fistulas as they are infected. Gives endoscopy patient the medications she missed earlier today. Checks the syringe driver (pain relief) of the terminally ill patient. Sets up a wound trolley and takes to high dependency patient and proceeds to clean and redress wounds (X3). Phones nursing college to speak to personal tutor of one of her students re: concerns. Phones ambulance control to confirm discharge is booked for tomorrow to transfer patient.	7

Time of Day	Patient Caseload	PATIENT TYPE <i>SR</i> =side room <i>MB</i> =medical boarder	SUMMARY OF OBSERVATION SESSION 1-3: ACUTE GYNAECOLOGY CE (3A)
<i>Late afternoon</i>	4	Theatre patients: • 1 Post-op major surgery-Day 1 • 1 Pre-op patient for minor surgery today • 2 Post-op major surgery just back from theatre	First attends to patient on her 1 st post-op day. Asks if she needs analgesia or to pass urine yet (had catheter removed earlier). Then goes to second bed, asks pain score and gets analgesia for her. Other two ladies are fast asleep and do not their vital signs monitored for another fifteen minutes. Sees to a ward attendant who has come in to have sutures removed. Takes patient to treatment room but cannot get sutures out so has to ask a doctor, who also has difficulty as skin has grown over the sutures. Patient looks in agony as she pulls but eventually gets them out. Patient given some analgesia. Total time spent with this patient is one hour. Goes with senior doctor as she explains the operation performed o one of her theatre patients. Nurse reminds patient to press the PCA button for analgesia if she is sore. Before they move to next patient nurse attaches the machine to start monitoring her vital signs. Nurse returns to post-op majors to check and record their vital signs, pain score, check IV infusions, wounds and wound drains. Gives an anti-emetic injection to post-op major in bed 3, then helps to sit up a little by propping up on extra pillows and makes her comfortable. Patient doesn't want anything for pain. Gives oral mouth care to patient in next bed. Doesn't notice 1 st post-op day patient is in distress and trying to be sick as she is still behind screens but another nurse comes in to attend to her. Has to go back to see the other post-op patient who is not coping too well then returns too take a lady to toilet. While she is trying to pass urine, she makes up patient's bed with fresh linen. Helps patient back to bed, who is shivering. Checks her blood glucose levels (normal), and gets her a drink of orange juice. Writes up notes, chats to nurses and doctors, and prepares paperwork for next day's admissions. Spends great deal of time with two theatre patients-1 who feels unwell, one who generally is having emotional rather than physical problems coping with her surgery.
Mid-morning	5	• Bay G 3 post-op major surgery Bay H • 1 post-op major surgery • 2 pre-op major surgery	Ward round is in progress. Phones to arrange bank nurse cover for sick absence. Goes in to see post-op major in bay G beds 1, 3 & 4. Performs same tasks in much the same order for all three patients: checks vital signs, pain scores, updates fluid intake and output charts, wounds, and blood loss. Goes round patients with doctors to evaluate and update their care. Prepares paperwork and the examination room for an expected emergency admission. When patient arrives she is taken to the examination room. Doctor has decided her wound which has burst can be resutured under local anaesthetic on the ward. Nurse sets up tray and assists doctor to resuture, holding patient's hand, offering support. Makes sure patient is okay before letting her leave the ward. Returns the patient's case notes to the secretary. Goes for tea break.
Late afternoon/early evening	3	• 3 for medical TOP (in individual rooms)	All patients just reviewed prior to observation session. Chats to nurses at desk. Collects posters for a gynaecology conference and goes around ward to pin them on the walls at strategic locations where they will be seen by nursing staff. Tidies up the notice board in doctors room and throws out of date items. Reads notes of patient. Discovers a set of case notes on the desk that she forgot to file earlier with other discharge items. Reads case notes of an emergency admission-patient has an extremely painful Bartholins abscess. Prepares a trolley with items for vaginal examinations for the medical TOP patients, pages doctor to come and examine the patients as they are keen to get home. Patient in room H is the most desperate to leave so they start in there. She is able to get home so nurse tells her she can put clothes on and she will be back with her discharge letter and medication. The next patient will have to wait a little longer as the examination shows she has passed incomplete membrane tissue and have to make sure she does not haemorrhage. Nurse cleans the patient as she is covered in blood after the examination. The third and final patient is also okay to go home. Sits at the desk and prepares the discharge paperwork and patient medication from the drug cupboard. Takes to the patients (room H first) and makes sure they are feeling okay. Gives advice, offers support and follow-up meetings to discuss any emotional issues. Checks they have contraception. First patient is given an injection of Depo-Provera, a long acting, slow release contraceptive Second patient needs an Implanon contraceptive implant so she makes an appointment to return for that as she is not trained to do that. Both are given an appointment to come back for an ultrasound scan to check the procedure has been successful.

Summary of observation session 1-3: Surgical CE (2D)

Time of Day	Caseload	Patient Type <i>SR =side room MB=medical boarder</i>	
Early morning	7	<ul style="list-style-type: none"> ● 1 for major breast surgery later today (SR) ● 1 max-fax trauma, leg ulcers ● 1 for keyhole surgery today ● 1 for bowel investigations ● 1 abdominal pain ● 1 minor breast surgery-home later ● 1 max-fax on emergency theatre list 	<p>Goes first to bed 3 of six-bedded area to organise patient in preparation for discharge home later. Then at bed 4 completes the paperwork and checklist for the patient on the emergency Max-fax theatre list. Assists this elderly patient to the toilet as she has difficulty mobilising. Returns to bed 3 to complete the discharge paperwork with the patient and checks her wound is okay at the same time. A total count of 18 different forms, charts, and notes were completed for one minor surgical patient. Nurse then phones relatives to inform them of the impending discharge. Goes to the patient in the side room not long returned from minor breast surgery. Checks her vital signs, wound, and recovery from anaesthetic. Removes the patient's intravenous cannula. Provides patient with cup of tea and some toast. Helps other nurse with bed making for recently vacated beds, and then helps distribute menu cards to patients. Checks on the patient in the side room again. Patient is a bit sore and is feeling squeamish after her toast so the nurse has some analgesia and anti-emetic medication checked by another nurse and gives to the patient. Returns to the six-bedded bay to look at the elderly patient's leg ulcers. The bandaging is noticeably stained and wet from the soakage. Sets up a trolley and returns to clean the wound. Decides not to re-bandage the ulcers but covers them with sterile pads until the doctor can see them.</p>
Late morning 31/08/04	7	<ul style="list-style-type: none"> ● 1 for pre-op minor surgery later today ● 1 post-op surgery, IVI still in progress ● 3 post-op major surgery-2 for home later today and 1 home next day (SR) ● 1 post-op eye surgery ● 1 post-op minor- for nursing home transfer later 	<p>Deals with discharge paperwork for one of minor breast patients. Decides to move beds to free up one 6-bedded bay to accommodate nextdays admissions. Prepares the patient for theatre and providing a special gown to wear. Checks to see if the eye dressing should be changed before going to theatre, then checks the intravenous fluids of the post-op patient. Goes back to other ladies in side rooms waiting to go home. The post-op lady going home next day needs occupational therapy input arranged and palliative care team involvement. She checks with the patient that this has been arranged. Takes new bag of intravenous fluids to the post-op patient and changes it over, resets pump. Teaches the student how to reset the pump. Sends nurse to pharmacy to collect discharge scrips. Gathers syringe and wound pads and gives to nursing home patient for the district nurse to change wound dressing over the weekend. Distributes patient lunches. See a patient at the desk that appears in pain, gets her some analgesia, and checks her vital signs.</p>
Late afternoon/ Evening 08/10/04	8	<ul style="list-style-type: none"> ● 1 for pre-op minor eye surgery later today (SR) ● 1 post-op major surgery, barrier nursing (SR) ● 3 post-op major surgery ● 1 asthmatic (MB) ● 1 post-op minor eye surgery ● 1 post-op minor max-fax 	<p>Attends to eye patient in 6-bed area who buzzes for nurse assistance-finished using commode. Asks patient to wait till she attends to one of the doctors (n=7) with another patient. Helps asthmatic patient to toilet. Writes notes. Attends to patient in side room who has infectious bowel condition. Answers phone calls; returns to side room to change IV bag, and drain gastric aspirate and urine bags. Inserts IV cannula in one of post-op majors-has a little difficulty- has 3 tries and then is successful. Receives an update of changes from doctor after ward round completed. Has tea break. Receives verbal update from nurse on her return. Drains catheter in side room while patient is asleep. Max-fax patient has drainage tube into facial wound and needs secured, as it has become loose causing pain. Checks vital signs and gives some analgesia. Arranges social services assessment for side room patient getting home. Checks observations for post-op majors. Completes pre-op checklist, writes notes</p>

Code	Time of Day	Patient Caseload	Type <i>SR =side room MB=medical boarder</i>	Summary of observation session 1-Gynaecology NE	Number of Interruptions
3B	Afternoon	Clinic	Takes turns with other staff to see patient referrals at the clinic and arranges admission to the unit. Sees all the patients after the consultant has seen them to sign legal forms. Each appointment takes 20-40 minutes.	Interviews with patients conducted in a routine format. Consented to allow blood and urine tests for Chlamydia and HIV/ Hepatitis. Confirms understanding of decision made, family support, and gestation of pregnancy. Provides date for admission and writes in ward diary. Completes checklist of medical history, personal & social details, including contraception used. Procedure explained in great detail, offered counselling. If for medical TOP patients are given one tablet to take at the clinic as first part of the procedure. Given leaflets and contact information. Sees a total of 5 patients at this clinic today. First is very young girl with one previous pregnancy and one previous medical termination. Second patient is older with two children, recently split from partner of 12 years. Third patient has had two previous terminations and is unconcerned-nurse decides to speak to her in private once she is admitted to discuss her sexual behaviour in more detail and offer support or advise different/ more suitable form of contraception. Fourth patient has had a previous medical TOP for amid-trimester intra-uterine death, and three other terminations. Nurse writes a memo to remind her to provide in-depth counselling with this patient on admission as her attitude to contraception use is very worrying. Last patient is a woman in her thirties who is very distraught and ashamed at having to come forward for a termination. She wouldn't be able to cope with a pregnancy but at the same time feels so guilty at having to go through with it. Nurse says this is a common source of conflict in patients having to make this decision. The patient had one previous termination as a young woman and so is feeling extra guilty and uncertain about this one. Nurse gets her to discuss concerns with her and offers support and empathises with her about the decision she has had to make. Nurse is non-judgemental in her approach with patients but decides which patients need additional advice about contraception and sexual behaviours, especially those who are repeat attenders for this procedure.	0
3C	Afternoon	3	Nurse is attending to management issues and then will attend the clinic later.	Staff nurse gives opinion of the wording on current cremation forms for the disposal of foetal remains. At present is a bit insensitive and could be improved to limit emotional distress to patients (referred to as 'clinical waste'). Decides to adopt the algorithm used by the general gynaecology ward for sensitive disposal and phones the staff to send over a copy of their current protocol. Searches for case notes that have went missing between clinic and admission visits as patient has arrived. Consultant comes to inform nurse of changes to clinic times and location to cover local holiday in case she needs to change her staffing to suit. Gives a copy of the reworded form to the ward clerkess and asks her to scan onto computer for her. Goes up to start the clinic. Sees 3 patients at the clinic. First patient has complex circumstances and will need extra support, partner is working abroad, her brother is in intensive care, and father has just had major cardiac surgery. Second patient's mother is also in hospital with kidney disease and she herself has just managed to break out of a violent relationship, hence reason for termination. She is very weepy. Nurse asks if she is sure she wants to proceed and patient is adamant she didn't want children at this time regardless of circumstances. Admits to feeling depressed and agrees to extra counselling. The last patient has had two previous terminations. She agrees to take part in a medical trial that is currently recruiting patients. Nurse explains the procedure and what is required as a participant-has full procedure done on the one day rather than over 48 hours as currently done. Asks patient to complete a questionnaire before she leaves.	0
3A	Early morning	2	<ul style="list-style-type: none"> • 1 for Surgical TOP (SR) • 1 for medical TOP (SR) 	Collects a bedpan after patient buzzes for nurse. Takes to the sluice, locks door, and checks contents for any evidence of foetal tissue. Finds a small pregnancy sac, which is incomplete. Puts into a bag for disposal. Tells the patient there is still some tissue which needs to be passed before she can get home and advises her to continue as before. Returns to desk to write in nursing notes. Goes for tea break, but informs the other nurses that she has still to do the surgical patient's theatre checklist. On return from her break she collects the case notes and takes to the patient to do the checklist and prepare her for theatre. Goes through the procedure that will take place and what to expect once the operation is over. Checks vital signs and pain score-only mild cramps. Obtains ward keys, organises discharge prescriptions for her two patients, then puts with case notes for later. Asks medical TOP if she has any blood loss or pain. Patient is feeling fine at present so collects Depo-Provera instruction leaflet and takes to patient to read. Advises patient the injection needs repeated on a 3-monthly basis and arranges appointment for her first follow-up injection with the local family planning unit. Asks patient to complete a questionnaire regarding consent to allow tests on the foetal tissue. Goes to first patient to check another bedpan contents. Tells patient and her partner that she is allowed home as everything looks okay now. Thanks other nurse for taking her patient to theatre while she was pre-occupied with someone else. Provides counselling for the patient being discharged and gives instruction of what to expect in terms of physical and emotional effects-encourages patient to phone if any queries or concerns.	0

Appendix 15

		Participant Case Number																		
(MD=management day CD=clinic day +=unit coordinator duties)		1A	1B	1C	1D	1E	2A	2B	2C	2D	2E	2F	3A	3B	3C	4A	4B	4C	4D	
Observation 1																				
Total patients in caseload		9	8	7	9	7	4	5	3	4	3	7	2	0	0	6+	5	8+	6+	
•Major surgical cases		1	2	2	3	3	2	5	1	1	2	4	0	CD	MD	1	3	5	1	
•Minor surgical cases		6	3	3	3	3	0	0	0	0	0	2	1	CD	MD	1	2	2	1	
Emergency cases		0	0	1	2	1	1	0	1	0	0	1	0	CD	MD	0	0	1	0	
Acutely ill patients		2	0	1	1	0	1	0	0	0	0	0	0	CD	MD	1	0	0	1	
Medical TOP / boarding patients		0	3	0	0	0	0	0	1	3	1	0	1	CD	MD	0	0	0	0	
Observation 2																				
Total patients in caseload		8	8	7	8	8	MD	3	3	4	2	3	1	2	3	5	9	6+	9+	
•Major surgical cases		2	1	3	2	0	MD	0	0	2	2	0	0	0	0	3	6	4	3	
•Minor surgical cases		4	2	4	2	4	MD	0	0	0	0	0	1	1	1	1	1	2	3	
Emergency cases		1	0	0	1	1	MD	0	1	0	0	0	0	0	0	0	0	0	1	
Acutely ill patients		1	2	0	0	0	MD	0	0	0	0	0	0	0	0	1	2	0	2	
Medical TOP / boarding patients		0	3	0	3	3	MD	3	2	2	0	3	0	1	3	0	0	0	0	
Observation 3																				
Total patients in caseload		10	8	8	7	7	4	4	3	2	3	3	3	1	1	6	6	5+	7+	
•Major surgical cases		2	2	4	3	1	2	3	0	0	0	1	0	0	0	3	4	2	5	
•Minor surgical cases		2	4	3	3	4	0	1	0	0	2	0	1	0	0	1	0	1	0	
Emergency cases		2	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	
Acutely ill patients		4	1	0	1	0	0	0	0	0	0	0	0	0	0	2	2	2	2	
Medical TOP / boarding patients		0	1	1	0	0	2	0	3	2	0	1	2	1	1	0	0	0	0	

Appendix 16

Appendix

Tayside Hospitals: Patient Dependency Classification-Criteria for Care

Interpreting Dependency Categories

Total Scores	Dependency level	Category of Care	Category Examples
Four 'A' scores	Dependency I	Self-Care	Physically capable of caring for one's self but requires some procedures or monitoring by the nursing staff, eg blood pressure, TPR, collection of specimens etc
'A' and 'B' scores and not more than one 'C' score	Dependency II	Average nursing care	Requires some assistance with personal needs, and an average amount of nursing care/ supervision/ and encouragement eg, a diabetic patient for reassessment
Two or three 'C' scores	Dependency III	Above average nursing care	Requires frequent nursing attention and almost complete assistance for personal care needs. Requires medical support and/ or special equipment eg, a first day post-operative radical mastectomy
Four or more 'C' scores	Dependency IV	Maximum care	Requires very frequent or continuous attention and close supervision by medical personnel, health team members and/or technical equipment, eg, a comatose patient
'X' for Specialling	Dependency V	Specialling (one-to-one care)	Requires the presence of a nurse at the bedside constantly over 24 hrs eg, a major post-operative patient nursed at ward level

Appendix 17

Summary of Interruptions per Observation Session

NURSE CODE	LOCALITY <i>1= CE 2= NE</i>	SPECIALITY <i>1= Gynaecology 2= Surgical</i>	OBSERVATION PERIOD		
			1	2	3
1A	1	2	9	3	8
1B	1	2	3	10	9
1C	1	2	5	13	17
1D	1	2	14	13	12
1E	1	2	13	10	5
2A	1	1	30*	7	9
2B	1	1	14	9	5
2C	1	1	9	7	8
2D	1	1	12	13	6
2E	1	1	6	9	7
2F	1	1	10	7	5
3A	2	1	0	0	3
3B	2	1	0	4	0
3C	2	1	0~	2	0
4A	2	2	7	12	2
4B	2	2	4	1	6
4C	2	2	13	4	8
4D	2	2	2	6	4

Appendix 18



**UNIVERSITY OF
STIRLING**

DEPARTMENT OF
NURSING AND MIDWIFERY

Postgraduate Research Room 3B158
Department of Nursing and Midwifery
University of Stirling
Stirling
FK9 4LA

Telephone: +44 (0)1786 466287
Facsimile: +44 (0)1786 466333
E-mail: audrey.morrison@stir.ac.uk

Date: 3 October 2005

Dear Nurse,

Title of Study: An investigation of the Nature of Clinical Judgements and Decision Making Involved in the Priority-Setting of Patient Care

You are being invited to participate in the above nursing research study, which is currently being undertaken as part of a PhD qualification. This study explores how individual trained nurses both determine and manage priorities related to the caseload of patients for whom they have responsibility. This is a relatively unexplored topic within nursing, yet priority setting forms a very large part of, and plays a major role in, everyday nursing practice. By participating in my study you would therefore be helping to further awareness of this topic, and provide a better understanding of nurses' work in general.

Please could you take a few moments of your time to read the attached Information Leaflet. If you would like to take part in this study, please return the completed questionnaire to me in the stamp-addressed envelope provided. Please would you return this envelope by 26 October 2005.

Thank you. Your help in this study would be very much appreciated. I do hope you will consider taking part.

Yours Sincerely,

Audrey Morrison



UNIVERSITY OF STIRLING

DEPARTMENT OF
NURSING AND MIDWIFERY

Title of Study: An investigation of the nature of clinical judgements and decision making involved in the priority setting of patient care

Introduction

You are being invited to take part in a research study. The Tayside Committee on Medical research Ethics, which has responsibility for scrutinising all proposals for medical research on humans in Tayside, has examined the proposal and has raised no objections from the point of view of medical ethics. It is a requirement that individual records in this research be made available for scrutiny by monitors from NHS Tayside. Before you decide whether you wish to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. If there is anything you are not clear about, or if you would like more information, feel free to contact me. My contact details can be found at the end of the leaflet. Thank you for reading this.

What is expected of me if I choose to take part?

This study involves the completion of a self-report questionnaire. This involves working through different sections of the questionnaire and answering any questions as honestly as possible. These questions will explore the kinds of decisions you make in connection with nursing work. You would need to allow adequate time to complete this questionnaire, preferably at a time when you are least likely to be interrupted. It is

estimated the questionnaire will take approximately 35-45 minutes to complete. If you decide to take part, please return the completed questionnaire in the SAE provided.

What is the purpose of the study?

This study forms part of the requirements for a PhD qualification. This questionnaire is the second stage of a two-stage study exploring how nurses prioritise patient care. The patient case studies contained within the questionnaire are based on actual patients that formed individual nurse's caseloads in the first stage of this study. This second stage focuses on how nurses use information, and think about priorities of care.

Why have I been chosen?

All qualified nurses on your ward are being invited to take part. This means that any nurse who is a permanent member of staff, and employed on nurse grade C-G (or equivalent scale), is eligible to participate in the study. Nurses working temporarily on the ward as agency or bank staff will therefore not be asked. If you have been, or are currently, a subject in other research studies you may not be eligible to take part.

Do I have to take part?

Your participation is voluntary. It will be your choice whether or not you are willing to participate or not. All that is asked is that you read the information leaflet provided before you make your final decision.

Will my taking part in this study be kept confidential?

Any information you have provided during the course of this research study will be kept strictly confidential. No person other than the researcher will have access to this information. Information will be coded in such a way that you will not be recognised

personally from this data. All data will be stored securely in a locked filing cabinet to which only the researcher has access. Computerised data will not have your name on it, only a code; and the file will be kept on a University network system that is password-protected to the researcher. Once this study is completed, all data containing your personal details will be destroyed. All other coded data will be kept for a minimum time of five years, after which it will be destroyed.

What will happen to the results of the research study?

The findings of this study will be used for publication in peer-reviewed nursing journals and relevant nursing conference presentations. If you would like a written report or a local seminar in your area please inform your ward or line manager. Once the study is completed the researcher will arrange for the information to be disseminated at local level according to the consensus of individual requests.

What if I have any questions?

If you need to ask any questions, or if you are unsure how to complete any of the sections, please contact the researcher directly using any of the contact information provided below.

Thank you for considering to take part in this study

<p>Audrey Morrison (researcher) Postgraduate research room Department of Nursing and Midwifery University of Stirling Stirling FK9 4LA (01786) 466287 (<i>work</i>) 07845489601(<i>mobile</i>) E-mail: audrey.morrison@stir.ac.uk</p>	<p>Dr Vivien Swanson (academic supervisor) Psychology Department University of Stirling Stirling FK9 4LA (01786) 467685 (<i>work</i>) E-mail: vivien.swanson@stir.ac.uk</p>
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**UNIVERSITY OF
STIRLING**

DEPARTMENT OF
NURSING AND MIDWIFERY

QUESTIONNAIRE

Study Title:

**An Investigation Of The Nature Of Clinical Judgements And
Decision Making Involved In The Priority-Setting Of Patient Care**

Study Number:

--	--	--	--	--	--

INTRODUCTION

You are being asked to complete a questionnaire. This questionnaire forms part of a PhD study exploring how individual nurses prioritise their caseload of patients and the tasks associated with patient care they are responsible for completing. This will take 35-45 minutes to complete therefore please allow yourself adequate time. The questionnaire is comprised of four sections. Please read the instructions for each section carefully. Answer all questions even if you do not think they are directly relevant. Thank you for taking the time to participate in this study.

SECTION 1

The following questions are important. Please tick the relevant boxes.

1. Gender

Male Female

2. How many years have you been in practice since qualifying as a nurse?

0-1 2-5 6-9 10 or more

3. How many years have you worked in your present post?

0-1 2-5 6-9 10 or more

4. How would you describe your area of current specialism?

Surgical Medical... Obstetrics Gynaecology
Community/ Primary Care Care of Elderly Mental Health
HDU/ICU/ Triage Other (*please name*)

5. Since initial registration what other areas have you worked?

(please tick all that apply)

Surgical Medical... Obstetrics Gynaecology
Community/ Primary Care Care of Elderly Mental Health
HDU/ICU/ Triage Other (*please name*)

6. Which of the following best describes your current role or grade?

D grade staff nurse /midwife E Grade staff nurse /midwife
 F grade staff nurse/ midwife G /H grade ward manager

Other (please state)

7. Since initial registration, what additional qualifications do you now hold?
(If you are currently studying for a qualification please give the title of study and indicate in the box provided.)

Type	Title of Qualification	Already have	Studying for
Professional	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
Academic	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

8. Describe a situation at work where you found it easy to prioritise your patient caseload. (if necessary attach a separate sheet to answer the following 2 questions)

9. Describe a situation where you found it difficult to prioritise your patient caseload?

10. Which of the following factors best describes the style in which you typically determine your priorities at work? (tick all that apply)

Intuitively Rationally Analytically Subjectively Objectively

SECTION 2

Read each statement carefully. For each statement please indicate the response that best represents your opinion alongside each statement by allocating the appropriate code on the line beside each statement:

SA = *strongly agree* or the statement is definitely true

A = *agree* or the statements is mostly true

N = *neutral*, you cannot decide or the statement is equally true and false

D = *disagree* or the statement is mostly false

SD = *strongly disagree* or the statement is definitely false

Mark only one response for each statement. Respond to all statements.

- _____ 1 I am not a worrier
- _____ 2. I like to have a lot of people around me.
- _____ 3. I don't like to waste my time daydreaming
- _____ 4. I try to be courteous to everyone I meet
- _____ 5. I keep my belongings clean and neat.
- _____ 6. I often feel inferior to others
- _____ 7. I laugh easily
- _____ 8. Once I find the right way to do something, I stick to it.
- _____ 9. I often get into arguments with my family or co-workers
- _____ 10. I'm pretty good about pacing myself so as to get things done on time
- _____ 11. When I'm under a great deal of stress, sometimes I feel like I'm going to pieces
- _____ 12. I don't consider myself especially 'light-hearted'
- _____ 13. I am intrigued by the patterns I find in art and nature
- _____ 14. Some people think I'm selfish and egotistical
- _____ 15. I am not a very methodical person
- _____ 16. I rarely feel lonely or blue
- _____ 17. I really enjoy talking to people
- _____ 18. I believe letting students hear controversial speakers will confuse / mislead them
- _____ 19. I would rather co-operate with others than compete with them
- _____ 20 I try to perform all the tasks assigned to me conscientiously
- _____ 21 I often feel tense and jittery
- _____ 22. I like to be where the action is
- _____ 23. Poetry has little or no effect on me
- _____ 24. I tend to be cynical and sceptical of other's intentions
- _____ 25. I have a clear set of goals and work towards them in an orderly fashion
- _____ 26. Sometimes I feel completely worthless
- _____ 27. I usually prefer to do things alone

- ___ 28. I often try new and foreign foods
- ___ 29. I believe that most people will take advantage of you if you let them
- ___ 30. I waste a lot of time before settling down to work
- ___ 31. I rarely feel fearful or anxious
- ___ 32. I often feel as if I'm bursting with energy
- ___ 33. I seldom notice the moods or feelings that different environments produce
- ___ 34. Most people I know like me
- ___ 35. I work hard to accomplish my goals
- ___ 36. I often get angry at the way people treat me
- ___ 37. I am a cheerful, high-spirited person
- ___ 38. I believe we should look to our religious authorities for decisions on moral issues
- ___ 39. Some people think of me as cold and calculating
- ___ 40. When I make a commitment, I can always be counted on to follow through
- ___ 41. Too often, when things go wrong, I get discouraged and feel like giving up
- ___ 42. I am not a cheerful optimist
- ___ 43. I sometimes feel a chill or wave of excitement reading poetry or looking at art.
- ___ 44. I'm hard-headed and tough minded in my attitudes
- ___ 45. Sometimes I 'm not as dependable or reliable as I should be
- ___ 46. I am seldom sad or depressed
- ___ 47. My life is fast-paced
- ___ 48. I have little interest in speculating on the nature of the universe or mankind
- ___ 49. I generally try to be thoughtful and considerate
- ___ 50. I am a productive person who always gets the job done
- ___ 51. I often feel helpless and want someone to solve my problems
- ___ 52. I am a very active person
- ___ 53. I have a lot of intellectual curiosity
- ___ 54. If I don't like people, I let them know it
- ___ 55. I never seem to be able to get organised
- ___ 56. At times I have been so ashamed I just wanted to hide
- ___ 57. I would rather go my own way than be a leader of others
- ___ 58. I often enjoy playing with theories and abstract ideas
- ___ 59. If necessary, I am willing to manipulate people to get what I want
- ___ 60. I strive for excellence in everything I do

SECTION 3

In this section, you are asked to imagine you have just come on duty and are about to receive the nursing handover report. You will receive two separate situations involving one female surgical ward and one gynaecology ward. In each of the contexts, you will be assigned a caseload of patients and will be asked to rate the patient caseload in the order of priority, which you believe best represents what you would do, or have done in a real-life situation. Using the information provided, please assess each patient, and decide whom you will attend to first, second, third, and so on after you leave the duty room.

Please note there is no right or wrong answer. This exercise is purely to explore how individual nurses determine priority. Please do this exercise on your own and do not discuss with your colleagues as this may bias the findings.

Situation One. Surgical ward C19 Handover Report Information.

The nurse has just allocated the following patients to you, forming the caseload you will be responsible for until the end of your shift. Please **read the following information** provided for each patient and determine the priority status as you might do before going into the actual ward. Using your own opinion **rate your patients in order of priority**, with 1 representing the most important or urgent priority to you, and 5 representing the least important, or non-urgent priority. Then, **rate the tasks or care aspects associated with each patient** in order of the priority you intend to carry them out:

<p>Bed 1 age 32 female</p> <p><u>Day 2 Appendicectomy Post-op</u></p> <p>Required catheterised as unable to pass urine. Surgeon does not like indwelling catheters so needs reviewed later.</p> <p>She is afebrile. Tolerating oral analgesia for pain but needs encouragement to mobilise as is still apprehensive and not keen to get out of bed</p>	<p>Bed 2 age 59 female</p> <p><u>Day 5 Hemicolectomy Post-op</u></p> <p>Colostomy bag in situ, coping well. Stoma nurse in daily to demonstrate and supervise stoma hygiene.</p> <p>To have wound sutures removed today but would like some analgesia prior to having this done. There is a possibility she can go home if the wound is okay.</p>	<p>Bed 3 age 45 female</p> <p><u>Day 3 Major breast surgery</u></p> <p>Not coping too well and is still very weepy and easily upset. Although being seen daily by breast specialist nurse she seeks constant reassurance from nursing staff.</p> <p>Seen by surgeon who wants her 2 wound drains removed today.</p>
<p>Bed 4 age 35 female</p> <p><u>Day 1 Ligation and stripping of varicose veins (minor surgery)</u></p> <p>To be discharged later but needs fresh bandaging applied as this is heavily bloodstained. Physiotherapist still to instruct the patient regarding post-operative exercises. You will need to arrange this.</p>	<p>Bed 5 (SR) age 53 female</p> <p><u>Day 1 Open Colectomy (major surgery)</u></p> <p>Very obese and is on a special mattress. She has an intravenous infusion of electrolyte fluids, on a 4-hourly regime, as she is still nauseated. Because of her size, she finds it painful to move so still has her PCA for pain relief. Surgeon requests nil by mouth meantime. Has recent pyrexia which surgeon is concerned about. Is becoming withdrawn today and not her usually bubbly self. Please observe.</p>	<p>Bed 6 age 75 female</p> <p><u>Day 9 Wide Excision of melanoma on right arm</u></p> <p>Is to be discharged home. Family will be in to collect her in one hour from now. Seen by the tissue viability nurse who has provided counselling and instructed re hygiene at home. Asked nursing staff to liaise with community nurses to attend to her wound after discharge. Needs a follow-up appointment to return to the tissue viability clinic for review of wound. You will need to arrange this</p>

Exercise 1: Indicate your Priority Ratings for patients in the appropriate boxes:

Bed 1	Bed 2	Bed 3	Bed 4	Bed 5	Bed 6
<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>

Exercise 2: Rate the tasks or care aspects associated with each individual patient in the order that you will attend to first, second, third, and so on. Do this for as many tasks as you feel are necessary, up to a limit of 6 tasks.

<p>Bed 1</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p>	<p>Bed 2</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p>	<p>Bed 3</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p>
<p>Bed 4</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p>	<p>Bed 5</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p>	<p>Bed 6</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p>

Situation Two. Gynaecology ward G8 Patient handover report

As in the previous section, you are asked to imagine you have just come on duty and are about to receive the nursing handover report. You will receive two separate situations involving one female surgical ward and one gynaecology ward. In each of the contexts, you will be assigned a caseload of patients and will be asked to rate the patient caseload in the order of priority, which you believe best represents what you would do, or have done in a real-life situation. Using the information provided, please assess each patient, and decide whom you will attend to first, second, third, and so on after you leave the duty room. Please note there is no right or wrong answer. This exercise is purely to explore how individual nurses determine priority. Please do this exercise on your own and do not discuss with your colleagues as this may bias the findings.

<p>Bed 1 age 40 female</p> <p><u>Day 1 Total Abdominal Hysterectomy (TAH)</u></p> <p>Has a wound drain in situ, and vaginal gauze pack that needs to be removed. Is on intravenous infusion of routine electrolyte fluids, which can be discontinued if tolerating fluids and light diet. Using the PCA for pain relief and this is being monitored 2-hourly. Depending on her recent pain score recordings this may be discontinued and oral analgesia prescribed.</p>	<p>Bed 2 age 35 female</p> <p><u>Day 2 Laparotomy. Reversal of Sterilisation</u></p> <p>Is an Insulin-dependent Diabetic. This morning her insulin pump has been discontinued and her normal daily dose of Insulin was given. Still requires frequent blood sugar monitoring. Intravenous fluids discontinued as tolerating fluids. She has no wound drains and her wound is clean and dry. Taking Co-Codamol for pain relief with fair effect.</p>	<p>Bed 3 age 62 female</p> <p><u>Day 3 Anterior and Posterior Pelvic Floor Repair</u></p> <p>Had problems passing urine and required insertion of urinary catheter this morning She has a copious, dark, vaginal bleeding which is causing her some embarrassment. A high vaginal swab was sent yesterday for culture, the lab results of which are indicating a definite infection. She needs commenced on medication for this and you will need a doctor to prescribe the appropriate antibiotic.</p>
<p>Bed 4 age 51 female</p> <p><u>Day 1 Laparotomy, TAH, and Omentectomy</u></p> <p>Still has Paracentesis drain in situ as large amount of ascitic fluid still present. This needs to be observed closely as the surgeon wants no more than 1 litre drained every 3 hours. The gynaecology oncology nurse has seen the patient and is concerned about her low mood. Please observe the patient's mood and reactions when her relatives are present at visiting hour today. This is to be documented on the oncology nursing sheet for review by the cancer team tomorrow</p>	<p>Bed 5 (SR) age 30 female</p> <p><u>Medical termination of pregnancy (MTOp)</u></p> <p>She has one previous miscarriage and has two children at home. She has had the appropriate medication inserted vaginally, and has required simple oral analgesia for pain. She admits to having a fear of needles and although she is now complaining of more severe abdominal pain, is not keen to have opiates as prescribed. The patient will also require every bedpan to be examined for evidence of products of conception.</p>	<p>Bed 6 (SR) age 16 female</p> <p><u>Medical termination of pregnancy (MTOp)</u></p> <p>This 16-year-old female is for medical termination of pregnancy (MTOp). She has had two previous TOPs in the past 18 months, and has no children. She has had some fresh vaginal bleeding and some abdominal cramps as advised to expect as a result of the procedure. She is crying and asking the nurses for an injection for the pain. The patient requires every bedpan to be examined for products of conception.</p>

Exercise 1: Indicate your Priority Ratings for patients in the boxes provided below:

Bed 1 **Bed 2** **Bed 3** **Bed 4** **Bed 5** **Bed 6**

Exercise 2: Rate the tasks or care aspects associated with each individual patient in the order that you will attend to first, second, third, and so on. Do this for as many tasks as you feel are necessary, up to a limit of 6 tasks.

Bed 1	Bed 2	Bed 3
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.
6.	6.	6.
Bed 4	Bed 5	Bed 6
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.
6.	6.	6.

Section 4

This section is about the different strategies and ways people carry out tasks and make decisions. Please think about your nursing work then read the following statements carefully. Proceeding at your own pace please rate how well each of the statements typically describes how you do things at work. There are no right or wrong answers. Write the numbered value that is most appropriate for each statement in the box provided as indicated in the example:

1= Not at all well	2= Not very well	3= Slightly well	4= Somewhat well
5= Well	6= Very well	7= Extremely well	
<i>Example: If statement number 1 describes you very well, enter 6 in the relevant box as shown here</i>			Rate 6

1	I prefer to deal with specific problems rather than with general questions	
2	When talking or writing about a patient, I tend to focus on one main problem or issue	
3	When starting a task, I like to brainstorm ideas with colleagues	
4	I prefer to set priorities for the things I know I need to do, before I start doing them	
5	When faced with a problem at work, I use my own ideas and strategies to solve it.	
6	In discussing or writing about a patient, I think focusing on the details or facts are more important than the overall picture	
7	I tend to pay little attention to details.	
8	I like to figure out how to solve problems at work by following certain rules, guidelines, or protocols	
9	I like to control all stages of my workload or tasks without having to consult others.	
10	I like to play around with my own ideas and see how far I can succeed with them	
11	I am careful to use the proper method(s) to solve any problems at work.	
12	I enjoy working on things that I can do by following specific directions.	
13	I stick to standard rules or ways of doing things.	
14	I like problems at work where I can try my own ways of solving them	
15	When making a decision at work, I mostly rely on my own judgement of the situation	
16	I can switch from one task to another easily, because all tasks seem equally important to me	
17	When talking or writing about a patient, I like to combine my own ideas with those of others who have written before me.	
18	I care more about the general effect than about the specific details of the task I have to do	
19	When working on any one patient task, I can see how the parts relate to the overall goal of the task in hand	
20	I like situations where I can compare and rate different ways of doing things	
21	When there are many important things to do at work, I try to do as many as I can in whatever time I have.	
22	When I am in charge, I like to follow methods and ideas others have used previously.	
23	I like to check and rate opposing points of view or conflicting ideas	
24	I like to collect detailed or specific information about patients in my caseload	
25	In dealing with complexity or difficult situations at work, I have a good sense of how important each of them is, and in what order to tackle them.	
26	I like situations where I can follow a set routine.	
27	When discussing or writing about a patient, I stick to points of view accepted by my colleagues	
28	I generally like tasks that have fixed rules or guidelines to follow in order to complete them	

29	I prefer to work with patients or do patient tasks that have been approved by my peers	
30	When there are several important things to do, I do those most important to me and my team	
31	I like tasks that have a clear structure and a set plan or goal	
32	When working with my patients, I prefer to start off tasks using my own notion of priorities	
33	When there are many things to do, I have a clear sense of the order in which to do them	
34	I like to participate in activities at work where I interact with others as a team.	
35	I like to tackle all kinds of problems at work, even seemingly trivial ones.	
36	When faced with a new problem at work, I like to solve it using traditional means	
37	I like to work alone on tasks or with a problem	
38	I tend to emphasise the general aspects of issues, or the overall effect upon the ward	
39	I like to follow definite directions when doing a task or solving a problem at work	
40	When writing down or discussing my ideas, I start with whatever comes to mind.	
41	When working on a specific project at work, I like to share ideas and get input from other people.	
42	I like situations where I can study different views or ideas.	
43	When trying to make a decision at work, I tend to see only one major factor	
44	I like problems where I need to pay attention to details.	
45	I like to challenge older ways of doing things and seek better ones.	
46	I like situations where I interact with others and everyone works together.	
47	I find that solving one problem usually leads to many others that are just as important	
48	I like working with patient caseloads that deal with general patient issues rather than with nitty-gritty details.	
49	I like situations where I can do things my own way and use my own ideas about how to do it	
50	When there are several important tasks to do, I do the one that I think is most important.	
51	I prefer tasks which involve grading or comparing methods used by others	
52	When there are several things to do, I choose the ones most important to other colleagues or members of the wider team	
53	When faced with a problem or issue at work, I prefer to try new strategies to solve it	
54	I like to concentrate on one task at a time	
55	I prefer patient caseloads that allow me to work independently	
56	Enjoy work that involves analysing or comparing reports, results, or people.	
57	I prefer to deal with specific problems rather than with general questions	
58	I like to do things in new ways not used by others.	
59	When I start prioritising my patient caseload, I focus on tasks identified as relevant by other colleagues	
60	I feel I have to finish off one task before starting another one	
61	In discussing or documenting, I like to describe the general picture	
62	I pay more attention to the parts of a task than to its overall effect or significance	
63	I prefer situations where I can carry out my own ideas or priorities without relying on others	
64	I like to change routines in order to improve the way tasks are done.	
65	I like to take old problems and find new methods of solving them	

Thank you for taking the time to complete this questionnaire and taking part in the study.

Appendix 19



LD/TI

27 September 2005

Dear Ms. Morrison

**An Exploration of Gynaecology and Surgical Nurses' Priority
Setting**

Thank you for your letter of 2 September 2005 replying to the points raised by the Departmental Research Ethics Committee. I understand that there is some urgency in gaining departmental ethics approval since the study is due to commence soon.

I have reviewed your responses and your submitted materials and believe that you have satisfactorily addressed each of the issues. I therefore approve the study.

My only comment, not to do with the ethics of the project, is that the formatting of the questionnaire needs some attention before distribution to participants. In particular the text boxes for responses obscures some of the text, see page 1 and 2. Also, the lines for responses in section 2 are not aligned properly. Perhaps the text should be incorporated as a table since better control of formatting is available. In section 3, Exercise 2 is split across pages. This may confuse participants as to the number of tasks they can specify. It would be better to have a page break at exercise 2. Similarly for situation 2. In Section 4 the font is too small and is inconsistent.

I wish you all the best in conducting this interesting study.

Yours sincerely

Len Dagleish, PhD
Chair

Tayside Committee on Medical Research Ethics
B
Level 9
Ninewells Hospital & Medical School
DUNDEE
DD1 9SY
Telephone Number: 01382 632701
Fax Number: 01382 496207
www.nhstayside.scot.nhs.uk

NHS
Tayside

Mrs Audrey Morrison
PhD Student (Final Year)
University of Stirling
Department of Nursing & Midwifery
University of Stirling
Stirling
FK9 4LA

Date 21 October 2005
Your Ref
Our Ref NFB/JM/05/S1402/59
Enquiries to Mr Nigel F Brown
Extension 32701
Direct Line 01382 632701
Email nigel.brown@tuht.scot.nhs.uk
or
fiona.bain@tuht.scot.nhs.uk

Dear Mrs Morrison

Full title of study: An investigation of the nature of clinical judgements and decision making involved in the priority setting of patient care
REC reference number: 05/S1402/59

Thank you for your letter of 08 October 2005, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Administrator.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Application		19 July 2005
Investigator CV		
Investigator CV	Supervisor - Dr Vivien Swanson	
Protocol		18 July 2005
Questionnaire	1	18 July 2005
Letter of invitation to participant	1	14 July 2005
Participant Information Sheet	3	06 October 2005
Participant Consent Form	1	01 August 2005
Response to Request for Further Information		08 October 2005



Headquarters
Kings Cross, Clepington Road, Dundee DD3 8EA

Chairperson, Mr Peter Bates
Chief Executive, Professor Tony Wells

Research governance approval

You should arrange for the R&D department at all relevant NHS care organisations to be notified that the research will be taking place, and provide a copy of the REC application, the protocol and this letter.

All researchers and research collaborators who will be participating in the research must obtain final research governance approval before commencing any research procedures. Where a substantive contract is not held with the care organisation, it may be necessary for an honorary contract to be issued before approval for the research can be given.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

05/S1402/59

Please quote this number on all correspondence

Yours sincerely



Nigel F Brown
LREC ADMINISTRATOR

Enclosures: Standard approval conditions

Copy to: NHS Tayside R & D

Headquarters
Kings Cross, Clepington Road, Dundee DD3 8EA

Chairperson, Mr Peter Bates
Chief Executive, Professor Tony Wells

Personnel Department
Acute Services Division
NHS Tayside
Ninewells Hospital
Level 9
DUNDEE DD1 9SY
Telephone Number : (01382) 660111
Fax Number: (01382) 632098 or
496237
www.nhstayside.scot.nhs.uk

Ms Audrey Morrison
Balintore Cottage
67 Waggon Road
Brightons
FALKIRK
Stirlingshire
FK2 0EL

Date	4 October 2005
Your Ref	
Our Ref	PMcL/ve
Enquiries to	Vanessa Edgar
Extension	32578
Direct Line	01382 632578
Email	vanessa.y.edgar@tuht.scot.nhs.uk

Dear Ms Morrison

HONORARY HEALTH SERVICE APPOINTMENT AS A RESEARCH NURSE

I am writing on behalf of NHS Tayside (Acute Services Division) to offer you an Honorary Health Service appointment as a Research Nurse on the following terms and conditions:-

1. This appointment is to NHS Tayside (Acute Services Division) and is effective from 1 October 2005 for a period of 2 months until 30 November 2005.
2. In the performance of any work you shall be responsible to Fiona Greig, Consultant Midwife, Perth Royal Infirmary, during the course of your contract.
3. Whilst on NHS premises you may become aware of information regarding Health Service Patients and may be party to information regarding Health Service Staff. This information must be handled with the strictest of confidence and must not be communicated to persons who do not require the information. Please sign the enclosed confidentiality statement (2 copies) and return one copy to myself, retaining the other copy for your own information.
4. This appointment will not include any payment of salary or expenses by NHS Tayside (Acute Services Division).
5. Whilst on NHS premises, you will be expected to conform to all NHS Tayside and Departmental policies.



Headquarters
Ninewells Hospital & Medical School, Dundee, DD1 9SY

Chairperson, Professor Jim McGoldrick
Chief Executive, Mr Gerry Marr
Tayside NHS Board is the common name of Tayside Health Board

A copy of this letter is enclosed which you should sign in acceptance of the above conditions and return to me as soon as possible.

Yours sincerely



Patricia McLean
Employment Services Manager

Encs

I accept the conditions as detailed above

Signed *Audrey Aspin* Date *10:10:05*

Fife Acute Hospitals

Victoria Hospital

Hayfield Road
Kirkcaldy
Fife KY2 5AH
Telephone 01592 643355
www.scot.nhs.uk/faht



Ms Audrey Morrison
67 Waggon Road
Brightons
Falkirk
FK2 0EL

Date 12 September 2005
Your Ref
Our Ref VH/HONAPPT/04
Enquiries to Vicki Herd
Extension 8687
Direct Line
Fax No 01592 648088
Email vicki.herd@faht.scot.nhs.uk

Dear Audrey,

HONORARY APPOINTMENT FIFE ACUTE HOSPITALS

I am writing to offer you an Honorary (unpaid) appointment within Surgery and Women & Childrens, Fife Acute Hospitals with effect from September 2005 until October 2005 subject to clearance by Occupational Health.

During this appointment Arlene Saunderson, Directorate Nurse Manager will be your supervising clinician within Fife Acute Hospitals. Ms Saunderson should arrange for you to be issued with an ID Badge on commencement of your appointment.

Your hours of work will be flexible to suit the needs of the project and should be agreed with your supervising clinician.

If you agree to accept this appointment on the terms set out above, please sign and date the pro forma on the attached copy letter and return to me as soon as possible.

Yours sincerely

PP Graeme Pettigrew
Personnel Officer

Cc: Arlene Saunderson
Catherine Cummings
Aileen Yell

DO NOT DETACH

PRO FORMA

I hereby accept the Honorary appointment offered to me by Fife Acute Hospitals on the terms set out above.

Signed Date 13 September 2005



LC/LH

27 October 2005

Mrs Audrey Morrison
PhD Student
Department of Nursing and Midwifery
University of Stirling
STIRLING
FK9 4LA

Dear Mrs Morrison,

R&D Project ID: 2005GY03

Title: An investigation of the nature of clinical judgements and decision making involved in the priority setting of patient care.

LREC Ref: N/A LREC Approval Date: N/A

Main REC Ref: 05/S1402/59 Main REC Approval Date: 21/10/05

Funding: Unfunded

Sponsor: University of Stirling

NHS Support Costs: None

The above project has been registered on the NHS Tayside R&D database, as required by the Research Governance Framework and EU Clinical Trials Directive. Full Main REC approval has been obtained and there are no local NHS Support costs associated with this research project.

NHS Tayside has no objection to the project proceeding, provided all necessary approvals are in place and all amendments to the protocol, personnel involved and funding be notified to the R&D office and all appropriate personnel.

It is important to note that all research must be carried out in compliance with the Research Governance Framework for Health & Community Care and the new EU Clinical Trials Directive.

Kind Regards

Elizabeth Coote
Non-Commercial
Research & Development Manager

c.c. Mr Nigel Brown (LREC Administrator, NHS Tayside)
Ms Morag Campbell (Contracts Officer, University of Stirling)