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AN ANALYSIS OF THE INFLUENCES ON THE MOVING AND HANDLING PRACTICE OF DIPLOMA STUDENT NURSES WITHIN A MEDICAL ENVIRONMENT.

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ABSTRACT

Anecdotal evidence indicates that in clinical practice diploma student nurses encounter M&H practices that do not always reflect those taught in training and that these influence their own practice. There is little available research evidence that identifies the factors that influence students moving and handling.

The aim of the study was to explore the factors influencing the moving and handling practice of student nurses in the practice setting. 24 diploma in nursing students from one centre of a school of nursing participated in the qualitative study. Data was obtained using semi-structured interviews and non-participant observation.

The students moving and handling practice was subject to a large number of influences of which the most influential were those of service staff and the associated M&H norms of the clinical area. In the face of experienced staff students felt inferior and powerless and in order to 'fit in' failed to confront established moving and handling norms. Students felt their moving and handling fraining unrepresentative of clinical practice and were little influenced by it. The predominant influence was the clinical staff's practice of moving and handling.

Pre and post-registration moving and handling training needs to be standardised, integrated and for students' should be taught in a way that enables them to apply their learning in the practice setting.

CHAPTER ONE

INTRODUCTION

1.1 The Study

Personal and published anecdotal evidence from students suggests that clinical areas are influential in shaping student-handling practice (Travis 2000). Using a medical setting of two trust hospitals this study explores and describes the influential factors on diploma student nurses moving and handling practice and their relative importance. The question posed was what factors influence the moving and handling practice of student nurses in clinical practice? The aim to identify these factors and determine their relative on student nurses' ability to apply the principles of manual handling taught during their pre-registration course. The outcome to suggest potentially more effective methods of moving and handling training.

This qualitative study was conducted using diploma students from one centre of a multi-centred school of nursing during their clinical experience on the medical directorates of two hospital trusts. Non-participant observation determined the student's clinical application of patient handling and semi-structured interviews explored their experience and perception of patient moving and handling (Harris 1997).

1.2 Nursing and manual handling

Nursing's heritage is a high incidence of musculo-skeletal injuries. Smedley (1995) identified the lifetime prevalence of back pain among female nurses as 60%, a major

cause being the necessity to frequently move and handle patients manually (Smedley 1994).

As a response to worker musculo-skeletal morbidity in 1990 the European Commission drafted directive 90/269, requiring national manual handling legislation. Britains Manual Handling Operations Legislation (1992) requires risk assessments of manual handling, risk reduction and wherever possible alternative and ergonomic solutions to manual handling.

Prior to the 1990 introduction of the diploma in nursing programme nurses received a variable and rudimentary moving and handling fraining (Pattison 1988). Nursing schools devoted variable amounts of time to the teaching of 'lifting', concentrated on manual techniques practised in the clinical area and used only a limited number of handling aids of restricted applicability. On average a student nurse received only one hour's theoretical instruction and two hours supervised practice (RCN 1979). Raistrick (1981) identified the time devoted to the instruction of student nurse manual handling training was from one hour to half a day. In consequence most of the student's' experience was in the clinical areas. The result was that a student's patient handling was heavily influenced by the 'manual lifting' practices of the clinical area. This associated with the fraditional nursing culture of self-sacrifice in the service of ones patients sowed the seeds of future injury.

The supernumerary status for students created by Project 2000 (The Diploma in

Nursing) reinforced in 1992 by the Manual Handling Operations Regulations (HSE 1992's) requirement for enhanced manual handling fraining, provided an opportunity for schools to introduce a new handling sfrategy. The School from which students for this study was drawn infroduced moving and handling instruction of an increased quality and quantity based on principles in the Manual Handling Operations Legislation (1992). The aim of the moving and handling fraining programme is to educate student nurses to use sound ergonomic principles and a problem solving approach to determine safe solutions to patient handling problems. For this the School adopts a step by step approach. First students' are infroduced to the moving and handling legislation and principles of safe load handling. Then subsequent sessions teach students to use equipment and apply techniques that reduce the level of risk associated with manual handling. These moving and handling sessions are strategically located to provide regular reinforcement of the principles of manual handling risk assessment and problem solving. The aim is to produce skilled practitioners, who can intelligently adapt their manual-handling practice such that it is safe for them, their colleagues and patients. Support for this programme is inherent within the RCN Code of Practice for Patient Handling and the Code of Professional Conduct (Nursing and Midwifery Council 2002). Clause 1.4 of the Code of Conduct emphasises the duty of care to patients and clients to ensure the dispensation of safe and competent care and section 8.1 to the establishment of a safe environment. Further Clinical Governance aims to maintain and improve a high standard of quality of patient care. One concept being the establishment and maintenance of a safe patient environment through clinically effective moving and handling founded on evidence based practice (DoH 1998, 1999).

1.3 Previous research

Following the infroduction of the Manual Handling Operations Regulations (1992), few studies have focused on student nurses' moving and handling practice. Those studies that have been done indicate students often conform to inadvisable clinical practice and are reticent to challenge it (Kane 1994a, Peto 1994, Swain Pufahl & Williamson 2003). The problem is thus part of the theory practice gap in respect of practical skills (Cooke (1991), Wilson and Startup (1991).

In attempting to determine reasons for student compliance Kane (1994b), Peto (1994) & Swain et al (2003) generally agree compliance is not generally due to a lack of knowedge, but because of a multiplicity of clinically based influences, the primary influence being that of ward staff That clinical staff act as role models and that their clinical practices establish ward norms has long been established (Melia 1984), Bandura (1977), Betz (1985) and Fitzpatrick et al (1996). Holland (1999) identified that students need to 'fit in' in and Gregory (1996) that students conform to norms because of their desire to be accepted. Kneafsey's (2000) literature review of 'the effect of occupational socialization on nurses' patient handling practices' concludes that occupational socialisation is the most significant factor on student patient handling, but suggests that developments of reflective and critical thinking in nurse education may have altered the current picture.

This study explores the factors that influence students moving and handling practice and their relative importance. It does so within an educational and clinical environment that

has responded to moving and handling legislation with improved moving and handling fraining, procedures and equipment and uses students exposed to these benefits and the additional educational developments of critical and reflective thinking. The use of a qualitative methodology incorporating semi-structured interviews provides the flexibility to explore student experience and perceptions of influences on their manual handling (Harris 1997, Robson 1993). Observation data absent from previous studies, serves as both a method for corroboration of student statements (Fielding 1994) and an insight into the interpersonal interaction.

1.4 Study chapters

Chapter two reviews the literature. First literature associated with back pain and injury establishes the cost to the profession, then the nature of the handling practices causing the problem and the legislative response. Next studies of manual handling fraining identify the theory practice gap. The possible influential factors on student manual handling are identified by a review of the moving and handling environment. This encompasses topics within the disciplines of sociology and psychology and their possible linkage with student manual handling practice.

Chapter three discusses the study's methodology. The research question and outcomes are identified and the arguments for the research design choice of a qualitative methodology. In the light of the research question, practical considerations and the descriptive nature of the research, use of semi-structured interviews and non-participant observation are advanced as appropriate research methods. Data analysis

using multi-stage content analysis with participant verification of the analysis is described (Bumard 1991). Finally the limitations of the study are identified.

Chapter four describes the hospital based medical context and the moving and handling environment. Pertinent factors such as handling resources, risk assessment, policies and clinical staff fraining and support are identified.

Chapters five and six discuss the results of the study. To aid the clarity of the description the results of the observations and interviews are dealt with separately. This sfrategy facilitates vahdation of interview data with student actions from each of the three years of the diploma programme. The results identify a dissonance between some aspects of the students stated responses and their actions. The primary influence of the clinical environment is identified and within this the predominate factor of the handling norms established by clinical staff Student handling fraining in its present form is recognised as a weak influence

Finally chapter six describes the conclusions of the study and in the light of these the suggested recommendations for improving the present position of student and clinical manual handling, particularly with respect to handling fraining. The limitations of the study are acknowledged and suggestions made for further research. These include using altered subject numbers, research methods and investigation of student characteristics that mitigate against compliance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Literature review methodology

Several databases were used as well as local university library catalogues. These were searched using key words and phrases. Additional sources were extracted from unpublished dissertations, collected articles, personal contacts, and books related to moving and handling. Further material was obtained incrementally utilising references from journal articles and books.

Library search of books	**Key word or phrase**
Local University library	Occupational socialisation of nurses Compliance Kellys' construct theory Moving and handling, lifting.
Data Base Searches	
CINAHL	Student Compliance
BIDS (Education)	Sociahsation
(ERIC)	Socialisation
(EMBASE)	Sociahsation
(Social Science)	
Nursing Collection (1995-2000)	Socialisation & student nurses
CINAHL: Searched, 1985 - 2003	Lifting. Moving and handling.
CINAHL: Searched, 1985 – 2000	Socialisation
CINAHL: Searched, 1985 – 2000	Student nurse socialisation
CINAHL: Searched, 1998-2002	Compliance, (staff- student compliance)
Nursing Collection: 1995 -2002	Compliance, (staff- student compliance)
Psycho info: Searched 1985-2002	Socialisation, worker socialisation, staff compliance, worker compliance, nurse compliance. Compliance.
British Nursing Index 1994-2003	Compliance, staff compliance.
British Nursing Index 1985-2003	Moving and handling, manual handling, lifting
OVID Searched 1985-2002	Socialisation, worker socialisation, Student socialisation.

2.2 Back Pain and Injury in Nursing

Traditionally nursing has been acknowledged to be an occupation associated with a high risk of back injuries (Cust 1972, Cust 1976, Stubbs 1986). Hignett (1996)'s review of studies on work-related back pain identified a link between back pain and nursing and suggested that nursing is one of the occupations with the highest level of morbidity attributable to this problem. A finding supported by Stubbs and Buckle (1984) and a Health and Safety Commission study of (1994/95). Pheasant and Stubbs (1992) also identified nursing's incidence of back pain and injury as higher than that of the general population. In terms of morbidity it has been estimated that 40,000 nurses take sick leave for back pain each year, resulting in an annual total of 764,000 lost working days Stiibbs (1983a). As Stubbs (1986) and Hignett (1996) identified that most nurses cope with back pain without taking time off work, these reported morbidity figures represent the tip of what could be a very large iceberg. The level of injury incurs an estimated cost of £50,000,000 for the replacement of nurses who leave nursing due to back injury and a fiirther £ 70,000,000 due to sickness (Gilhnan 1992). One might think tiiat such costs would be a catalyst for change, but McGuire (1997) identified that 85% of NHS managers and 95% of the finance directors in one trust were unaware of the cost of back injury to their trust.

Results confirming that legislation had yet to make a significant impact on the injury statistics came four years after the infroduction of the 1992 moving and handling legislation. Seccombe and Smith (1996) identified that 32% of nurses had taken time off with back pain and the Health and Safety Executive (1995) reported that only

construction workers were at higher risk. The cause is thought to lie in the nature of a nurse's work.

Nursing involves heavy physical work incorporating frequent bending, twisting, static postures, lifting and repetitive work (Baty & Stubbs 1987). As a result of accident statistics, numerous studies on nurse back injuries have been carried out over the years, but comparison between them is difficult. Buckle (1987) identified that that a firm diagnosis of back pain is rarely made and variables such as the intermittent symptomatic nature of the pain, its description by the sufferer and the variability of the studies definitions of these factors preclude comparisons. He also points to the problems posed by the different research methodologies. However, despite these differences each concludes that nursing carries a significant risk of injury from the moving and handling ofpatients.

Cust (1972) identified a prevalence rate of low back pain in nurses of between 35% and 52% and Stubb's (1986) cited that 12% of all nurses leaving the profession identified back pain as either a main or contributory factor. Both studies used a questionnaire with a limited response rate of approximately 50%. The predominant practise was manual lifting, suggesting that the use of 'manual techniques' generates a high incidence of back pain. In these studies student nurses were found to be most at risk during their first few weeks on the ward and areas such as health care of the elderly, medicine district nursing and orthopaedics were associated with the highest incidence of back pain (Stubbs (1986). O'Bryne (1992) and Moffett, Hughes & Griffiths (1993) confirmed student

nurses as particularly vulnerable. They stated that 37% of a sample of 199 female student nurses suffered a first instance of back pain within their first year of nursing and that the incidence of back pain was linked to areas with a heavy workload such as health care of the elderly.

In contrast with these studies today's contemporary practice of manual handling does not encourage manual lifting, consequently one might expect a lower level of injury. However, Seccombe & Smith's (1996) national study of 6,000 nurses on behalf of the Royal College of Nurses (RCN), identified a high prevalence of back pain in nurses working in general medicine. This was ascribed to an insufficiency of moving and handling equipment, although there is no clarification as to whether this was due to unavailability, limited availability or an insufficient variety of equipment.

The continuing problem of back injuries in nursing was highlighted by Smedley, Egger, Cooper and Coggon's (1995) investigation into the manual handling activities and risk of low back pain among nurses in Southampton. They identified that the lifetime prevalence of back pain was 60% (sample 1,616). The one year period prevalence was 45% and 10% had been absent from work for a cumulative period exceeding four weeks, but student nurses were not included in the study. Simmons (1992) identified that up to one in four respondents regularly experienced back pain at some point in the working day and that three quarters felt they were expected to accept back pain as part of the job. These attitudes may be partly explained by Harber, Billet, Vojtecky, Rosenthal, Shimozaki & Horan (1988)'s study which controversially advanced the idea that nurses

would find changing patient care practices to affect their own discomfort would be unacceptable from a 'caring' profession. This study also discovered a prevailing belief among nurses that they were primarily responsible for the prevention of the injury, by the adoption of correct working practices. This emphasis on personal responsibility was reinforced by corporate fraining practices, which stressed employee responsibility and excluded the part played by the work environment and working practices. Such findmgs divert attention away from employee's attempting to reduce the inherent environmental and nursing practice risks associated with manual handling injuries.

Hignett (1996) reviewed eighty studies of work related back pain in nurses over a thirty year period and despite the different methodologies; definition of back pain, the disparate nursmg populations used and the assessment time periods of the studies, there was general agreement that nursing is a high risk occupation for back pain. She also identified that frequent patient handling appears to be a contributory factor and that the fraditional approach to the fraining of moving and handling as a means to reduce risk is unproven. As a consequence the National Statistics Omnibus Survey (1996) identifies nursing along with coal mining, care working and construction as occupations with the highest levels of musculoskeletal disorders.

Larese and Fiorito (1994)'s Italian study supports the premise that musculoskeletal disorders constitute a major source of debility in nurses compared to other hospital workers and occupations particularly if working practices require them to work alone. An incidence of back pain of 48% was identified and as in Cust's study a positive

relationship was found between age and length of employment. However, Larese and Fiorito (19994)'s applicability to British practice and student nurses should be made with caution. There is no acknowledgement of changed working practices stemming from the European Union directive (90/269,1990) on the handling of loads, 60% of the subjects in the study practiced heavy hfting and student nurses are not identified as a sub-group.

2.3 Possible causes of back pain.

Stiibbs and Buckle (1984), Stiibbs (1986) and Fiorito and Larese (1994) postulated a link between patient handling and back pain and Jensen (1990) suggested that frequency of patient handling was a factor. Further support comes from intemational studies by Takala & Kukkonen (1987) in Finland, Kirking, Bertsche, (1999) in America, Retsas & Pmikana (2000) in Ausfralia and Marras, Davis and Yip Yin (2001) in Hong Kong. Garg, Owen, Seller & Banaag (1991), Gladman (1991) and Smedley, Egger, Cooper, Coggon (1995) also identified a link between low back pain, the manual movement of patients and the frequency of these activities. The studies used different methodologies, participant age structures and occured against different national moving and handlmg protocols, but whether a laboratory study, such as Garg et al's, or clinical as for the other studies, the common finding was that the risk of injury to nurses from the manual handling of patients is a global problem.

Smedley et al (1995), Love (1996) and Marras et al's (1999) work extended that of previous studies by identifying the level of risk associated with specific manoeuvres.

These studies focused on manual fransfers establishing there was a high probability of them inducing musculoskeletal damage, especially when performed by one person. Manual fransfer methods are now regarded as obsolete in British practice, but significantly some of these whilst not advocated, are still being practised (Seccombe & Smith 1996, Love 1996).

Comparative evaluations of these studies is difficult as their definitions of back pain differ and different sample groups and research methodologies are used. One common conclusion is that the manual handling of patients' poses a significant risk to the safety of nurses, particularly when repetitive and inappropriate manual handling of patients is used.

2.4 Manual Handling Legislation

In 1990 the European Community addressed the problem of the high level of occupational related manual handling injuries by directive (90/269,1990). This required member states to infroduce manual handling of loads legislation. In the UK the Manual Handling (Operations) Regulations of 1992 came into force on the 1st of January 1993. The legislation requires employers to reduce the risks to employee's from manual handling by undertaking manual handling risk assessments, the provision of load handling equipment and appropriate manual handling fraining. The aim, as far as possible is to eliminate the manual handling of loads. When this is not possible to reduce risk by the implementation of safer working practices.

In compliance with the legislation and estabhshment of safer working practices the trusts in this study have infroduced minimal lifting policies, appointed a manual handling advisor and provided equipment and training. However, evidence exists that problems may arise in the implementation of such policies. Owen's (1998) study discovered that in one trust only 10% of staff had read the hospital policy and resistance existed to the use of new handling equipment. Bias in the study may exist as limited trust funding meant that some wards had to purchase equipment from their own budgets. The inference to staff being that the initiative was not considered important.

Smith & Seccombe's (1996) national survey of 6000 members of the Royal College of Nurses identified that half of those reporting a back injury said they had not had continuous access to equipment and one in ten had no access to equipment. Of those suffering a moving and handling injury, 75% stated it occurred in a hospital and 96% of those within a NHS hospital. This post legislation study supports the pre-legislation finding that medical and health care of the elderly wards are associated with a significant risk of injury, 18% from medicine and 30% from health care of the elderly respectively of nurses reporting injuries. This finding was not linked to equipment availability, but respondents said too few staff were available, requiring nurses to work alone and therefore unable to carry out safe handling, but specifics as to who and where are not identified.

In summary an attempt has been made to reduce the occupational risk to nurses from patient moving and handling, but with limited success.

2.5 Moving and Handling Training

Adequate fraining is identified as a key requirement of the Manual Handling Operations Regulations (1992), but prior to the legislation fraining provision was limited. In some cases the subject was covered in as little as 3 hours (Raistrick 1981, Stubbs 1983). Pattison (1988) identified that 75% of sampled nurses had received less than two hours fraining and the remainder two to five hours. 69% had received no instruction in the use of aids and 75% stated that the fraining received did not reflect or was appropriate for practice. Cole (1992) identified the NHS as inadequately prepared to respond to the manual handling legislation, of particular concern was the limited amount of manual handling fraining provided for auxihary nurses. The non-availability of formal in service instruction was underlined by Scott (1995), identifying that only 64.5% of quahfied staff had received any kind of instruction, 20% of auxiliaries had received no formal instruction and 43.8% none within the last 20 years. This was a small questionnaire study of just one medical unit of a British hospital and therefore not generalizable. Seccombe & Smith (1996) in their national study of back injured nurses (and therefore possibly unrepresentative of the wider nursing population), identified that 91% had received fraining, but similar to Scott's (1995) study 43% had received it during the 1980's. A 2003 RCN random sample evaluation of Trust provision for manual handling indicated that 50% frain by a cascade system and 45% by a Back Care Advisor of which 15% is through ward supervision and 10% by external agencies. However, even when fraining is available problems are encountered.

One trust encountered difficulties when senior clinical staff were not included in

fraining. Nursing assistants who attended fraining and then attempted to apply their skills encountered resistance from senior clinical staff (Oddy & Lodge 1993a). The 2003 RCN survey also highlighted problems of implementation associated with negative peer pressure, lack of resources and policy enforcement, non use of equipment, failure to follow safe-systems of work and the use of condemned lifts. Careful implementation of fraining is therefore important, but there is a lack of consensus as to its effectiveness.

Stubbs (1983) challenged the accepted, but unproved wisdom that fraining improves practice. Stubbs carried out an intensive fraining programme and tested the participants' ability to retain taught content fifteen weeks later. Stubbs identified the inability of frainee's to retain learned principals (Stubbs 1983. These results led Stubbs to question the validity fraining programmes, suggesting that there was no demonsfrable link between fraining and reduced levels of injury. In a later study Pheasant & Stubbs (1992) noted manual-handling fraining had a short-term impact on the reduction of back injuries, but was quickly followed by a return to original levels. Studies by Gebhardt (1994) and Hollingdale (1997) examining the effectiveness of fraining on the incidence of back pain on health professionals concluded that there was a minimal positive influence, but Hollingdale noted that some individuals with more recent fraining in manual handling experienced a higher prevalence of back pain. The research failed to identify the reason for this, but one suggestion was that some of the handling techniques were inappropriate for some clinical situations. The reason for fraining failing to have an impact on back injuries is unclear, but one suggestion is its failure to reflect real practice.

Both Stubbs (1983) and St Vincent & Tellier (1989) suggest that one possible reason for the limited effectiveness of fraining programmes is they fail to take account of and adapt to the consfraints of the workplace. A study by Larese and Fiorito (1994) into musculoskeletal disorders in hospital nurses suggested that an important factor was the nullification of the benefits of fraining by the adoption of inappropriate working practices to cope with inadequate staffing levels. They suggested that in any sfrategy to reduce levels of injury it is important to address work distribution and nurse to patient ratio. The suggestion is that no training can compensate for intrinsically unsafe environments and working practices. This premise was also identified as relevant to student nurses by Wilkinson, Peters, Mitchell, Irwin, McCorrie & MacLeod (1998). They identified that students need to have experience of the context of experiences and application of theory within practice in order to consolidate learning. Hignett (1996) and Yip (2001) take up the issue of links to the workplace by suggesting the importance of ergonomics in fraining programmes.

Hignett (1996) states that benefits may be gained by the inclusion of ergonomics in manual handling fraining programmes. She quotes two studies Hellsing, Linton, Andershed, Bergman and Liew (1993) and Troup and Rauhala (1987) in which an ergonomic component was included in handling fraining. Hignett suggests Hellsing et al (1993)'s inclusion of ergonomics produced a favourable improvement in body postures, but no critique is offered to justify this assumption. Videman, Rauhala, Lindsfrom, Cedercreutz, Kamppi, Tola, and Troup's, (1989) confrolled experiment involving student nurses had one group which received 40 hours of patient handling

fraining with an ergonomic component and another group a fraditional 'handling techniques' programme. One-year later nurses receiving the ergonomic component reported less back injuries than those exposed to the fraditional training, but this was not statistically significant. The case for the inclusion of ergonomics therefore appears unproven. The authors accept this lack of confirmation of ergonomics as being significant, but added that senior nurses had hindered the sampled nurses in the apphcation of their skills. The nature of these hindrances is not identified, but more significantly the authors make no comment on the fact that clinical circumstances affected taught practice.

Increasingly there is acknowledgement that programmes that focus on just one factor are not effective in the reduction of manual handlmg injuries. Owen, Keene & Olson (2002)'s study of an ergonomic approach to reducing back and shoulder sfress in hospital personnel used a multifactoral approach by infroducing appropriate equipment, predetermined handling sfrategies for tasks and an education programme that included managers. The result was a sustained reduction in injuries over a five-year period. Such multifactor intervention sfrategies are increasingly being advocated in which fraining is just one component (Hignett 2003 & Nelson, Fragala & Menzel 2003).

The conclusion is that the effectiveness of fraditional skills based fraining remains unproven, but this finding requires further testing, given the increased emphasis on fraining, its frequency and the addition of an ergonomic component to moving and handling programmes. Future studies should pay attention to the time allocated to the

acquisition of skills and its impact on content retention over time, a point raised by Hayne (1981) cited in Stiibbs (1983).

The School of Nursing from which the students for this study came, allocates 21 hours to Moving and Handling fraining within the Common Foundation Programme (12 months) and a further 9 hours over the 24 months of the Branch programmes. This course incorporates the load handling principles as advocated in the Manual Handling Operations Regulations (1992) and their practical application to health care practice as in the Royal College of Nursing and National Back Pain Associations book, The Guide to the Handling of Patients (1997). The sessions are distributed throughout the course and integrated with clinical placements. The aim is to provide the student with a firm foundation in both the theory and practice of all types of patient handling.

Given the increased time devoted to this subject and the emphasis on non-manual handling techniques, students are theoretically better prepared than their predecessors to apply good practice. However, anecdotal evidence from students of the nursing school suggests that discrepancies continue to exist between student nurses knowledge of moving and handling and their practice. Kane (1994b) suggests that the reason for this is the influence of the clinical environment and its detachment from theory.

2.6 Theory Practice Gap

The theory practice gap is a recurrent theme in nursing literature and identifies the disparity between taught and actual practice. Cooke (1991) defines it as practice failing

to mimic theory and Elkan and Robinson (1993) as a relational breakdown between schools of nursing and clinical practice. As an example of the dissonance between theory and practice, Greenwood (1993) criticises the patient individualism of nursing models as being of questionable assistance to students when they encounter the 'real world' of clinical practice with its competing demands. Shead (1991) broadens this premise by identifying a fundamental 'segmentation' between education and service. Education wishes to produce a competent nurse capable of practising independently, but service requires :-

"Competent and compliant students concerned with getting the work done". (Shead 1991 p. 1992).

This difference in emphasis appears not to have been eliminated with the educational changes associated with the advent of Project 2000. Bradby and Soothill (1993) identified that following the Common Foundation Programme twenty one per cent of students were concerned about their lack of practical skills. Elkan & Robinson (1993) suggested that this might be accounted for by the lack of emphasis on the acquiring of practical skills, tutors believing them to be less important than interpersonal or communication skills. Students and clinical practitioners on the other hand felt more emphasis should be given to the teaching of practical skills. The subjects taught by the educationalists and whether these included an interest in the teaching of practical skills are not noted in the small study of 35 students, educationalists and practitioners. Elkan & Robinson's (1995) review of nine research teams findings on the implementation of

Project 2000 supports their earlier finding, but again detail of the surveys participants are not available. Wilson and Startup's (1991) longitudinal survey of nurse socialization during their first year of their fraining found that only fifty per cent of students felt the school contributed to the learning of practical skills and that practical skills were performed differently on the ward. These studies did not identify particular practical skills, therefore the relevance to moving and handling is uncertain. Also Wilson and Startup's sample of first year students' had little experience or opportunities to consolidate their learning and were unskilled in reflective practice.

Elkan and Robinson (1993) concluded that nurse teachers whilst subscribing to a holistic model of nursing which values all aspects of the curriculum, appear not to have given the acquisition of practical skills the same status. The result on students was to make them feel.

"Awkward and ill at ease during some of their early ward placements. . . . students' ascribed these feelings to a lack of practical competence" (Elkan & Robinson 1993. pp 296).

Failure to emphasis to the acquisition of practical skills appears to affect student clinical practice. Wilson and Startup (1991) suggest that as students in clinical practice have little contact with tutors and are relatively unskilled they have to rely on memory and clinical staff to perform a skill. As workloads within placements are often high, students are paired off with auxiliaries familiar with the ward routines (Melia 1987, Wilson and

Startup 1991). Thus confrol of practical skills is given over to unqualified support staff. Melia (1987) placed great emphasis on the importance of the auxiliary in the initiation of the student to the clinical area and my anecdotal evidence suggests this may still be the case with the auxiliary's replacement, the health care worker. Wakefield (2000)'s limited study involving four diploma student nurses entitled, 'Tensions experienced by student nurses in a changed NHS culture'. Supports this. One student is quoted as saying.

"I keep being put with the auxiliary and she keeps telling me what to do" (Wakefield 2000 pp. 574).

The inexperienced student may therefore be exposed to clinical skills which do not reflect the research lead approach of the nursing school, what Ashworth and Morrison (1989. pp. 1011) describe as the 'deleterious norms of the workplace'. These norms arise from the differentiation clinical staff make between the 'ideahstic' and the 'realistic' (Smithers & Bircumshaw1988). Idealistic practice is perceived as unworkable, consequently they ignore research findings because:

a) Staff are too busy, short staffed.
b) They pose a threat to their knowledge and expertise.
c) The effect change would have on the routine.
d) The belief that they are already doing what is for the best.

McCaughty (1991) stated that a fundamental reason for the theory practice gap is *that*

the nursing curriculum is perceived as an imperfect representation of nursing practice and inadequate to meet nursing practice which is infinitely more varied and complex than any possible theoretical definition.

A classroom description of nursing care can never be quite the same as the real world This leads to a state where nurses consciously ignore theory because of the influence of contemporary systems of work, which carmot accommodate it or are just ignorant of it (Yassin 1994).

Elkan & Robinson (1995) state that the nursing diploma has failed to eliminate the theory practice gap. The disparity between taught and clinical practice means that the student is left to make the bridge between the generalities of theory and the complex environment of clinical practice. Students attempting to accommodate to the realities of the clinical environment do so without a knowledge and understanding of the factors that have shaped it and therefore do not have the ability to determine the validity of the observed practice. Only after a variety of clinical placements does the student gain the necessary experience to determine what is and is not valid practice. From a moving and handling perspective the student nurses' fraining equips them with an understanding of basic principles and their application within the artificial context of the nursing school, but this does not guarantee their application within the complex world of clinical practice (Cook Nendrick 1999, Travis 2000). The difficulty of accurately representing the clinical environment poses a significant problem for fraining in moving and handling.

Moving and handling fraining offered by schools of nursing is limited and hampered by the artificial environment in which techniques are practiced (Oddy 1993, McGuire 1995). They cite as examples fraining in artificial environments lacking the limitations of space, equipment and 'real' patients using fraining packages that are not valued and relevant to the needs of nurses and their patients. McGuire (1995) comments on the failure to fransfer techniques into the clinical areas. This occurs when training does not effectively address the interface between it and the estabhshed attitudes of clinical staff towards moving and handling. Regular ward-based fraining on adapting handling techniques to 'real' clinical handling scenarios may help staff practically, but do not address staff attitudes to moving and handling.

2.7 Role Theory and Socialisation

The socialisation process has been described in various terms. Merton (1957 p.278) describes it as.

"The process by which people selectively acquire the values and attitudes, the interests, skills and knowledge, in short the culture of the current group in which they are, or seek to become a member". Whilst Bradby (1990) infers it is a process whereby individuals acquire the values, attitudes, morals, knowledge and skills, espoused by the group. Both statements indicate a uni-directional process, whereby the nursing student is viewed as a blank page on which their professional socialisation is written.

Du Toit (1995) rejects this simple notion, advocating that socialisation is the interplay of experience with the individuals past experiences, personal qualities, values and motivations. Howkins and Ewen's (1999) study on the professional socialisation of community-nursing students supports the theory that is not a reactive linear process, but a dynamic and proactive one. Personal characteristics conjoin with the varied mechanisms in the milieu of student experience; such as role instruction, interaction with professional reference groups, role modelling, role rehearsal and the setting in which learning takes place, to influence role development (Fitzpatrick, While & Roberts 1996, Melia 1987). Student socialisation is thus a product of personality, past experience and present circumstances. To understand the impact of this interpretation of socialisation on student nurses requires an appreciation of status change due to nurse education development.

Prior to the fransference of nurse education into higher education, student nurses were members of the health service clinical work force. Their style of education was one of apprenticeship, where a large part of student learning was ascribed to a clinical expert. The student's primary function was to contribute to patient care and only secondarily was the clinical experience seen as educational. The advent of Project 2000 increased the emphasis on the academic aspect of nurse education and a status change to being supernumerary to the clinical workforce. However, all vestiges of apprentice style learning have not been removed by supernumerary status.

The new student initially encounters and may identify with the 'idealized' role model

of the nurse as personified by the nurse tutor Betz (1985), but within clinical practice, he/she increasingly comes under the influence of clinical role models. Bandura (1977), Betz (1985) and Fitzpatiick et al (1996) state that the primary agents influencing student nurses are their clinical role models, providing students with their observational learning. Fitzpatrick et al (1996) in their stiidy of RGN, Diploma and degree programmes, determined that the majority of students (N= 97) in all three programmes identified nurses in practice as influential in their development. Holland (1999) identified these role models as 'officiants'.

"Those who possess the information, understanding and experience to ensure the correct performance" (Holland 1999, pp. 230).

The knowledge skills and attitudes demonsfrated to students are incorporated within the 'ward routine' which reflects the established preferences of the ward staff McCaugherty (1991). Qualified staff thus have a two-fold influence. First as role models they are 'gate keepers' to the knowledge and skills required by nursing students and secondly they inculcate students to the established clinical practice of the area (Holland 1999). Holland asserts this is a continuance of apprenticeship learning, as practices are learnt by working with knowledgeable staff and occurs through trial and error. Holland states that diploma student nurses continue to expect.

"to fit in by being able to undertake certain practical skills" (Holland, 1999, pp 6.)

Holland adopted an ethnographic participant observer method within a singular setting where students were aware of her nurse teacher role. The possible influences of these features on the results and generalizability have to be bom in mind.

Buckenham (1998) takes up this theme of 'fitting in' as part of beimg 'socialized' to what nursing is and that it occurs throughout the course. Students' accept this initiation into clinical practice, preferring ward staff to teaching staff as role models (Davis 1990). As socialisation takes place through interaction with individuals identified as significant to the individual, this identifies clinical staff as highly influential (Melia 1984). Melia's study identified other students and permanent ward staff as the most significant socialisation agents, but in the changed clinical environment of the 1990's, Gray and Smith (1999) identified the student's mentor as the 'linchpin'.

Philpin's (1999) study on the impact of educational reforms on the occupational socialisation of diploma nurses noted that in 'acute' areas a dissonance existed between the ideologies of the educational institution and the clinical area. The sociahsation process in areas, such as theafres and intensive care units being quite severe. Here non-acceptance of norms lead to incurred negative sanctions, such as being picked on, yelled at and excluded. However, as the study sample was qualified diploma nurses from a small regional area (n=9), the result is only suggestive of the possible atmosphere likely to be experienced by student nurses.

2.8 Clinical Mentors and Nursing students

In the literature there is a lack of consensus over the definition of the term mentor. Within the author's School of Nursing the definition which best fits the role of the mentor is that of

"A qualified and experienced member of the practice placement staff who enters into a formal arrangement to provide educational and personal support to a student throughout the period of placement." (Quinn 1995 pp.188).

Prior to the diploma in nursing course Orton (1981) and Fretwell (1985) identified the sfrong influence of frained staff on learners, particularly that of the ward sister (Fretwell 1985), but with the advent of clinical mentors within the diploma in nursing programme, this appears to have changed. The studies of Philips, Davies & Neary, (1996), Fitzpatrick, While & Roberts, (1996) and Wilkinson, Peters, Mitchell, Irwin, McCorrie & MacLeod (1998), found that mentors are highly regarded. Philips et al's (1996) study on the infroduction of mentors in a pre-regisfration nurse education course identified that the mentor was critical in providing an infroduction to and support for students' during thefr clinical placements, as well as being highly regarded for their teaching of practical skills, (60.4%) of questionnaire respondents (Philips et al 1996. pp.1083).

Valentine (1996) used a critical incident questionnaire to study the perceptions of student nurses modelling behaviour and Gray & Smith (1999) a longitudinal quahtative study to explore the professional socialisation of students. They identified that the student's mentor and their preferences were the most significant influence on students.

This influence appeared to be mediated through the application of significant social power.

Cahill's (1996) study of third year students views of mentorship identified they had clear expectations of what they wanted from a mentor, but failed to voice these expectations. This was attributed to the students' perceived lack of power by being at the bottom of the hierarchy. Further preoccupations were the fear that personal differences between them and their mentor might jeopardize obtaining a good report. Such anxieties indicate both the existence and significance of social confrol mechanisms within the clinical environment. Cahill also describes how social confrol mechanisms are mediated and how attuned students' can become to their subtlety. She describes how looks and silences are modifying factors on student behaviour and concludes by saying that students' feel a need to fit in. This leads them to adaptive behaviour which mirror's that of their mentors and other staff The student's objective is a relationship that facilitates attainment of their learning objectives and a satisfactory report. In such environments students failed to challenge, as they felt thefr mentors were unlikely to support them and this coupled with the potential sanction of a bad report curtailed them from speaking out. Cahill advocates that mentor relationships are thus one of confrol directed to conformity with social norms rather than student support. Some bias in the results may stem from Cahill's acknowledgement that an eagerness to pursue points may have slanted the discussion and that her position as a nurse teacher could have inhibited the discussion. Cahill also refers to the possibility of some participants having an axe to grind.

Windsor (1987), Cahill (1996) and Philips et al (1996) identified fitting in to the ward team and being seen to be useful as important for students. Philips et al (1996) identified that the student's mentor facilitated this process of adaptation and the importance of the mentor/student relationship for the sociahsation of the student to clinical staff norms.

2.9 Groups, Norms and the Student

Society creates rules, 'correct' behaviour or 'norms' Napier & Gershenfeld (1999) to ensure its continuity and efficient running. Such norms are formed as co-operative solutions to meet the needs for the group to perform tasks, attain goals and maintain the group ((Sampson 1990, Napier & Gershenfeld 1999). This estabhshment of norms is common to all social groupings and is considered the correct way for group members to act. Once this social structure has emerged it is resistant to change (Argyle 1969, Hewstone 1988). In clinical practice staff interpret the organisations policies and practices and form the culture of the clinical environment with its norms, values and rituals (Sleutel 2000). Some norms may be visible (the written rules of an organisation), but often norms are invisible, are taken for granted and in a highly cohesive group sfrong influences are exerted to ensure member conformity.

Within such highly cohesive groups there is a tendency for group polarisation. If members are swayed by the exfreme views of a sfrong minority, the group may stifle debate on a subject, which may result is the adoption of a poor decision (Abraham & Shanley 1992). Factors prevalent in creating this situation within groups are:

a) Their isolation from alternative sources of information.

b) Not devoting time to evaluating their decisions.

c) Have a leader who expresses strong views encouraging conformity and obedience.

d) The group is under pressure, with little time to consider complex problems.

All these factors are possible within a highly pressured clinical team. The outcome is faith in the group's correctness, censorship of alternate viewpoints (producing a normative influence to comply) and an incapacity to discuss alternatives, consider negative consequences or question basic assumptions. In the presence of such negative social influences even the presence of a knowledgeable and experienced individual does not guarantee that rational and thoughtful group decisions will ensue (Abraham & Shanley 1992). An individual expounding new ideas implies that old adherents are misguided and practicing incorrectiy. For the group the good group member is one who is loyal and does not challenge group decisions (Sampson 1990). Norms act as social confrol mechanisms on the attitudes and behaviours of group members and individuals joining the group experience direct and indfrect influences to shape their thoughts, feelings and behaviour, to ensure conformity to group norms and role expectations Pennington (1986). When a student nurse arrives on a new clinical placement he/she enters the social group and encounters its established beliefs, values, attitudes and behaviour patterns (Roth 1990).

The student nurse needs to 'fit in' Philips et al (1996), Gray & Smith (1999) and become a group member. This is contingent on a willingness to accept norms of the

clinical staff Challenging these disrupts group cohesion and invites the application of 'normative social influences' (Feldman 1995). These influences are the purposeful pressure applied by the group to make the individual conform to its expectations. Resistance is regarded as deviant and results in a decrease of trust, liking and respect and incurs penalties. These may include negative comments, being picked on, yelled at, ridiculed or excluded (Philpin 1999). When the individual is there involuntarily (as is the student nurse), then such sanctions are very powerful and only a very confident person will resist (Handy 1993). Conforming however invites group 'acceptance', avoids sanctions or possible group rejection (Argyle 1967.) Students are a minority, are not perceived as experienced group members and thus it is difficult for them to be assertive and may feel the whole environment is conspiring against them (Smithers & Bircumshaw, 1988). In these circumstances students' who may wish to influence moving and handling practice are in a difficult position.

Group norms can evolve and change in circumstances where two or more individuals combine to support a deviant idea, especially if one of those individuals has a high informal status in the group Argyle (1967). For a student to gain this informal status and be able to suggest change, they must first be accepted and recognised as practically competent (Smithers & Bircumshaw, 1988). This requirement is based on Hollander (1964)'s theory that to attain such a position the individual should first of all conform to the established norms and prove their competency. This is difficult for the student, given the limited time they are on any one clinical placement and particularly so for inexperienced students' in the early part of their fraining.

Whilst conformity to norms is implicit in group membership, in some cases groups verbally acknowledge the existence of written rules (such as organisational policies), but have a tacit understanding that they are not followed Napier (1999). The students in Melia's (1987)'s study on the occupational socialisation of nurses described incorrect group behaviour in which they participated, but justified this on the expedient grounds of accomplishing the task. They stated that such behaviour did not go on in the presence of the ward sister, but speculated that it was known about, but a blind eye turned to it. Students' therefore experience and acknowledge discrepancies exist between what is taught and its practice, but justify this on the grounds of expediency often citing 'shortages of staff and time' (Meha 1987, p. 173, Gray & Smith 1999). This is not to say that students do not have quahns about such practice. Wilson and Startup (1991) determined that students felt guilty about the discrepancies between taught practice and that in clinical areas, but felt powerless to do anything but conform and fit in.

2.10 Conformity

"A change in behaviour or belief toward a group as a result of real or imagined group pressure". (Keisler and Keisler1969 p.2)

The individual has the choice of conforming, attempting to change the norms, maintaining independence or acting directly opposite to the norm.

Sherif in the 1930's determined that conformity of an individual is enhanced in

situations where they find themselves in ambiguous new situations, with no prior experience of a task and hence no frame of reference. The greater the degree of ambiguity and the less experience a person has then the more powerful is the influence of the group and its established norms. Student nurses' in new and unfamiliar clinical environments face this situation. They are in placements for a limited time and have an unclear organisational position Ashworth & Morrison (1989). Asch's classic experiments of the 1950's went further and identified that a discrepancy may exist between the responses subjects give in a group situation and those they believe. In the experiment they knew their answer was wrong, but went along with the majority (Asch 1955).

Whilst the above psychological explanations may give some insights into conformal behaviour, Perrin and Spence (1980) have criticised Asch's conclusions as being based on laboratory envfronments and labelled them as products of the social influences of thefr time. They repeated Ash's experiment and noted less conformity attributing this to an altered social culture, whereby non-conformity was tolerated and individual expression more appreciated. This indicates that individual conformity can be subject to contemporary social conditions.

Gregory (1996) studying the psychosocial education of nurses, identified that a significant factor for student nurses was the socio-psychological process of conforming in order to belong to the ward team. Bradby (1990) in a qualitative study on student nurses' perceptions on the status passage into nursing, identified that students'

encountering the clinical environment experienced feelings of unfamiliarity, sfrangeness, feeling lost, and bewilderment. Some of this anxiety stemmed from unawareness of the established norms (Brown 1988) and the need to determine what the norms were. Peterson (1988) states these norms are the behaviours, beliefs and attitudes that form accepted clinical practice. Sampson (1990) identified student nurses as marginal group members who crave acceptance, but initially are not ehgible for membership. They lack power, are unaware of their standing and as a consequence are subject to varying degrees of emotional sfress. This may exhibit itself as anxiety, confusion, anger or loneliness. In exfreme cases sfress may be the result of bullying and the response an excessive effort to please, fit in and gain approval (Randle 2003). On encountering new environments students determine what is rewarded and what is disapproved of and then conform in order to in fit in. As they gain understanding of how the group operates and norms are adopted, individuals reduce their anxiety level, become less bewildered, fearful, and start to feel accepted. This is not to say that they have 'internalized' group norms. The student may publicly adopt a conforming stance under the pressure of the 'normative influence', whilst privately maintaining an inner deviance (Brehm 1999, Wilson & Startup 1991). The lengths to which individuals may go was noted by Bradby (1990). She found feeling part of the ward team was more important than the quality of care delivered. Pressure to be liked, gain approval and meet staff expectations may induce newcomers to accept and be uncritical of the prevailing norms (Gross 1987, Sleutel 2000). In moving and handling terms this may result in following inadvisable or dangerous practice.

The new group member is motivated by the anxiety of thefr newness and their desire to be accepted. Orton (1981), Fretwell (1985) and Peterson (1983, 1988) identified that many nurses are sfrongly influenced by the implicit and explicit norms of the work group. Gregory (1996) acknowledges that to reduce individual sfress and avoid conflict conformity to group norms is required, but as not all individuals automatically conform it is important to determine what determines the course of action an individual will take in the face of normative pressures.

Argyle (1969), Gregory (1996) and Sleutel (2000) identified that conformity is enhanced in those low in confidence and most keen to belong to the group and that this conformity is further enhanced by positive reinforcement of their actions Endler (1966). Other influential factors noted by Asch (1955) were those of pleasing the group and the avoidance of dissent and conflict, (group harmony was seen as desirable and pleasing others more important than correctness). Napier (1999) added that if the person likes the group, conformity to its norms is more likely and Stang (1973) that individuals with low self-esteem are more likely to conform than those with high self-esteem. Lack of confidence low self-esteem and high anxiety coupled with the need for social approval may therefore make a person more susceptible to 'informational social influence' as others are seen to have greater knowledge (Feldman 1995). Deutsch and Gerard (1955) add that the socialising influence on individuals is greater in face to face encounters than in private and as decisions about how to move a patient are in many cases a team exercise, one anticipates this will be a significant factor. The theoretical picture of conformity is one of a multifarious interaction of forces not necessarily related to one

another. The result is an unclear picture as to why people conform (Duval & Wickland 1972).

Much of the above is theory and many of the cited studies pre-date the infroduction of the diploma course. However Gray & Smith's (1999) study of the diploma of nursing students' view of socialisation continues to support the premise that the greatest influence on the student is to be liked and that acceptance is sought by conforming to group norms. Gray & Smith's longitudinal grounded theory study required some students to keep diaries. The study was small (n=17) and during the latter part of the tiiree year study those students asked to keep diaries failed to do so, thus data analysis of the latter part of the study is likely to be less insightful. Knowledge of the more experienced students is important because as student nurses progress they are likely to become more confident and assertive as they identify with the qualified role (Anderson 1993).

Weisenthal, Endler, Coward & Edwards (1976) state that people who perceive themselves competent or skilled at certain tasks are less likely to conform than those less skilled or experienced. It might therefore be anticipated that as students' become more experienced in moving and handling, they would be less likely to conform to established practice. This was the case in one study where the individual factors of confidence and knowledge level were identified as modifying factors, influencing nurses to challenge moving and handling practice (Kane 1994b). Within a hierarchical profession such as nursing two further features are operative. One is the pressure on

the student nurse to comply with the power structure and the other that of role expectation.

On the theme of power as exhibited by an authority figure, Milgram's (1974) studies on obedience concluded that a large proportion of people do as they are told, as long as they perceive the command comes from a legitimate authority. Relevant health field research is Hofling's (1966) study of nurses' compliance in administering a drug above the safe dose. Confrary to hospital policy twenty-one of the twenty-two nurses complied by accepting a verbal order. The stated reason was a wish not to upset the doctor and thereby avoid the perceived negative consequences. However, they had no knowledge of the drug or opportunity to consult peers. Rank and Jackson's (1977) rephcation study infroduced these two factors. The result, only 2 of the 18 nurses would have given the drug. This was ascribed to the above changed features, increased self-esteem of nurses and fear of lawsuits. Napier (1999) identifies that non-compliance with an authority figure can result in negative sanctions and labelling as a deviant. In the case of a student nurse one sanction is an adverse report on the student's clinical progress.

With regard to role, new group members are subject to the norm of role expectation and individuals are expected to conform to a group expectation of role (Napier 1999). Shaw (1971) identifies three distinctions for role; that expected by the group, that perceived by the individual and that enacted.

Clinical placements expected behaviour pattern for students' is a low status and

subservient role (Napier 1999). This means little notice is taken of what they have to say (Argyle 1994). A disparity between this role perception and its enactment will lead to the student being put under pressure to conform.

2.11 Student socialisation in clinical practice

Supernumerary status has created certain tensions for students. Students' are confronted with two perspectives of nursing, an educational and a clinical one (Meha 1987). With respect to moving and handling the student's initial role model is the teacher and skills develop in the artificial environment of the nursing school. The school then expects the student to fransfer this taught practice into the complex, 'real' environment of clinical placements.

Within clinical placements the student experiences 'a theory practice gap' between taught moving and handling practices and those encountered in clinical practice. The student's dilemma is how to satisfy two powerful groups, the school and service. The result is the student experiences sfress and uncertainty (Melia 1987, Bradby 1990). The student is distanced from tutorial staff and the clinical staff are suspicious of the student's loyalty. The student is viewed as being 'in the organization, but not of it' (Ashworth & Morrison 1989 p. 1013), a visitor Wakefield (2000), whose aim is to fulfil a course requirement rather than make a worthwhile contribution. Becker, Geer, Hughes and Sfrauss's, classic (1961) study of medical students' and Meha (1987) nursing study suggest that students are adept at dealing with the conflicting and competing demands of education and practice by determining when and how to reproduce the required

performance. Becker et al (1961) suggest.

'He (the student) adapts his behaviour to the situation as he sees it, ignoring possible lines of action which appear pre-ordained to fail or unworkable, discarding those which may cause conflict in short, choosing the action which seems reasonable and expedient'. (Becker et al. 1961, pp 442).

Wilson and Startup (1991) identified this in their study of nurse socialization.
'Students were expected to perform skills in 'the school way' if they encountered teaching staff on the ward, but were also expected by most of the frained staff to perform them 'the ward way' when working on the ward.' (Wilson and Startup, 1991. pp. 1481.)

In the context of moving and handling the likelihood is the student will select those moving and handling practices which conform to the expectations of his/her current environment. Melia (1987) supports this argument as she discovered that nursing students' were more concemed with adapting to their current situation than taking on the role of a qualified nurse. Melia's (1984) and Holloway & Penson (1987) cite the example of the ability to perform procedures with speed. Further, the students' primary aim was getting on with the ward staff and fitting in, particularly with the auxiliary staff. Auxiliary nurses were perceived as occupying a powerful position because of the stability they brought to the workforce, their familiarity with the area and their relationship with the sister and the possible influence this had on the students report (Melia 1984). This is illusfrated by a student reference to nursing auxiliaries

"there is no way you are going to change their routine" (Melia 1987 p. 108)

This overview of socialisation gives the impression that students seei their fraining as 'a series of hurdles' (Melia 1984, pp.141) which have to be overcome. One of these is thefr passage through clinical practice and 'fitting in' appears to be a major student pre-occupation. The student is driven by the need to attain the goals of both education and clinical practice and adopts behaviour appropriate to the prevailing requirements of the moment.

2.12 Clinical staff practice of manual handling

Since the infroduction of the Manual Handling (Operations) Regulations 1992, studies determining moving and handling practice amongst nurses and student nurses indicates that the change to safer practice has been slow.

Hignett and Richardson (1995) suggest the nurse's perception of load handling is an important factor. Thefr qualitative study of twenty-six nurses sought to identify factors nurses considered important in influencing thefr patient handling. Of the influences they identified some of the most significant were; the quality of care issues such as privacy, dignity, quality of hfe and the patients and relatives demands for immediate attention. Shift schedules and care management systems were also identified as influential. The patient's ability to assist had a significant impact and patient safety was identified as of paramount importance, to the extent that nurses would consider putting their own safety at risk. Further factors were the space and furnishings of the environment and the

fatigue and stress attached to nursing. The influence of the spatial environment was linked to the use of Ufting equipment, frequent comments being made about the limitation space imposed on the use of hoists. In confrast to Stubbs (1983), Hignett & Richardson (1995) identified fraining as a positive influence on patient handling behaviour. This may have been due to the emphasis put on staff fraining at the time of the study, as it followed the infroduction of the 1992 Manual Handling (Operations) Regulations legislation with its sfress on staff fraining. Apart from stating that staff were prepared to compromise their own safety, the study failed to identify exactly how the influences affected their moving and handling practice.

McGuire, Astley, and Dewar's (1995) questionnaire study assessing Scottish nurses moving and handling practices identified that 60.5% (n = 3,548) of the study group admitted not using aids when appropriate. The reasons were insufficient numbers of aids, there being time consuming to use and the most common unsuitable for the task. McGuire et al's findings on training indicated 13.1% had not received any fraining post-registration and 5.4% had received no training at all, but the grades of staff involved were not identified. The inadequacies in the quality of training were identified as it needing to be more ward based, frequent and include more tuition on how to adapt skills to clinical practice. On safety only 35% of respondents stated they were able to move and handle correctly and then for only 50% of the time. The reasons given were the lack of space and equipment. Other significant issues were staff attitudes and the reluctance of nurses to ask for help when wards were busy. From the causative factors identified emphasis was placed on the need for more training, and

the lack of attention given to changing attitudes and working practices. A large sample was used, but the presentation lacked sufficient detail to obtain a detailed picture of handling practices relative to grades, age's distribution and location of each grade of staff. Duffy, Burke & Dockrell (1999) obtained similar findings and criticism again focused on fraining not taking place in clinical areas.

Scott (1995) and Green (1996) carried out patient handling studies in hospital based medical areas using non-participant observation, interviews and questionnaire methods. The participants in both studies comprised nurses, auxiliaries and students Scott (1995) n=85 and Green (1996) n=10. Similar results were obtained in both studies. Four main categories were identified as encompassing the significant influences on patient handling.

Training: As in Kane (1994a), Scott identified that only 65.4% of qualified staff had received any fraining and this fell to 20% for auxiliary staff. 43.8% of the remaining auxiliary staff had received no formal instruction in the past twenty years (Scott 1995). Green (1996) identified fraining as useful, but was not widely applied by some staff due to 'being set in their ways' (Green 1996 p. 307).

Equipment: In Scott's (1995)'s study hoists were left unused because of inadequate training. Green (1996) identified difficulties due to lacking of sliding equipment and one ward had a new hoist on which staff had not received instruction. Connolloy, Wilkinson, Flanagan and Mulley's (1990) study on nurses attitudes to and use of

patient hoists identified that 49% of nurses in the study had received no instruction in the principles of hoist use and 44% had not been taught to use the hoist on their ward. In this study nurses who considered their instruction inadequate stated patients disliked them and that they were time consuming to use. Love (1996) and White (1998) also identified deference to patient choice as a reason for not employing hoists. This finding is contradicted by McGuire, Moody, Astley and Tigar's (1996) study of client attitudes to hoists, which intimated that clients were more accepting of hoists than perhaps realized and in some cases nurses used client prejudice as a cover for their own bias against hoists.

Environment: Of numerous identified factors, lack of space, time and poor staffing levels were most significant. Green (1996) also cited not using the available equipment often enough as a hindrance to safe moving and handling. This factor was also endorsed by Love (1996) and Hollingdale (1997). Kane (1994b), Love (1996) and Hollingdale (1997) do not identify inappropriate or unavailable equipment as a factor.

Staff self-perception: Scott (1995) stated they applied correct principals, but often opted for the quickest method, however, the circumstances as to when this was done was not stated. Green (1996) added that some nurses would not use unsafe techniques because of self or patient safety, whilst others complied to maintain 'popularity' and avoid the negative attitude of colleagues.

Generalisation of both Scott (1995)'s and Green' (1996) study is problematic, as they

were carried out in singular locations. Also the studies do not provide a breakdown of resuhs with regard to the different grades of staff This makes it impossible to determine a picture of what students considered important, but perhaps the most important weakness is that whilst acknowledging the importance of inter-personal influences, this is not fully investigated in the studies. Only Green's (1996) study appreciated the importance of staff attitudes, concluding that a need exists to address attitude change in relation to moving and handling.

Moore, Meakings & Ruszala (1998) study focusing on 'what prevents nurses applying their knowledge of correct patient handling techniques' used observation, questionnaire and interviews as in Scott (1995) and Green (1996). Moore et al's study used nine wards from Medicine, Surgery, and Care of the Elderly in two hospital trusts, using all nursing staff (except students) n = 223. They identified numerous factors influencing handling which, in confrast to Scott (1995) and Green (1996) they grouped under five main headings:

Manual Handling Policy: Staff were aware of it, but not of its content.

Training: Inability to fransfer techniques from fraining into clinical practice because of client characteristics and complications.

Resources (material and human): Variability in amounts and availability of equipment.

Design and layout: Space consfraints and space congested with multiple articles.

The social context of working practice, culture and fradition. This last category included patient influence, the nurse's values and attitudes, the values of nursing colleagues and those of non-nursing staff, systems of work. Staff with a previous back injury were more

passionate about the use of handling aids and the attitudes of senior staff were perceived as major influences. This factor sometimes provoked an inner conflict as staff wanted to handle correctly, but couldn't due to the bad handling practice of senior staff Reasons for this were a lack of personal assertiveness, avoidance of conflict, a belief junior staff opinions were less worthy and a wish to stay popular. Other influential factors were other staff such as physiotherapists and patient influences.

The study acknowledges it is non-representative as wards were only selected from surgical, medical and health care of the elderly areas. Also questionable is whether the same findings, categorisation and weighting are appropriate to student nurses, as this group was not included in the study.

Finally, Love (1997) carried out a small-scale study (n=11) of an orthopaedic units standard for the practice of safe moving and handling. Love used a Delphi survey technique of expert opinion (students excluded). Training was only effective when the environment was not cramped and sufficient, well-maintained equipment was available for safe practice. The improperly maintained equipment singled out, as most impeding safe moving and handling practice was the patient's bed.

2.13 Student practice of moving and handling

Studies of student moving and handling suggest a reticence to challenge established clinical practice. This may go so far as to conform to practices they know to be inadvisable.

Kane (1994a) investigated the knowledge and Ufting practices of nineteen thfrd year undergraduate students. The study focused on two person lifts; some of which where acceptable at the time of the study, but all of which are now considered dangerous practice (Hohnes 1997, cited in. The guide to the handling of patients 4th Ed, Chapter, Unsafe Lifting Practices pp 223-239.) Kane used a questionnaire and no concurrent observations were made. The students accurately identified acceptable lifts, but were inaccurate in identifying some which were not. They correctly identified the 'drag lift' as unacceptable, but stated this was the most common lift used in clinical areas and one in which they participated. 50% of the participants stated they conformed to use of a two-person lift led by a staff nurse even when they knew the lift was unsafe. Kane (1994a) identified that student practice reflected that of the ward staff and that they dfrectly influenced student moving and handling practice. She further concluded that student knowledge of unsafe practice did not guarantee it would not be used. The study poses the problem of what influences student conformity to manual handling practices and their relative importance.

In a follow up paper (Kane 1994b) discussed possible reasons for this conformity. Students' stated they wished to avoid negative reactions from clinical staff such as.

"It isn't a good idea to be branded a know all on a ward"; "I wouldn't like to become unpopular and create friction with the nursing staff; you have to survive the placement" (Kane b 1994, pp.36).

These students may have been anxious to be approved of and liked because of a perceived prejudice to their undergraduate status. Those who did not conform gave either concern for their own safety, that of the patient or both as the reason. Whilst giving an insight into causes for compliance, it is limited by the small number of respondents and their being senior undergraduate students. An insight into the interactive processes influencing the students might have been provided by an observational study.

A fiirther important influence is the student's perception of thefr role as learners and therefore not in a position to question practices.

"Students report that although their ideas are encouraged in some areas, in others they risk becoming very unpopular if they challenge practice" CalUster (2001 pp. 14).

Peto's (1994) unpublished dissertation investigated the participation of diploma students in the handling assessments of patients. As in Kane (1994a) she observed that students foUowed the example of frained staff by participating in Ufts they knew to be inadvisable and by not carrying out effective handling assessments. The reason students gave for participating in and failing to challenge hazardous practices was their unwilUngness to upset staff with their up to date knowledge. As in Kane (1994b) they perceived their role as a learner and therefore felt imable to challenge the accepted norm (Peto 1994).

Swain, Pufahl & WilUamson (2003) used a self-report questionnaire survey to determine

if stiident nurses applied taught practice (n=139). Student knowledge was determined by distinguishing between recommended and non-recommended handling techniques. Their actions in practice were explored using a series of open and dichotomized questions, alternative statements and menus of responses. Three patient handling scenarios were used to explore the possible influence of other staff. The majority of students had a good knowledge of contemporary M&H practice, but did use non-recommended techniques. Students identified that clinical staff adopted these techniques because of preference, time pressures and lack of staff and unawareness of recommended techniques. The most frequent reason for student compliance was the influence and practice of other staff, others being lack of time and equipment. Student reasons for thefr conformity were the perceived powerlessness of their low status and possible sanctions, particularly that of their clinical report. The scenarios exploring staff influence indicated that the level of conformity with non-recommended practices was low, 12% if working with a staff nurse and 5% with an experienced auxiliary. A scenario designed to determine their response when recommended equipment was unavailable identified that 74% of students would search for an alternative safe manoeuvre, 17% would wait for the equipment and 7% adopt an unsafe manoeuvre. The major reason for non-conformity was the risk of injury to self or the patient. Swain et al in a search for factors assessed male students as more compliant than females, but excluded age. Whilst providing some insights into student practice the use of scenarios rather than observation of 'actual' student practice is unlikely to be truly representative. Becker et al (1961) identified that students choose the action that seems reasonable and expedient. In this case maybe an over optimistic appraisal of their non-conformity with

non-recommended practice in order to please the nurse researcher. The conclusions on the factors of age and gender are also open to question without fiirther information on the respondents' backgrounds.

Kneafsey (2000)'s literature review on the effect of occupational socialisation on nurses patient handling practice concludes that the problem is multi-factoral significant elements being resource, envfronmental and socialisation. This suggests that singular simplistic solutions such as increased fraining or more equipment are unlikely to succeed. Schön (1983) offers both a reason and a solution stating that professionals fri clinical practice face unique and complex situations, which are not amenable to solution by technical rational approaches, but are facilitated by reflection. Schön sees this as a counter to repetitive and routine practice, which may draw the practitioner into uncorrected patterns of error. He identifies two types of reflection, reflection-in-action which occurs whilst practising and influences decisions made and reflection-on-action which reflects on past events. Each aims to achieve the understanding and meaning of experience by the processes of conscious reflection, criticism and action. These processes are facilitated by the skills of self-awareness, description, critical analysis, synthesis and evaluation (Atkins & Murphy 1993).

The sharing of and reflection on their clinical experience by students may help extend their knowledge, understanding and hence their learning of those experiences (Wilkinson Peters, Mitchell, Irwin, McCorrie and McLeod 1998). The aim is the provision of an opportunity for change facilitated by use of the reflective approach

(Green 2002).

I have identified only one study on moving and handling using reflective skills, that of Green (2002) who used a reflective exercise as a preparation for students' going on clinical practice. Twenty-five students who had just completed their Common Foundation Programme moving and handling programme, which incorporated a reflective component, were asked to comment on its usefulness. They all stated it was helpful in preparing them for practice, but it raised some issues. Some students had encountered bad practise, despite the fact that staff had received updated training. This underlines that a change of practice is not simply dependent on a change of knowledge. Students also identified a difficulty in challenging bad practice because some staff had been lifting for years and were reluctant to change. Challenging practice was particularly difficult during the early stages of the course. In many cases students knew of the safe systems, but their actions were influenced by the collective values of staff and the desire to help the patient. However, 15 of the 25 students felt that reflection was beneficial in helping them develop more assertive sfrategies. As students gained experience, some became more confident and assertive. This may reflect the developmental stages students attain as they progress from a novice to expert (Benner 2001) and the attendant attainment of higher order reflective skills.

2.14 Conclusion

The literature review identifies that the influences on patient moving and handling are multi-factorial, complex and dynamic and predominantly lie outside the influence of manual handling assessments as required by legislation and hospital policies. They are

also resistant to modification by concenfrating on the application of skills based fraining. For the student those factors identified as influential includes the environment, client factors, mentors, individual nursing skill, group dynamics, student personality as well as the educational philosophy employed in moving and handling fraining.

Previous literature such as Kane (1994)'s study preceded the fiill realization of the 1992 legislation, did not use diploma students and the self report questionnaire methodology lacked observational corroboration. Swain et al (2003) also used a self-report questionnaire without corroborative observation and further posed scenario-based questions, responses to which were made outside of the contextual influences of the practice environment. Kneafsey (2000) suggests that it is time to re-explore the extent to which nursing culture and its concomitant socialization processes have changed, particularly with respect to moving and handling. This stems from the fact that much of the professional socialization literature is dated and that new developments in nurse education focusing on reflective and critical thinking skills have possibly influenced the sociahzation of nurses. Kneafsey (2000) suggests the need for qualitative studies to examine whether such elements have had any effect on student socialization and manual handling.

Over ten years has elapsed since the introduction of the manual handling regulations, during which both service and nurse education have striven to improve patient handling and achieve a commonality of patient handling practice. During this time only a limited number of manual handling studies have assessed the results of these

efforts. Many of these do not effectively discriminate between clinical staff and students, such that the moving and handling practices carried out by students are not clearly identified (McGufre et al 1995, Scott 1995, Green 1996, Moore et al 1998). Manual handling studies which focus on students are dated i.e. Kane (1994a) identifies manual lifts which are now inadvisable and thus provide little information on what moving and handling practices are being carried out by students in contemporary practice (Kane 1994a &b, Kneafsey 2000, Green 2002). They also identify student socialization as an influence within the clinical environment, but are not specific about who influences them, the manner of this influence and the effect of factors such as student experience, age or gender. Due to the emphasis of nurse education on increased levels of handling training, reflection and critical thinking, student response to clinical socialisation of moving and handling practice may also have altered.

Swain et al (2003)'s study surveying student manual handling practice identified that a theory practice gap continues to exist in students manual handling practice. To identify its causes Swain et al used a self-report questionnaire and student responses to theoretical handling scenarios, but no validation of student responses by observation of students within the context and under the influences of their clinical moving and handling environment was carried out.

This study by the use of semi-structured interviews and verification of student practice by observation will provide a fresh perspective on contemporary student moving and

handling practice. It will re-determine the degree of student socialisation, their level of compliance with inappropriate handling practices, the factors influencing their manual handling and why. The results will be used to suggest possible joint service/education initiatives to promote safer patient handling.

CHAPTER THREE

RESEARCH METHODS

3.1 Introduction

The chapter describes why a qualitative, descriptive exploration of the influences on student nurses manual handling, using semi-structured interviews and non-participant observation method was chosen.

3.2 Background to the study

The literature review established that nursing has a high incidence of load handling injuries. Because of this and the infroduction of the Manual Handling Operations Legislation (1992), contemporary clinical practice and nurse education promotes safe load handling. Previous studies have examined nurses' manual handling practice, but in many cases thefr emphasis has been on the relationship with load handling injuries, adopted a quantitative perspective and were carried out prior to the infroduction of the legislation. Relatively few studies have focused on the manual handling practice of student nurses and sought to understand its influences by adopting a qualitative approach.

3.3 Research question

Question - What are the factors influencing the moving and handling practice of diploma student nurses?

3.4 Aim

To determine the major factors influencing the load-handling practice of student

nurses.

3.5 Outcomes

a) To compare and confrast the moving and handling practices of student nurses in clinical practice with the principles taught in fraining during their pre-regisfration nurse education.

b) To explore the relative influence of educational, environmental, social and work culture influences on student nurses moving and handling skills.

c) To suggest potentially more effective methods of moving and handling fraining, with the aim of improving student nurse moving and handling practice.

3.6 Research design

The aim of the study is to estabUsh the student's representation of 'reality' within the context of the student nurse's experience of moving and handling (Holloway & Wheeler 2002). Under pinning this is the philosophical beliefs, assumptions and methods used to elicit that 'reality', tempered by consideration of practical issues e.g. the availability and accessibility of the participants (Holloway & Wheeler 2002). Qualitative research sfresses the socially constructed nature of reality and seeks answers as to how social experience is created and given meaning (Bailey 1997). In the context of student clinical load handling the knowledge of the experience is inseparable from its meaning (Morse 1989) and is represented by the students' perspectives. For this study a qualitative methodology was chosen as it requires a vehicle for studying the world from the perspective of the student Carr (1994).

3.7 Methodology

Qualitative research provides methods that attempt to describe human phenomena, which are not easily quantifiable (Streubert Speziale & Carpenter 2003). Such methods provide the opportunity to tap rich data from an exploration of the student nurses' attitudes to and perceptions of moving and handling during their clinical practice, whilst retaining the flexibility to respond to the complex variables influencüig their manual handling. In making a quaUtative choice one encounters a debate between social and natural science research over the nature of validity and what methods adequately establish it (Carr 1994, Schutz 1994, Rose, Beeby & Parker 1995).

Natural sciences research established the quantitative positivist paradigm. This epistemological view is of an external reality where events are governed by natural laws (Knorr-Cetina 1981) and research is 'neufral' (PoUt & Hungler 1985), in that systems can be dissected down to their component parts and investigated by an impartial observer whose subjectivity or belief systems have no influence on the results. The methodology is one of experiment, description and correlation, enabling predictions to be made over similar future events and which dismisses the experiences of the individual as unimportant (Carr 1994).

Use of a quantitative approach was judged inappropriate because of the multiple variables of the clinical setting i.e. variability of the participants and that student nurses participation in moving and handling events act as learning processes producing qualitative change. These factors make it impossible to exert the confrol necessary for

an experimental approach.

Clarke (1995) criticises the application of quantitative methods to social phenomena as it strips them of their context, creating an artificial environment. As moving and handling takes place within complex and dynamic social environments, the derivation of data arises from the amorphous nature of these contexts. Glaser & Sfrauss (1966) sfress the efficiency of quahtative research within the very active and developing hospital situation. Positivist attempts to manipulate and confrol participants and events inevitably alters their behaviour, stripping the data of its context and denuding it of reality. The argument is that reality within a social context is not fixed, extemal and subject to natural laws of social interaction with predictable results, but varies with time, place, social dynamics and the meanings people bring to events at any moment in time (Guba 1985). The influences on student nurses moving and handling skills are thus best understood using inductive reasoning using meanings derived from the social contexts of their practice environments.

The generation of a representative study sample for this research was a further reason for a quantitative approach being judged inappropriate. Practical determinants and appropriateness dictated it be a non-random, convenience sample, using student nurses on placements within predetermined designated areas. From a positivist perspective the sample suffers a 'selection bias' and is of a number to which the application of statistical techniques is considered inappropriate. Indeed the use of statistical tests is confounded by the multiplicity of the variables, the generation of non-standard data and an inherent

limitation of statistics. Statistical mathematics can explore the causative effects of phenomena producing correlations and probabilities, but these merely signify relationships and are not indicative of their causation. Further, adequate mathematical representation requires stability, which whilst often achievable within the natural world, is less so within the field of social science with its prevalence of dynamic variables (Sayer 1992).

Nolan (1995) argues that qualitative studies are based on a set of assumptions derived from an epistemology all together different from those associated with the quantitative paradigm. Qualitative paradigms argue that 'truths' within the social world are not subject to fixed, extemal laws, but are based on and subject to the meaning people give to them. The assumption is human beings not only react, but act upon and create meanings from their experiences, so that inner and extemal 'realities' interact and cannot be separated (Hunt 1991).

This study adopts a qualitative perspective accepting that individuals create subjective social reality by interaction and interpretation. The world thus becomes real through an individual's contact with it and the way to access this reality is through the description of the 'lived experiences' by the person themselves (Jasper 1994). In this case the student nurses 'lived experiences' are those of their clinical moving and handling and the reality is derived from the individual's perspective. The aim is to perceive and describe this reality from the individual's perspective (Bailey 1997), accepting that realities only 'exist' to the extent that there is a shared understanding of their meaning

(Nolan & Behi 1995, a).

The students' reality is the insight, understanding and interpretation they have of the influential factors and patterns of factors shaping their manual handling practice, as exemplified by what they say and do within the context of their clinical practice. The role of the qualitative researcher is to capture this process of interpretation through the words and actions of the participants (Maykut & Morehouse 1994).

Qualitative research is however not free from potential threats to validity. As the researcher is a teacher researching students, some general criticisms pertinent to this study are identified. Others more specific to the chosen research methods are discussed in the relevant sections.

The behaviour and status of the researcher can be de-stabilizing artefacts. For example thefr approach and demeanour to the participants, as well as their power relationship impacts on the trust and rapport with the researcher and ultimately the quality of the data (Mason 2002). Within social research individuals are subject to social desirability bias. During interviews participants may try to 'please' the interviewer with thefr responses and when observed can change their normal behaviour to that considered more acceptable (Polit and Hungler 1993, Gilbert 1993).

The investigator may create unreliable data by applying techniques in which they are insufficiently skilled i.e. at interview the interviewer may unwittingly lead respondents

to desired responses (Gilbert 1993). The researcher must also be honest in their observations and guard against bias and prejudice during analysis and data interpretation. During analysis a fundamental problem directly linked to describing the lived experience is that by analysing it, it may be distorted. The researcher's interpretation of the inter-subjectively created meaning of the participants' experience can in itself become a second order construct. There is therefore a question as to what constitutes reliability and validity in qualitative research.

Validity is defined as 'the quality of being well founded on fact, or established on sound principles, and thoroughly applicable to the circumstances: soundness and sfrength (of argument, proof, authority etc)' (Oxford EngUsh Dictionary 1971).

The central concern is the justifiability of a claim to knowledge and the soundness of the tools and subsequent elicited evidence used to support it.

Definitions of vaUdity tend to reflect their derivations from either quantitative or qualitative research. Quantitative researchers may state their approach is more reliable, as the positivist paradigm applies rigorous objectivity and control of extraneous variables leading to strong internal validity. A qualitative reposte is that this approach does not of necessity make it valid, for a consequence of confrol is it's distortion of the reflection of real life. Whilst some qualitative researchers reject the rigidity of positivism, they have translated positivist concepts and applied them in a different way to validate the rigor of qualitative research. Thus internal validity

becomes credibility, extemal validity is transferability and reliability is expressed as auditability (Emden 2001, Avis 1995 a).

Validity in both paradigms is often seen as a technical criterion focused on the rigour of the employed methods rather than on the validity of the epistemological argument. The problem yet to be resolved is how research with its inherent methods can best demonsfrate validity from all epistemological viewpoints to all researchers (Avis 1995 a).

3.8 Research strategy

Studies of qualitative research often identify particular approaches or fraditions e.g. grounded theory, ethnography and phenomenology and these then define the philosophy, methodological approach and study method. In the quest for research dependability this has often been interpreted as a requirement for rigid adherence to procedures inherent within these approaches to produce a justifiable knowledge claim (Avis 2002). Avis argues against this inflexibility of approach advocating that the meaning of a belief is not provided by single theories and advocates a pragmatic epistemology.

'Treating methodological theories as matters of faith that must be adhered to in order to assure a justifiable knowledge claim is not helpful in outlining the rationale for the use of qualitative methods. . . . . researchers' need to give greater attention to the validity of thefr epistemological arguments when considering the nature of the evidence' (Avis 2002)

Burgess (1984) and Mason (2002) consider that alignment with a 'big' position or philosophy can be unhelpfùl in planning research. Mason (2002) advocates an active process to research sfrategy rather than passive alignment with a doctrine and the assumption that one must then strictly adhere to its approaches. Mason (2002) suggests research decisions should arise from the research question and context and by examining the different approaches identify their usefulness and appropriateness. Avis (2002) argues that validity is about constructing a cogent epistemological argument commensurate with the claims of an enquiry.

Given the research question and aims of this study a pragmatic approach is advocated. The argument for a qualitative approach is that it is appropriate in settings, such as the one for this study, where the researcher has little confrol over events and the focus is on contemporary phenomenon within a real Ufe context (Denscombe 1998). This approach therefore provides an opportunity to explore student moving and handling within the complexity of its natural setting with a view to explaining why student nurses adopt the pattem of handling they do, rather than just determining what they do (Polit and Hungler 1985).

Qualitative methods invite the use of a multi-method data gathering approach to produce a rich bank of data. The chosen methods were semi-structured interviews and non-participant observations. A choice derived from an ontological and epistemological perspective of participants' views, understandings, interpretations and experiences as meaningfùl properties of social reality and that talking interactively is a legitimate

method to tap these. Non-participant observation because of the cenfrality of social interactions performed in the 'natural' clinical context and their value in adding depth and completeness (Mason 2002).

Interviews

Quahtative approaches seek to arrive at an understanding of a phenomenon from the perspective of those experiencing it (Speziale & Carpenter 2003). In this study the aim was to obtain student nurse perceptions and interpretations (Mason 2002) on the factors influencing thefr moving and handling arising from interactions within the clinical envfronment. It was therefore essential to identify what they felt and beUeved using semi-structured interviews comprising open questions, which allow participants to expand on their experience (PoUt & Hungler 1993). Such interviews are a flexible and adaptable method of determining the factors influencing the interviewee's load handling practice providing data rich in experience, attitudes and complements observational perspectives (Harris 1997, Robson 1993). They allow a study focus whilst providing the flexibility to probe and clarify participants comments whilst maintaining their freedom of expression (Rose 1994).

Whilst interviews produce large amounts of data, its quality is dependent on the structure and process of the interview and can be heavily influenced by the interviewer. Concentration and acute listening skills are required along with a sensitive perception as to when and how to prompt a respondent (Robson 1993), also an acknowledgement that the views participants and the interviewer hold about each

other are potential sources of bias (Daly 1992).

Interviews of all types contain inherent constraints in that they are social constructs created by the interaction between respondent and interviewer as they role-play and manage impressions (Dingwall 1997, Rose 1994). Respondents may give replies which mirror what they perceive should happen, rather than what does happen or displays them in the best possible light, thus bolstering their image (Polit & Hungler 1993). In this case I was known by the students to be a nurse tutor with an interest in moving and handling. My status, interest and power may have influenced them to try to demonstrate their competence, but their actual handling behaviour was validated by the observations. Being aware of the power relationship and the potential effect it might have on the interview I adopted an informal maimer to put students at their ease (Denscombe 1998). To further reduce the risk of this social desirability bias, students for the study came from a different cenfre of the Nursing School from me. They were informed there was no hidden agenda to the study and their anonymity and also that of the data was assured.

The semi-structured interview used a format of standardised questions, although the sequence and probes for information were varied. This provided flexibility to respond to the level of student comprehension and adapt questions in the Ught of answers given to later questions, seek clarification or expansion of the interviewee's experience and the potential for exploration of a topic by supplementary questioning, (Fielding 1994).

Observation

One of the potential weaknesses of the interview technique is its reliability. The temptation is for the respondent to provide answers which state what should happen, rather than what actually does happen, thus displaying themselves in the best possible light (Polit & Hungler 1993). To help counter this risk of bias, an observational data-gathering component was built into the study. Behaviour is observed 'as it happens', rather than how it is recalled and the method may either be by participant or non-participant observation (Barker 1991a). Given my circumstances non- participant observation was impractical, thus non-participant observation was adopted. A systematic recording schedule was used to record data Barker (1991b).

Whilst observation brings advantages there are inherent limitations in a 'snap-shot' observation period without knowledge of 'interactions outside it', such as relationships, culture and norms which may be influential (Mason 2002). This limitation may be off set to degree by exploration through interviews. The potential for observational bias also may influence the data. In this case particularly that associated with anticipation of what might be observed arising from the researchers knowledge of moving and handling. Another intrinsic disadvantage is the non-participants presence with its potential for stimulating a 'reactivity effect' causing behavioural distortions. (Polit & Hungler 1993). The potential for this effect was magnified as I had chosen to reveal the purpose for the observations.

Participant observation was considered as an alternative sfrategy based on the

assumption that culture is learned and shared among members of a group and as such, can be described and understood (Morse 1994). Participant observation through shared experience has the advantage of providing a more perceptive insight into and understanding of the student's situation and the influences moulding their moving and handling practice (Polit & Hungler 1993). However, this method was rejected on the following grounds.

1. A covert study would be required in a clinical area used by another school of nursing where I am unknown. This would produce ethical dilemmas and engender political barriers.
2. The adoption of a student role. My mature age would infroduce a credibility factor.
3. My own practical consfraints at the time.
4. Integration into the area was too difficuh due to my intermittent and limited availability.
5. The time consfraint on the research programme.
6. The knowledge that I was known to students and clinical staff as a nurse tutor interested in handling skills.

Whilst the qualitative method generates a depth of data, it can be criticised on the grounds of its credibility (validity) and the potential for generalization to other areas. However in determining the 'particular' (determining the influences on moving and handling practice in this one area), it is hoped to illuminate the 'general' of student moving and handling (Denscombe 1998). Support for this is advocated by the choice of a representative location for this study. The medical location within two district

hospitals and choice of participants provides some similarity with that of other hospitals, enhancing the case for generalization of the findings (Denscombe 1998).

This study adopts three principals in making its claim to validity (Avis 1995), which whilst insufficient in themselves go some way towards allowing the reader to make a judgement about this claim.

1) Explicit statements of the assumptions made by the researcher related to ontology and epistemology in obtaining, describing and analysing the data.
2) A description of method such that there is an opportunity for its auditability.
3) The rationality and plausibility of the findings in the light of the research methods and their coherence with existing knowledge.

3.9 The clinical setting

The chosen case was the medical directorates of two hospital trusts, geographically located within the same urban area of a medium sized town. In total 10 wards were used. Six wards were accessed in an acute general hospital and four wards in the designated community hospital with generally less acute patients. The choice of trusts was made on the grounds that they provide clinical placements for all levels of students from the Nursing School and the diversity of patient moving and handling, which ranged from independent to totally dependent.

A medical setting was chosen because:

a) A review of moving and handling literature indicates these areas have a high level of

handling incidents and statistically a high incidence of musculo-skeletal injuries.

b) In my opinion the areas are representative of typical medical placements for student nurses during their fraining and because of the potentially high incidence of moving and handling provide the maximum opportunity to gather data related to contemporary moving and handling practice (Reed, Proctor, & Murray, 1996), (Denscombe 1998).

The choice of location was influenced by the fact that I am known in the nursing school as a moving and handling teacher. To reduce this potential influence, the study location is one of four geographical cenfres of the school where I am unknown to clinical staff and students. The students were therefore not subject to any preconceived judgements about me or my views on moving and handling. I however retained the advantage of being familiar with the fraining programme followed by the students and the location was convenient to reach.

3.10 Informants

The stiidy accessed a non-probability, voluntary, purposive, convenience sample of student nurses drawn from one fraining cenfre of the School of Nursing over a six-month period. The convenience stems from the fact that the students were allocated to thefr medical experience on the dfrectorates of the two trust hospitals during the time of the research. Purposive sampling involves the selection of a sample on the basis that the processes being studied are likely to occur (Silverman 2000). This generated a homogeneous sample with respect to exposure to a uniform fraining programme, but heterogeneous with respect to

the stage of that fraining. An opportunity was thus provided to determine possible maturation changes over time in the students' individual approach to moving and handling problems. The mixed sex sample size of twenty-four students was from each of the three years of the diploma programme. The sample was non-homogenous with respect to an even distribution of students in each of the three years, the largest proportion being in thefr first and second years.

The sample size was determined by the fact that during the study saturation of interview data occurred confirming that afready revealed by a repetition of themes (Burgess 1984, Gilbert 1993). The age range of the students was from the late teens to middle 50's, resulting in a variety of life experiences, both within and outside of the sphere of health care.

3.11 Access **and ethical considerations.**

The study had minimal ethical impUcations for patients, as they were only indfrectly involved and not subject to additional interventions. However, because of thefr indfrect involvement and considerations of hospital and staff confidentiality, approval was sought from the appropriate Ethics Committee (appendix I).

An overview of the research was provided for the Unit Nurse Manager and access requested to the chosen medical areas (appendix E). Written permission was sought from the consultants (appendix F), and verbal permission from the ward managers. As the study requfred my presence during intimate handling procedures and was thus an intrusion upon

patient privacy, written information outlining the study was provided for them (appendix H) and thefr verbal permission requested prior to any observation. In some female cases this was refused on the grounds of my male gender.

Written permission to access students was sought from the head of the school of nursing (appendix G). Following approval a letter was sent to students allocated to the clinical locations during the time of the study, asking if they would be prepared to participate (appendix D). The letter outlined the research, informed them the study topic was load handling and that observations of patient handling and interviews on this topic would be carried out. I was truthful about the reason for the research and invited clarification questions. This stance of openness was taken in the hope that by acknowledging that possible differences existed between the reality of clinical and taught practice, students would feel more relaxed and open to the study. The altemative of providing a veiled description of the research aims would have lead to suspicion and speculation as to the tme motive for the research. It would also have involved a degree of ethically unacceptable deception and have violated the right to full disclosure and hence informed consent of participants (Polit and Hungler 1985).

A fiirther ethical consideration of consent was that as I am a tutor students might feel obliged to participate because of a fear of official disfavour (Dingwall 1980). In the light of this no pressure to participate was appUed and a number of students did in fact decline. The right to privacy was protected. Offering assurances of confidentiality and anonymity to the areas and those involved in the study (Polit and Hungler 1985).

Gathered data was freated in the strictest confidence, and used solely for the study. Transcripts of interviews were offered to students for their approval and on completion of the study an assurance was given that all data would be destroyed, students desfroying their own interview tapes if they wished. A resume of the research findings will be provided to all participants, managers and participating areas.

A potential health and safety risk was envisaged, namely what action to take in the event of observation of a dangerous moving and handling practice. I resolved to follow the principal of intervention to prevent harm. This risked influencing the resuhs of the study, but not to do so would have confravened the then extant UKCC Code of Conduct (1995) and possibly have put the patient, member of staff or both at risk. During the course of the study such action was not required.

3.12 Triangulation

Triangulation of methods was used in data collection. This is defined as the use of two or more research methods in one study (MitcheU 1986). The combined methods approach was thought advantageous to obtain as complete and comprehensive a picture as possible (Begeley 1996). This is not to imply a search for an objective 'truth', but more as a method of verification of interviewee data.

Multiple methods provide the potential for illumination of aspects that might be missed by the use of just one method, thus giving a different and complimentary perspective of the same phenomenon (Nolan & Behi 1995 (b), Denscombe 1998). Multiple methods

also help overcome the recognised weak link between respondents' attitudes and their behaviour (Foddy 1993). In this study 'across method' triangulation was used to increase the factors of 'confirmability' and 'completeness' (Dootson 1995). Interview and non-participant observation methods were used to compare stated and observed practice (confimabihty) and to give as complete a picture as possible of handling practice (completeness). Completeness is also enhanced by the different perspectives drawn from the accounts of the participants and is in it's self a form of triangulation (McDonnell, Jones, & Read 2000). For any influence data obtained from the student interviews was compared against pertinent observation data to determine if inconsistencies were apparent, i.e. stated use of a care plan by the student was compared with observed accessing of the care plan during practice. Likewise comparative analysis of data from interviews and observations related to each of the category influences achieved a complete picture i.e. a student may sfress during their interview the importance of the inclusion of patient opinion during a moving and handlfrig incident. Student observation confirmed if this was done.

A further reason for interview and observation triangulation was to offset participants' knowledge that I was a nurse tutor interested in moving and handling. This fact created the possibility that student statements about their handling practice might contain a desirability bias and therefore be un-representative of their actual practice. A multiple method approach allows a comparison to be made to detect any such anomalies (Fielding 1994). In a similar vein incorrect researcher inferences drawn during moving and handling observations may become apparent during interviews and corrected

(Begeley 1996).

3.13 Data collection

The methods employed were:

a) Non-participant observation of twenty-four student nurses undertaking moving and handling episodes during a pre-identified shift. To determine the nature and range of handling techniques.

b) Semi-structured interviews with the same twenty-four student nurses to explore thefr perception of and the range of influences on their handling practice. This data was correlated with that obtained by observation to vaUdate their stated practice.

c) Documentation - Contextual information considered likely to impact on moving and handling practice was reviewed. The moving and handling documentation was categorised under three headings:-

   ci) Material collected by staff and used as a reference for moving and handling techniques and equipment.

   cii) Trust policies and procedures designed to guide practice.

   ciii) Operational tools i.e. handling care plans used for the assessment and guidance of patient handling.

The observations and interviews were carried out on the same day, the interviews immediately following the observations. This order was adopted to avoid the possibility of the observations being influenced by views expressed at interview. Both the observations and interviews took place during a morning shift (a time period when the

number of moving and handling incidents is at its optimum) on a date determined convenient to the student nurse. The interviews were conducted following the observations in a comfortable, uninterrupted environment (Morse 1989) adjacent to the ward area and lasted 45 minutes to an hour. Permission to tape the interview was requested from the student and it was carried out in as informal a manner as possible, to put the respondent at ease. The end of the student's shift was avoided to eliminate the temptation to be as brief as possible. They were audio taped to ensure accurate data collection, to facilitate a continuous interaction and to allow the researcher to concentrate and initiate appropriate follow up (Rose 1994). At the end of the interview the student was thanked for their assistance and a subsequent personal letter thanking them for their contribution to the study.

In spite of appropriate positioning of the tape recorder, one interview was virtually inaudible due to the quiet voice of the student. Following the interview an immediate check determined this and notes were made on the student's pertinent responses.

The interviews were audio-recorded to facilitate the fluidity of the interaction, diminish the disruption of constant note taking and to obviate the problems of selective recall by the researcher during data analysis. Transcription of the full interview was undertaken subsequent to coding and analysis. Analysis was aided by the use of NUD·IST a computerised data analysis package.

Interview Schedule (Appendix B)

Anecdotal student evidence and analysis of the literature was used to conceive a conceptual framework of factors considered pertinent to influencing student moving and handling practice. An interview schedule was then drafted of appropriate questions based on the identified themes. Two colleagues well experienced in qualitative research were requested to critique the prototype interview schedule and appropriate amendments were made (Polit and Hungler 1995).

Questions were categorised to explore the interviewee's: fraining, knowledge and practice of load handling, experience of injuries and their perception and response to the ward manual handling culture. Another category aimed to determine their perception acceptance within the group. The questions were ordered in such a way that a fransition was formed from factual questions on fraining to those concemed with influences on manual handling. This allowed participants the opportunity to become comfortable with the interview process (Robson 1993). Categorising and ordering of the questions also facilitated their analysis.

The interview schedule was piloted using six student nurses and the respondents asked to comment on the clarity of the questions and their validity. These pilots also helped determine the 'equivalence of stimulus' for each question. The aim being, as far as possible, that every participant should understand the question in the same way as every other participant and hence improve reUability (Harris 1997). Following the pilot the schedule was refined by re-wording some questions and the addition of a question

related to personal injury.

Observation schedule (Appendix A)

The conceptual framework used for the development of the interview schedule was also employed as a guide for the observation schedule and a definition was created of what constituted a handling episode.

Definition of a handling episode - Any patient movement in which the student nurse actively participated, or for which advice or guidance was provided.

The observation schedule was designed to provide a record of the observed dynamic of the handling incident and was kept as simple as possible. It used a modified form of event sampling (Polit & Hungler 1993) and focused on factors identified as pertinent to the interaction. These were based on a review of the literature and criteria statements identifying techniques of good load handling practice incorporated within; legislative documents, codes of practice, poUcy documents and the principles of moving and handling within the Code of Practice for the Handling of Patients (RCN 1993). Requesting its review by a teacher of moving and handling obtained face validity of the schedule (Gilbert 1993).

The schedule gathered data during the handling incident using a series of tick boxes and statements for the perceived variables influencing the interaction and a resume added immediately afterwards. The variables considered pertinent and included in the

schedule were demographic details likely to influence the event such as; status of the person in charge, number of staff on duty, ward activities, moving and handling equipment available. Details of any co-worker, a summary of communication during the incident, planning undertaken for the handling task and description of the handling event. One section was devoted to the context of the incident. This included the social interactions during the load handling i.e. Who initiated the action, the identified leader, who determined the method of load handling, attitudes expressed and the degree of discussion that took place. The prevailing work-load, staff and equipment availability are also identified. Data from the observation schedule thus provided an insight into the dynamics of the handling incidents. Whilst the tool aimed to provide consistency, it infroduced decisions as to what was to be observed and focused on a social construct in just the same way as an interview. The aim was consistency of data, but its interpretation was no less inferential.

Research tools aim to assure the consistency of observed data, but are dependent on the reUability of the instrument and researcher skiU, defined as the unity of the schedule and the researcher (Robson 1993). The pilot led to modification of the schedule and the improvement of infra-observer consistency. A ratification of reliability by inter-observer reliability was not possible as I was working alone.

Documentation and other contextual material

The moving and handling documentation was categorised under three headings:

a) Material collected by staff and used as a source of reference for moving and handling

techniques and equipment. This material was examined for its relevance and appropriateness.

b) Trust poUcies and procedures designed to guide practice.

c) Operational tools i.e. handling care plans used for the assessment and guidance of patient handling.

The use of such material helps build a context from which one seeks to gain an understanding of the subject's actions (Bryman 1988). In this case it was important to comprehend the Trust's appreciation of moving and handling as an element of patient care and its impact on students and staff with whom the student had contact.

3.14 Pilot study

The observation and interview schedules were piloted on a similar area to that of the study within the same hospital. It comprised six observation periods of moving and handling practice, each period being equivalent to the length of that to be used in the main study and subsequent interviews with student volunteers. The conditions for the observations, interviews and the fraining profiles of the interviewed student nurses, replicated those of the main study. The piloted students were asked to comment on the ease of comprehension of the interview questions and the researchers interview technique (Robson 1993). The researcher Ustened to the tapes to critique and review his interview style.

Initially the observation schedule proved too complex, was difficult to use and thus reduced observer consistency (Robson 1993). As a result the observed factors were

rationahsed to provide only data considered the most pertinent to the study and the recording method simplified. The modified observation schedule was re-piloted and proved easier to use. The modification of the schedule and the number of piloted observations served to improve observer consistency and thus reliability.

The interview schedule proved simple to use, but minor modifications were made to the wording of some questions and others were omitted as they duplicated answers to other questions. A question on back injury was added, as this was noted to be a previously omitted significant factor. The six pilot interviews also provided the necessary famiUarity with the schedule, participants of the sort to be encountered in the main study and the practice and development of interview skills (Gilbert 1993).

3.15 Main study

Observations and Interviews

The observations and interviews were carried out over a period of six months. Each student nurse being observed during one morning shift carrying out the moving and handling episodes in which he/she was engaged. As non-participant observation is likely to promote a 'reactivity' effect', the first two observations were freated as dummies to allow persoimel to become acclimatized to the observers presence before collecting data (Robson 1993). I adopted mobile, unobtrusive positioning as far as possible. Other than pleasantries, interaction with the student and patient was avoided in an attempt to retain the naturalness of the situation (Denscombe 1998) along with a conscious effort to adopt neufral non-verbal signals. The observations provided:

a) Data on what took place during the moving and handling operations.

b) Corroboration of a student's stated practice, but did not provide insights as to why these actions took place. Where appropriate during the subsequent interview, reference to observed practice was made to determine the reasons for the student's actions.

At times during the interviews it was obvious respondents gave answers which mirrored what should happen to put them in the best possible light. Careful supplementary questioning using open questioning techniques helped compensate for this bias.

When appropriate a session summary sheet was compiled following an interview (Robson 1993). This identified significant observed expressions associated with particular foci adding emphasis to the interviewee's responses and any implications for future data analysis.

3.16 Data analysis

The data was systematically analysed using a multi-stage approach (Bumard 1991). The aim was to produce a systematic and detailed identification of the influential factors on student moving and handling and appropriately categorise them. A system of first and second level coding was employed (Miles & Huberman 1984). Transcripts were read through and general themes identified. This first level located the data within a main category heading. A second reading then identified a second level of all possible sub-categories. This list of categories was then surveyed and ordered under

the appropriate main category theme. Sub-categories that appeared similar were removed to produce a definitive list. A second analyst was then asked to generate a category system. The two were then compared and suitable adjustments made. A final check was made to determine that the categories covered all influential factors. The generation of themes and categories for data analysis was then subjected to peer review by an independent generation of themes and categories (Bumard 1991). This verification process did not lead to significant variations from the themes and sub-groups identified by the researcher. Each interview was then coded according to the list of categories and the coded sections of each interview collated under the main categories and sub-categories. A selection of the participants corroborated the reliability of the interpretations (Bumard 1991). Where possible within the interview data statements of intent and action on the part of the interviewee were validated by observation data of their moving and handling practice.

By this method a set of extemal categories was generated for both observational and interviews data. The aim was to generate a categorisation system into which significant themes and concepts influencing the participants (analytic induction) could be placed. The established thematic coding is as follows.

3.17 Thematic Coding

Influence of Training
Appropriateness
Applicability
Accessibility
Frequency
Pre-nursing fraining
Application of fraining

Influence of Patient/Relative
Compliance
Ability
Relatives
Safety
Comfort
Preference
Emergency

Influence of Environment
Obstmctions
Space
Accessibility

Influence of Socialisation
Practice change over time
Personality Influence
Role within group
Accepted by staff
Influence of staff grade
Ward culture

Influence of Systems
Handling care plans
Moving and handling assess'
Ward handover
Ward systems
Resources- personnel
Evaluation
Save time

Influence of Knowledge of
Legislation
Prof codes of practice
Policies
Principles of load handling
Equipment
Techniques

Influence of Equipment
Appropriateness
Accessibility
Speed of use
Sufficiency
Availability
AcceptabiUty

Influence of Clinical staff
Practices +ve/-ye
Knowledge
Experience
Experience of patient
Authority
Training
Grade
Personality
Staff safety

Influence of Personal Factors
Self competence
Assertiveness
Back injury
Previous experiences
Injuries of others
Safety

Having categorised the data it was reviewed to determine the most significant factors influencing moving and handling and then examined for linkages between these and personal factors such as age, previous experience of moving and handling, Ufe experience and year of fraining. The frequency of identification of factors, the degree of emphasis laid on them by the student and the sfrength of language employed during the interview were also accepted as indicators of their importance. Determination of the strength of emphasis was aided by re-listening to the taped interview. The findings derived from the analysis are described and related to previous research.

CHAPTER FOUR

CONTEXT TO OBSERVATIONS

4.1 Introduction

This chapter provides moving and handling information pertinent to the study, in order that the results are seen within the context of the fraining programme of the nursing school and the moving and handling mores of the tmst.

4.2 Moving and handling equipment in the clinical environment

An inventory is provided of the moving and handling equipment in each of the study areas (appendix C). Each one had a variety of mechanical, sliding and small handling aids, those areas with elderly clients having a greater number and variety of aids. Several areas had only a limited number of sUding sheets and these were located at a cenfral point. One area stored hoists in an unused bathroom covered with other materials. During the observations the unavailability of an aid was not identified as an influential factor on the choice of the move.

4.3 Manual handling policies and procedures

4.3a Manual handling trust policy

The Manual Handling PoUcy (1997) was located within the Health and Safety Manual, copies of which were available on the clinical areas. On only one clinical area was the manual located within the main ward area.

The philosophy of the tinst policy reflects a 'no Ufting sfrategy'.

'No lifting means that nothing which could if raised or lowered result in an injury to the person carrying out the lift shall be allowed to be moved in that manner which may lead to such an injury' (The XXXX Trust Manual Handling Policy 1997).

The policy stipulates that each ward have a Manual Handling Resource Person (MHRP) appropriately frained and supported. He/she is responsible for in service trafriing at ward level, advice, assessment, and management liaison. Lead Officers support the MHRP's by devising moving and handling protocols, delivering fraining to MHRP's and assuring the sufficiency and appropriateness of equipment.

4.3b Ward patient handling plans

Each hospital had a different patient handling plan. One had a pre-printed sheet for inclusion in the patients care plan. This identified the number of staff for handling procedures, but omitted a risk assessment and the moving and handling equipment to use. In some areas the handling care plans were remote from the bedside, being kept at the nurses' station.

The second plan had sections devoted to the equipment to use, the specific manoeuvre to employ and this information was pinned above the patient's bed to improve accessibility. In practice the plans often provided insufficient detail and were not regularly updated.

4.3c Training

Student

The Diploma programme of the school from which the students originate has a moving and handling component of six sessions within the Common Foundation Programme (CFP) and a further three sessions during the Adult branch programme. The first session focuses on the theory, principles and legislation associated with moving and handling. Further sessions within the CFP explore general handling, use of hoists, sliding aids and finally a session on application of skills using a problem solving exercise. During the Adult Branch programme students apply their skills by problem solving more complex moving and handling scenarios.

Clinical staff (in service)

Persons nominated to be Manual Handling Resource Persons undertook what at the tùne was an English National Board approved course deUvered by lead officers and tutors from the local School of Nursing. Their competence was assessed by a handling skills check and reviewed every twelve to eighteen months. Clinical staff received manual handling fraining from MHRP's and all new staff involved in patient handling received handling fraining prior to commencement of service.

4.3d Ward moving and handling resource material

No moving and handling staff resource file with material such as reference books, research articles or guides to the use of equipment was identified for staff use on any of the clinical areas.

4.3e Manual handling risk assessment

The local policy required a handling assessment for every manoeuvre, but to avoid the necessity for excessive assessment specified that patients without special needs may be moved in a *'standard manner'*. No definition was given as to what was meant by special needs or a standard manner. All other patients were required to have a handling plan.

The policy included specimen copies of the risk assessment form and handling check list citing; assessment of the load, planned procedures, identification of a team leader, attention to the environment, correct postures/holds, explanation of the procedure to the patient and selected procedures for handling patients. Some of these procedures required the handler to support a significant and what is now considered to be an unacceptable amount of the patient's body weight (The guide to the Handling of Patients 4th ed 1997). Such techniques have not been taught within the school of nursing for some time.

CHAPTER FIVE

RESULTS AND DISCUSSION - OBSERVATIONS

5.1 Manual handling observations

A total of forty-six handling events were observed, involving eighteen student nurses (Fig 1). The aim was to determine their patient handling practice and to act as comparative data to the interviews.

5.1 **Fig** 1

Number of observed handling events by year of course

Year 1 8 students	25
Year 2 8 Students	18
Year 3 2 Students	3

Because of variable patient dependencies between the areas, an uneven distribution of events resulted amongst the participants. Some students carried out several moving and handling events during the shift, others only one and six students did not carry out any during the period of observation (Fig 2). In the case of the third year students, only three events were observed involving two students and these were on patients who needed little assistance. For the third year students the number of events is too small to confirm

the stated handling practice in the interviews.

5.1 Fig 2

Observation & Interview	Ward	Sex	Age	Intake	Year	Type of move observed
1	A	F	24	03/00	2	slide,bed/hoist,hoist/bath,. Hoist to bed
2	B	M	44	03/00	2	bed to chair
3	D	F	22	03/00	2	bed to chair
4	C	F	45	03/00	2	no move observed
5	B	F	21	03/01	1	sit up in bed, bed to chair
6	C	F	45	99/03	3	bed to chair
7	E	F	34	09/00	2	slide up bed,
8	B	F	20	09/01	1	chair hoist transfer, hoist to chair transfer
9	A	F	22	03/00	2	slide in bed
10	E	F	21	09/01	1	moving in bed, getting out of bed. moving up bed for meal.
11	F	F	31	01/09	1	transfer wheelchair to bed, general handling
12	F	F	42	01/09	1	transfer bed to chair
13	C	F	20	03/01	1	no move observed
14	G	M	25	99/09	3	bed to chair transfer, slide up bed
15	H	F	20	03/00	2	no move observed
16	C	F	34	03/00	2	sit to stand transfer
17	I	F	25	03/01	1	transfer chair to commode, bed to chair transfer, slide up bed
18	B	F	31	03/01	1	transfer from commode to bed
19	C	F	28	03/01	1	lift to stand, hoist to chair transfer
20	A	F	20	03/00	2	No move observed
21	C	F	38	03/00	2	No move observed
22	F	F	19	03/00	2	chair to chair transfer, slide up bed, chair to hoist transfer
23	F	F	21	03/01	1	slide up the bed
24	G	F	21	99/09	3	No move observed

5.1 (i) Contextual information

The observation schedule included a number of contextual details related to the ward activity at the time of the observations, but during the observations these did not appear to be significant influences on student handling.

The findings of the observations are presented using the following categories:

- Student alone
- Student with assistance.

5.2 Moving and handling events year 1 students

A total of twenty-five handling events were observed for purposes as identified in (Fig 3).

Fig 3 Year 1

Move up the bed	4
Transfer wheelchair to bed. (manual)	1
Transfer bed to chair (manual)	4
Transfer bed to chair (hoist)	3
Transfer hoist to chair	2
Transfer chair to hoist	1
Transfer commode to chair (manual)	1
Transfer chair to commode (manual)	1
Sitting up in bed	3
Transfer commode to bed (manual)	1
Sit to stand	1
Rolling in bed (bed bath)	3

The occasions when assistance was provided by a co-worker in the above moving and handling incidents is identified in (Fig 4).

Fig 4. Year 1 Occasions when assistance provided by:

Staff nurse	7
Student	5
Health Care Assistant	7
Health Care Assistant & student	1
Health Care Assistant & Staff nurse	2
Student nurse alone	3

Student observations

5.2a Student alone

Students confrary to fraining approached moving and handling in an unsystematic manner. In none of the observed cases did the student nurse make reference to;

a) A written moving and handling care plan.

b) Determine the patient's abilities with other staff

c) Or ask the patient their abilities.

In only one case was the correct equipment used as identified in the handling plan (the handling plan was not consulted) and the environment prepared. The following example is more representative of the unsystematic approach used by students. The placement was not unduly busy, but did have a limited number of staff available on the shift. The student attempted to move an elderly gentleman with rheumatoid arthritis to and into the bath. The student did not refer to a handling assessment or seek information from other staff on the patient's abilities. She used a number of manual moves, including the under arm drag to get the patient onto a hoist and when handling him in the bathroom. This patient had limited mobility and was unstable when standing. Before getting him into the bath she attempted to remove his underwear by standing him using the underarm drag. When this failed she called a staff nurse. Without discussion or reference to the patient, they stood the patient using the underarm drag lift. Following bathing the student with the assistance of a second student took the patient through another series of under arm drag manoeuvres in order to dress him and retum him to his bed side chafr. The use of the under arm drag, (identified as unsafe by The Guide to the Handling of Patients 4* Ed 1997) went unquestioned and no attempt was made to use the wards standing hoist. This repeated practice of the under arm drag lift was observed in several areas and indicates that a hazardous manual fransfer method continues to be practised by vulnerable student nurses (Seccombe and Smith 1996 and Moffett, J., Hughes, G., Griffiths,?., 1993).

5.2b Student with assistance (Health Care Assistant/Assistants)

No discussion took place between the student and the care assistant regarding the technique to be employed, their competence to complete the move or their fitness to do so during any of the observations. No reference was made to the handling care plans or an evaluation made of the employed move.

In each instance the Health Care Assistant took the lead. No informal assessments, planning of the move, or agreed command structure was identified. Some mental assessments must have taken place, as equipment/other helpers were obtained and the environment prepared, (although occasionally this was inadequately done). The standard of these informal assessments was impossible to judge and on no occasion was the student asked to contribute to the process. During the move the students adopted a passive role, offering no comment on or question of the techniques employed, even when their execution presented a degree of risk.

Discussion with the patient was limited to pleasantries or the giving of imprecise directions. On only one occasion was their mobility assessed and their view was not sought on the type of manoeuvre to be employed or on its execution. The student took the lead on only one occasion and then the student and auxiliary employed an under arm drag to move the patient up the bed. Selecting the appropriate bed height was largely ignored and when sliding a patient the bed sheet was employed instead of a sliding sheet. When encouraging a patient to move independently, no sliding sheet was ever employed to facilitate this.

5.2c Student with assistance (Student nurse)

No reference was made to the patient's handling assessment, despite the fact that in several cases this was in place above the patient's bed.

The majority of the moves were with the assistance of a senior student. In each of these cases the senior student took the lead. Patient communication comprised a non-discussed statement about the intended move and preparation of the environment was inadequate. No discussion about the move, its stages or the commands to be used took place with the junior student. When working with a senior student the degree of discussion was no different from that with the health care assistants. When the use of a sliding sheet would have been appropriate none was used and for patient assistance, such as during patient fransfers the under arm drag (exemplified by observation 11) was the hold of choice. In one case a zimmer frame (a walking aid) was inappropriately used as a standing aid. The junior student accepted without dissent the friappropriate employment of holds or equipment.

5.2d Student with assistance (Staff Nurse & Health Care Assistant / Staff Nurse & Health Care Assistant + Student)

In one of the two observations the student nurse initially stmggled alone to fransfer the patient to a chair. Having failed to get the patient to stand she called for assistance. On the arrival of a Staff Nurse and Health Care Assistant the student stood back whilst the staff nurse, without clear directions to the patient or the health care assistant lead a banned manual fransfer. Prior to the fransfer no participants referred to a handling

assessment. Neither the appropriateness of the transfer nor that the student was initially on her own was questioned.

In the second case the patient needed sitting up the bed. The Staff Nurse took the lead. The move was made with a slide sheet, but with an imbalance of personnel. The student and the Health Care Assistant were on one side of the patient and the Staff Nurse on the other. The patient was sat forward using the under arm drag. Reference to a care plan and clear directions and commands were absent. The student was a passive member of the team, making no suggestions and was unquestioning of the employed methods.

5.2e Student with assistance (Staff Nurse)

For each move the Staff Nurse took the lead and the student was passive, not volunteering suggestions or ideas. The techniques employed were appropriate, but in some cases poorly executed. One example was a sliding manoeuvre where the patient was moved without adequate protection of the pressure sores on her heels.

5.3 Moving and handling events Year 2 students.

Eighteen handling events were observed (Fig 4).

Fig 4. Purpose of move

Move up the bed	4
Transfer bed to chair (manual)	2
Transfer bed to chair (hoist)	4
Transfer chafr to hoist	1
Transfer commode to chair (manual)	1
Sitting up in bed	2
Sit to stand	1
Transfer hoist to bed	1
Transfer bed to hoist	1
Rolling in bed (bed bath)	1

The personnel involved in providing assistance for the moves are identified in (Fig 5).

Fig 5 Staff (co-worker) associated with handling incident

Staff nurse/Sister	3
Health Care Assistant	10
Health Care Assistant & Staff nurse	2
Student nurse alone	3

5.3a Student alone

Patients who needed no physical intervention undertook all moves. No reference to a handling plan or an immediate handling assessment was made and no direction as to how the patient should move was volunteered. During transfers the student did not always adequately facilitate the patients move by choosing the optimum position for fumiture e.g. a chair was placed in front of a patient requiring them to turn through one hundred and eighty degrees rather than ninety degrees.

5.3b Student with assistance (Health Care Assistant)

Discussion with the patient was limited, only one being asked about their ability to move. Staff usually went sfraight into the manoeuvre without specific discussion as to how this should proceed. On only one occasion when the student led the move did a detailed discussion take place of the technique, equipment to be employed and reference

made to the written handling plan.

In all but the above case no attention was given to selecting appropriate bed heights and clearing sufficient space, consequently unsafe postures occurred. One instance of insufficient space led to a vase of flowers being knocked over! When patients moved fridependently aids to assist them were not employed. When using slide sheets to move patients incorrect postures were adopted and during one observation a walking aid was used inappropriately as a standing aid. When this failed the patient was stood using the under arm drag without dissent from the student.

During a fransfer from a bed to a chafr the student expressed unfamiliarity with the standing hoist. The Health Care Assistant then inexpertly demonsfrated its use by incorrectiy positioning the patient's arms and by leaving the patient in the hoist whilst she fetched an incontinence pad.

5.3c Student with assistance (Staff Nurse & Health Care Assistants)

In one of two instances where the patient had no ability to move and a sliding manoeuvre was employed, the lead was taken by the Staff Nurse. The handling plan was not referred to, no assessment was done and no discussion took place with staff or patient. The patient's heels were left off the slide sheet and part of the move was assisted by the Staff Nurse using the under arm drag. The student nurse was one of three helpers and participated without comment.

5.3d Student with assistance Staff Nurse/Sister

In all three moves involving heavily dependent patients the most senior person took the lead. Communication of intent to the patient and staff was limited and in only one case was reference made to a care plan. Preparation of the environment was inadequate and accommodation of the bed height to the shortest person was ignored. In one instance equipment was used inappropriately and an under arm drag was employed without comment from the assisting ward sister.

5.4 Moving and handling observations Year 3 students.

Only three handling events were observed for the purposes as identified in Fig 6, with assistance provided as identified in Fig 7.

Fig 6 Purpose of move

Move up the bed	1
Transfer bed to chair (manual)	1
Transfer bed to chair (independent)	1

Fig 7. Assistance provided by:

Health Care Assistant	2
Student nurse alone	1

In each case the student took the lead. No reference was made to a handling plan and in only one case was an overt on the spot handling assessment made. A clear verbal command stmcture was identified on the two occasions when a care assistant contributed. When the student was assisted, both the student and the assistant used the under arm hold to steady the patient and when the student adopted the correct position for a slide, she failed to correct the inappropriate position of the Health Care Assistant.

5.5 Observations - Conclusion

During the period of observation, no indication or statement of staff or student pointed to the unavailability of equipment or ward activities as being a significant influence. Neither was staffing levels and workload factors such that co-workers were not immediately on hand to provide assistance if requested. Analysis of the observations indicated significant influential factors common to all the student groups, the most influential of these being that of clinical staff

In all but one case, the lead and choice of handling method was taken by the most

senior or experienced member of staff This determined the strategy and character of the handling event. In many of the observed moves benefit would have been gained from the employment of sliding sheets, but often staff chose not to use these or used them incorrectly. Kane's earUer (1994a) study found a similar disparity between knowledge of what should be done and what is practised. Staff failed to communicate effectively with other staff and the patient, the result being inefficient and incompetent handling. Students were generally passive and acquiesced to clinical staff practices, even when these incorporated unsafe elements.

Moving and handling fraining emphasizes not using the unsafe drag-lift (Hohnes 1997, The Guide to the Handling of Patients 4th Ed. Chapter. Unsafe Lifting Practices pp.223-239), but in spite of this several patients (one of whom had a hemiplegia) were moved using this method. Indeed when patients needed assistance staff adopted this as the primary hold. As the underarm drag lift is excluded from fraining and its use negatively reinforced, it is possible staff use it because it is a quick procedure. Staff then become socialised into using it and instinctively adopt the technique. As Holland (1999) identified, such clinical practices are then imposed on new staff and students and by socialisation conformity is established (Kane 1994b). In every instance the student accepted the under arm drag method without comment, confirming the findings of Peto (1994) and Kane (1994) that students fail to chaUenge accepted clinical practice, even when aware of its inadvisability. Only one exception to this was when a third year nurse working with a health care assistant dissented. In this case the student was experienced, confident and as Kane (1994b) identified these factors can induce assertiveness.

The influence of training as a theme did exhibit itself to a limited degree as students attempted to apply general principles of good moving and handling practice. Evidence was preparation of the environment and attention to posture, but this was not always of a high order e.g. Lack of sufficient space and incorrect bed heights. This and the limited or improper use of equipment give support to Harber (1992)'s assertion that nurses may, to some degree, be responsible for their own injuries because of the working practices they adopt.

The Moving and Handling Operations Regulations (1992) and The Tmsts Moving and Handling policy (1997) require patients have individual handling care plans, but this requirement was not a significant influential factor. There was Umited observance of the tmsts moving and handling policy, evidenced by some wards not completing them for every patient, keeping them up to date and their limited use. This lack of use of handling plans may, in some cases be due to ignorance of the poUcy. Owen (1998) identified that only 10% of the sampled staff had read the hospital poUcy and therefore were unaware of its requfrements. Other reasons why staff and students were indifferent to handling plans as a primary reference for determining patient handling may be because they failed to give clear guidance i.e. 'Needs help to stand', or were out of date. In one of the two hospitals they were also inconveniently located away from the patient thus hampering easy reference. Failure to use a written plan was not compensated for by an observable assessment of patient mobiUty, as students often attempted to move patients who needed the assistance of more than one handler. The observations indicate that whilst considerable emphasis is paid in the students' fraining programme to the

importance of patient handling assessments, this is not fransferred to the clinical area. This finding is consistent with Stiibbs (1983) and St Vincent & TelUer's (1989) statement about the limited validity of fraining with respect to its impact on practice. It is also commensurate with Melia (1987) and Wilson and Startup's (1991) findings that students' actions in practice do not reflect those taught in the Nursing School, but are more in line with the established practice of the clinical area.

In summary the predominant theme influencing student handling practice is that associated with the influence of clinical staff and their practice of moving and handling.

CHAPTER SIX

RESULTS AND DISCUSSION - INTERVIEWS

6.1 Student nurse interviews

The interview data quoted and discussed within this section has been selected as fridicative of the general thoughts and perceptions of the students, sketch's a picture of their clinical moving and handling practice and identifies significant influential themes.

The Moving and Handling component of the School of Nursing's Diploma in Nursing course is delivered over three years. Six of the nine sessions are delivered during the first year and three of these occur before the student's first clinical placement.

The first year students were drawn from those on their first placement and others near to completion of their first year. The student sample consists of those who have had only three handling sessions and limited clinical experience and others who have had six sessions and more experience of handling patients in clinical practice.

The study's second and third year student nurses had received the six sessions of moving and handling delivered during the Common Foundation Programme, plus experience within several different clinical placements. In addition the second year students had received two further moving and handling sessions and the third year students one further day. Two of the three third year students had also received an annual update day as bank nurses.

The following discussion identifies the contrasting degree of influence between the themes that emerged from analysis of the interview data. One outcome of the study was to compare and contrast the clinical moving and handling practice of student nurses with the practices taught by the school. Hence the influence of training is the first of the themes addressed.

6.1a Influence of Training

The inadequacies of the fraining programme were identified as having a negative influence on student handling practice. First year students stated that because of thefr limited fraining prior to their first placement, they felt inadequately prepared for clinical practice and were heavily reliant on clinical staff One facet of this was the difficulty posed by unfamiliar equipment.

1st year student

Interview 13

'With the hoist, when I was on placement I wasn't sure how to use it, because we hadn't had many lessons on it, so I went and got somebody and they helped.'

For second year students the limited opportunities for practice during the handling sessions and its effect on the consolidation of their learning was an issue.

2nd year student - Interview 21

'There are long sfretches between fraining and meeting the situation in placement.'

Further evidence supporting the difficulty of retention of information arose from the limited ability of students to recall the content and handling techniques employed during flieir fraining. Recall of these yielded a superficial description of the practical aspects of the sessions with few references to the importance of the handling assessment and no mention of the guide given by legislation and the Code of Practice for the Handling of Patients (RCN 1993). Accurate recall proved particularly difficult for second and third year students, perhaps due to the fact that the majority of their moving and handling fraining was at the beginning of the course.

Students perceived that the lack of consolidation of their handling skills lead to a degrading of their level of skill and insecurity about their competence, a finding commensurate with that of Bradby and Soothill (1993). This insecurity enhanced their likelihood of adopting incorrect clinical practices.

1st year student - Interview 18

'Practice is not easy, because it is remembering techniques, as you are not using them on a daily basis.

1st year student - Interview 10

'You are not prepared enough for it (clinical practice)..... you find them (care assistants) doing it all different ways. I know they don't necessarily do it the right way, so you are learning bad habits, learning the wrong way from the start.'

However, for students who possessed clinical experience prior to fraining, the fransference of skills from theory to practice was perceived to be easier.

1st year student - Interview 5

'It has not been difficuh for me personally, because I have had experience in the practice field before'.

As well as the infrequency and limited time for consolidation, another fraining inadequacy was the sequencing of content. Both first and second year students wanted more emphasis on manual handling techniques at the beginning of the course.

1st year student - Interview 11

'I think we could have done with more fraining actually moving a person manually rather than with hoists, because we do get asked to help move people.'

This insufficiency may to some extent account for the frequency of observed use of the under arm drag as means of assisting patients to move. However as students complained that the school environment was less than realistic and practising on colleagues failed to reflect the complexity of patient handling problems, fiirther fraining on this aspect might prove ineffective.

1st year student Interview 5

'...It is different moving each other around because we haven't got the disabilities, we can move and you tend to help each other.'

One student who had been an auxiliary nurse prior to nurse training gave added weight to this point.

1st year student - Interview 19

'You are practicing with capable people rather than on somebody who is physically ill.... you know you are practicing in a sort of make believe situation'.

2nd year student - Interview 20

'Sometimes it would be nice to get a session where you are actually on a ward with somebody actually showing you how to do it in a more realistic situation.'

This suggestion reflects that of Wilkinson, Peters, Mitchell, Irwin, McCorrie & MacLeod, (1998) who stated that first hand knowledge of the context of experiences and application of theory within practice consolidates learning. Third year students echoed these sentiments, stating that after encountering the reality of patient ability in practice they do things differently.

These remarks regarding limited training time being insufficient to consolidate knowledge are commensurate with the findings of Stubbs (1983). The comments on its unreality being a barrier to its fransference into practice support McGuire (1995) and

Oddy (1993)'s finding. Even though the local school of nursing's diploma programme now devotes more time to moving and handling training than previous nursing programmes, it is still not perceived as being sufficient or effectively linked with practice. This supports Wilkinson's (1998) finding that separation of a moving and handling training programme from the workplace impedes the student's ability to consolidate learning and St Vincent and TelUer's (1989) assertion that handUng programmes not adapted to the workplace are ineffective.

Students entering clinical practice thus experience a tension between what has been taught and the reality of its expression through the handling practices of clinical staff

1st year student - Interview 18

'There is a theory practice gap because of techniques used by care assistants. They have their own way, although they are taught moving and handling.'

Second year students with additional clinical experience appeared particularly aware of the tension between taught and clinical practice.

2nd year student - Interview 4

'You come onto a ward and everybody has their own way of doing things. You have to fall into everybody else's pattem and sometimes you get a bit edgy with it because you know how it should be done.'

To some degree this tension arises from the students encounter with a lack of equipment, its unfamiliarity and or being unable to address complex clinical moving and handling problems with a consequent reliance on clinical staff. Elkan and Robinson (1993) suggested that such feelings arise from the student's own perceived lack of practical competence and Wilson and Startup (1999) as the tension created when students feel pressure to conform to the clinical staff's practice rather than applying practice taught in school.

Students often recognised moves were incorrect, but rationalised their use and went along with them as they appeared to achieve their objective, saved time and did not appear to compromise patient safety. An example frequently referred to was the sliding of patients on a bed sheet rather than a slide sheet.

2nd year student Interview - 22

'They use altemative methods sometimes-easier methods that aren't necessarily right. So occasionally the sUde sheet wouldn't be used and they just use the bed sheet.'

1st year student - Interview 23

'Sometimes you have just not got the time to get a sliding sheet. If you have enough members of staff you can just get the sheet and Uft them up on it, but they say at school that this is bad practice. I understand that probably it is, but you've just not got the time.'

These statements on the use of slide sheets are corroborated by student observation indicating an acceptance of ward handling norms and concur with Wilson and Startup's (1991) finding that some handling techniques performed on the ward do not conform with those taught in school.

The tensions expressed by first and second year students between fraining and clinical practice appear to have dissipated by the thfrd year of fraining. Having had lots of moving and handling experience these students stated they were comfortable with their handling practice and after assessing a patient no situation was too difficult. The reason for this change is difficult to determine, but may be due to a gradual assimilation of handling techniques and experience from the clinical areas.

The observational and interview evidence indicates that skills based manual handling training which is remote from the clinical environment and its 'real life' setting, has a limited effect on student manual handling.

Having identified that manual handling training has only a limited impact on the formation of student moving and handling practice what is the relative influence of the clinical environment through its social and work culture?

6.1b Influence of the Clinical Environment

This section provides an over view of the significant environmental influences on student moving and handling practice. It commences with a student appreciation of the

variability of handling excellence between areas.

Students indicated that the degree of excellence of the moving and handling environment varied from area to area. They attributed this to the staff's level of expertise and their appreciation of its significance. Some placements appeared to sfress safe patient handling, whilst others only saw it as a means to deliver care and applied generic rather than individuaUy assessed patient handlfrig. Students stated that generic handling techniques were often inflexibly applied, especially by Health Care Assistants, whilst frained staff adopted a more flexible patient cenfred approach. In the latter case students paid tribute to the positive reinforcement from staff who handled correctly. Students stated that areas had their own moving and handling culture derived from a variety of sources and were of the opinion that this was not always attributable to the influence of the ward manager.

First year students in the latter part of their first year of fraining reflecting on how they thought their manual handUng had changed over time gave responses which did not elicit a definite pattem. At one end of the spectrum some felt their practice had not changed at all, whilst others felt the influence of clinical experience on thefr handling had been quite marked.

1st Year student - Interview 18

'I am more aware of myself, the other day for instance. I was helping to bed bath a patient with the Sister who is slightly shorter than myself I found I was stooping over

the bed and could feel that my back was being pulled because of the position. So I said 'I am just going to raise the bed a little bit'. This helped, but it could have done with being raised a good couple of inches more, but the sister seemed quite comfortable and I thought oh well! Stupid thing to do on reflection not saying 'look I am sorry but this is making my back ache'.

This example illusfrates the complexity of any given handling and the possible multiple factors that may influence it. In this case the demeanour of the Sister, the possible influence of her seniority and the imperative to finish the task.

The following examples from first year students provide an insight into the students' perceptions of the influence of placement handling practices and thefr incremental effect over time.

1st year student - Interview 17

'It has got better with a bit of experience (the student's handUng practice). Some placements are better than others, but I think to have somewhere like this, where they use it (handling techniques) properly will be a lot better for me.'

1st year student - Interview 23

'It is appalling to say that it has got worse, but it (handling practice) has become accommodated to what I have had to do in the setting. . . . I would like to do it properly all the time, but it has got that little bit more lackadaisical. To get a patient out of a chafr

you are not meant to grasp under their arm because of damaging it, but I think it is just the easiest way and they (the staff) expect you to do it. So you just do it for quickness and ease of the job, which sounds awful, but you just do.'

These references to student handling practice becoming adapted to that of clinical staff applied also to second year students. When asked to comment how their practice had changed, many expressed an increased level of confidence, but this was confined to an increase in familiarisation with equipment and the techniques encountered in clinical practice. It was not possible to determine from the limited data available if these techniques concurred with the principles taught in fraining, but the observations and the following interview data imply that this may not be the case.

2nd year student - Interview 20

'The first few placements you do everything as you are taught in school. As you go on through your placements you end up doing it the way everybody else does it, because that is how it is done'.

The inference is that MeUa (1987) and Becker et al (1961)'s findings that students gradually conform to clinical practice is re-confirmed. However, this convergence does not imply that students are unaware of what constitutes good and bad practice, or the inadvisability of some handling practices.

First year student - Interview 5

'Although they (clinical staff) should know what they should be doing, they don't always do it.

They will say to you.

"We shouldn't be doing this, but do you mind if we just do it like this?" and you tend to say. "Alright then".

Rather than saying.

"No you shouldn't be doing it like this, that is not how we are taught", but you think they know the patient and what they are comfortable with".

2nd year student. Interview 1

'That shouldn't be being done, but you don't always feel brave enough to speak out and you're only on this placement for four more weeks.'

This statement of an experienced second year student does not indicate that experience promotes a willingness to challenge established practice, a feature bom out by no dissent being noted during any of the 2nd year observations. However, third year students, particularly those with previous experience as Health Care Assistants and this male student adopted a more reflective assertive approach to patient handling.

3rd year student. Interview 14

I think as a first year student it was like 'I am here to learn I will go with the flow' but after thirty months I have began to say well we will do it this way, we will do it the correct way.

This change stemmed from a clear determination to maximise use of the patient's ability to mobilize and to protect staff and patient safety.

Acceptance of the clinical environment as a major influence on student handling leads to the following questions. What are the specific influential factors and is any one of them more significant than the others? Some first year students identified that what they had learnt in school and use of handling care plans was considered significant. Others cited environmental space constraints and lack of equipment, but all agreed on the significant influence of what they had seen and the influence of clinical staff The staff member identified by first year students as the predominant influence was their mentor. The response of one student to the question; Considering your practice of moving and handling how much is it influenced by other staff? Replied.

Ffrst year student Interview - 8.

'A lot!'

Second year student nurses also acknowledged the influence of fraining on their moving and handling practice, but to a lesser extent. The two most frequently stated influential factors were safety and the handling assessment. Students were more aware of their own safety, but placed this second to that of the patient. Discussion of the handling assessment indicated its importance, but this was not as great as it first appeared. In its written format it was infrequently referred to, greater reliance being put on the assessment of patient ability prior to handling.

Other factors cited by first and second year students as shaping their handling practice were; the availability of equipment, the number of staff on a shift and the handling procedures adopted by staff

Thfrd year students stated patient ability as the pre-eminent influential factor, but also cited safety and equipment as major influences. The influence of other staff on this group, particularly those of an assertive and forceful nature was also evident.

The clinical moving and handling environment was assessed as the single most significant factor influencing students, although the degree of this influence appeared to vary from student to student and with time. This supports the observation finding.

The discussion will now examine in more detail the clinical influences on student nurse moving and handling.

6.1c Influence of Clinical staff

Observation of students passively following a clinical lead and interview data indicates that clinical staff are the predominant influence on student moving and handUng practice. This confirms the finding of Fitzpatiick et al (1996) that clinical staff provide role models for students. This influence arises from the moving and handling miUeu generated in the clinical environment and its projection by staff to students as they work with them. The influence of clinical staff was particularly significant for ffrst year students.

A common view of this group was that clinical staff know the patient and are thus best placed to lead moving and handling. In cases where the student's view differed from that of clinical staff, the clinical staff's opinion was predominant.

Ffrst year student - Interview 5

'Well they know the patient, so they know how it should be done" I tend to back down, because at the end of the day you are only the student.'

First year student - Interview 8

'Other staff influence my practice quite a lot. I suppose it will change from ward to ward, how people do things differentiy. If I get any help I'd sort of do it thefr way because they are more experienced, I would just follow their method'

This suggests that a student's handling practice is rather volatile, being determined by changes of placement and individual staff members.

Students cited both trained staff and care assistants as influential, but the degree to which a particular staff grade influenced them rested on how much they worked alongside them. Because of the hands on nature of their work and the pairing of students with them, Health Care Assistants (a situation similar to MeUa's (1987) study) were often cited as the most influential in determining moving and handling. Second were Staff Nurses and when a Student, a Health Care Assistant and a Staff Nurse were involved, the lead was normally taken by the Staff Nurse.

Four major reasons appear to account for this deference and acquiescence to clinical staff by first year students. First, recognition that they occupy a low position in the hierarchy and see themselves as relatively powerless Cahill (1996).

1st year student - Interview 13

'I don't really say anything, because they are superior to me, so you feel like you can't really say anything.'

Second a lack of confidence bom of inexperience, culminating in a sense of inferiority in the face of the perceived superiority of the expertise, experience and skill of the clinical staff Gregory (1996), Argyle (1994).

1st year student - Interview 23

'If they say "give us a lift with this patient" and they start to do it in one particular way and they are a senior member of staff to me, then I do tend to follow because they are above me. . . . . I don't like to question somebody above me, so I just tend to follow'

This conformity is in line with the observations and indicates the students' wish to reduce sfress, avoid conflict and fit in to the group norm Gregory (1996). This is enhanced in junior students as they are low in confidence Argyle (1969) and Sleutel (2000). A further factor is the desire not to upset the authority figure (Hofling 1966).

Third, deference to staff who possess a forthright personality. Clinical staff possessing such a personality appear less likely to be challenged by junior students.

1st year student - Interview 18

'It can be awkward at times, so I just withdraw from particular care assistants, because it is easier not to work with them than disagree with what they are doing'.

1st year student - Interview 8

'I'd sort of do it their way because they are more experienced, I would just follow their method'

Students still appear to encounter the enfrenched attitudes of auxiliary staff as identified by MeUa (1987) and Green (1996). fri the face of potential conflict, the response of the junior student is to submit or citing inexperience as their reason withdraws from the situation.

Four, was a desire to be liked, gain approval, meet staff expectations and not make themselves unpopular (Gross 1987, Sleutel 2000). This induces newcomers to be accepting and uncritical of the prevailing norms as determined by Gross (1987) and Sleutel (2000).

1st year student - Interview 5

'I do tend to back down and think well I have only worked on here a couple of weeks, or something like that and they know the patients best.....You don't want to storm in there with your suggestions, because you are going to make yourself quite unpopular.'

This proved to be the general view and is similar to that of Cahill's (1996) study of third year students of a compliant adaptive junior student. However, at interview one first year student referred to an instance when she had been more assertive and refused to assist with an inappropriate move. This person was a mature student, suggesting that a willingness to challenge may be linked to factors such as personality and or life experience (Du Toit 1995). Second year students appeared marginally more willing to question Health Care Assistants, but found them resistant to change, particularly the older males. This student assertion stemmed from a belief that this group were unwilling to accept suggestions from a young female. However, the majority of junior students felt that as their experience and confidence grew they would be more assertive, but the perception that experience creates emancipation may be misplaced. Many experienced students stated that whilst they were no longer as influenced by others as previously, they qualified this by stating that patient safety was the factor most likely to induce dissent. This was supported by examples as to when they would be assertive and dissent from participation, all hinged on the safety of the patient.

2nd year student - Interview 2

'If I thought it (handling technique) was detrimental to the patient then definitely not, but if it appeared more practical with benefit to the patient, then I wouldn't have a problem with doing it.'

Students carefully weighed the handling options against patient safety and if they thought a move was safe and in the interest of the client, they would often go along with

it. As determined by Hignett and Richardson (1995) most students, irrespective of experience identified patient safety and comfort as an influential factor and often mortgaged their own safety in favour of that of the patient. However this study's observations do not support this as patient safety was compromised by use of the under arm drag and no dissent or lack of compliance on the grounds of safety was observed.

The dilemma of whether or not to comply with a particular handling procedure was also related to when it occurred on the placement. At the beginning of a placement the insecurity of the new student in an unfamiliar environment was a factor.

2nd year student - Interview 1

'It is not easy as a student to come on the ward and do things how we are told, you don't feel relaxed with it, you just can't do it how it should be done.....I am the up and coming nurse. Being able to speak my mind and tell them, I don't feel that's always easy to do.

Such feelings concur with the finding of Bradby (1990) that students encountering the clinical environment experience feelings of unfamiliarity and anxiety because they are unaware of the estabhshed norms (Brown 1988) and are marginal members of the group (Sampson 1990).

Students also felt insecure because of their unfamiliarity with the patients. The staff's more extensive patient knowledge was a sfrong influence in determining patient

handling and the authority for stifling challenges.

2nd year student - Interview 4

'They have been doing Mrs X this way for six weeks, so I am not going to walk in on the first day and tell them, otherwise you are at war on the first day.'

The assertion is that a student's willingness to challenge is muzzled by their inexperience and status. The personality of their co-worker i.e. assertive and set in their ways is also an important influence, often more so than their grade. The greater the assertiveness of the clinical staff member, the less inclined the student is to challenge.

2nd year student - Interview 3

'If you know someone to be quite a bit aggressive, you tend to be a bit more wary about it all'

With regard to staff grade, students were wary of a staff nurse's opinion, but paradoxically found them more tolerant when they made suggestions. However what students were unequivocal about was that in situations where senior members of staff participated, their opinion prevailed.

One interesting finding, which appeared in several interviews, is what I have termed the 'squirrel phenomenon'. Students made judgements, but because of their lack of authority did not implement them, rather they stored them away for retrieval after qualification. Wilson and Startup (1991) identified this stance of students, whereby they

publicly conform to the 'normative influence', whilst continuing to maintain an inner deviance.

2nd year student - Interview 7

'You sort of go along with the flow and then adjust it for when you are qualified.'

A longitudinal study may identify whether students do indeed change thefr approach when qualified or whether another squirrel phenomenon appears, that of forgetting where your store is!

The opinion of third year students was that Health Care Assistants were the most influential staff members, because they were the most heavily involved with patient handling. Third year students because of confidence in their abilities felt themselves less susceptible to pressure and would argue thefr case. This may be due to Wiesenthal, Endler, Coward, & Edwards, (1976)'s assertion, substantiated by Kane (1994) that individuals who perceive themselves as skilled are more confident and less likely to conform.

The interviews and observations concur that the majority of students will comply with a less than ideal move. What the observations don't confirm are student statements that they would only do this if patient safety were not compromised. Student compUance avoids the dilemma of refusing to participate and the risk of possible sanctions or rejection.

6. 1d Influence of personal factors (safety and moving and handling)

Concem for patient safety exhibited in the previous section also extended to their own safety. However, some students and especially first years added a qualification. Personal safety was emphasised, but students appeared ready to compromise this in the interests of getting thing done, as identified by Hignett and Richardson (1995) in their study of trained staff. No student appreciated that compromising one's own safety inevitably put the patient at increased risk.

The majority of first year nurses had never suffered any injury and those who had said it had had only a minimal influence on their practice. Further, the potential for personal injury or knowledge of a colleague's injury carried the same minimal influence on their moving and handling practice and significantly did not over-ride the influence of clinical staff For all but one first year student the significance of suffering an injury was deemed unimportant. They considered that safety took second place to getting the job done and were more influenced by resources, particularly limited numbers of staff.

Second and thfrd year students painted a totally different picture. This group stated safety was a potent influence on thefr moving and handling. This was particularly so for those who had had a previous injury or knew of a colleagues injury.

3rd year student - Interview 6

'You have only got one back and you have got to take care of it!'

These findings are in line with those of Green (1996), who highlighted that some nurses would not use unsafe techniques on the groimds of self or patient safety. However, as for the first year students in this study, Green (1996) also determined that because of the negative attitude of colleagues some would comply to maintain 'popularity'. However whilst emphasising that safety was paramount, second and third year students acknowledged that the veracity of this varied with placements and the pressure of work. This was illusfrated when second year students were questioned about how much the quickness of a move influenced its choice. They all agreed this was very influential, indicating as did Melia (1984) and Holloway & Penson (1987) that working quickly and the ability to perform procedures with speed is an implicit norm of practice. Students indicated that as for McGuire et al's (1995) study, aids were often not used because of the perception that they are time consuming to use and slow down a procedure.

1st year student - Interview 23

'Quickness is definitely number one. The safety of the patient is always a priority, I think staff come second on the list. The patient is the number one priority, then there's the move, the quickness of it. While we are putting a sliding sheet in or getting the hoist we could have the patient moved by sUding them on a sheet.'

Indicative of the fact that safety may be a relative feature, is the opinion of tifrrd year stiidents. They pointed that its influence was dependent on its perceived importance within the moving and handling culture of a clinical area.

The findings indicate that as students gain experience they feel more confident and empowered to challenge practices, which put themselves and patients at risk. However, this appeared sfrongest when acting on behalf of the patient rather than ones self and was subject to pressure from work systems.

6.1e Influence of systems of work (time / staff resources)

In identifying consfraints on moving and handling practice, students repeatedly made reference to being short of time, with its indivisible Unk workload and insufficient staffing levels.

1st year student - Interview 23

'Time, we are so busy all the time, we have admissions coming in all the time'.

1st year student Interview - 8

'Limited time and how many staff you can get to help you.'

These consfraints on handling posed a dilemma for students with two altematives. One, the student had to make the patient wait until sufficient staff were available, a choice which brought pressure to adopt an altemative method. Two, because the pressure of work dictates handling cannot wait, attempt a technique with insufficient numbers of personnel.

1st year student - Interview 8

'Sometimes you attempt to do it on your own even though you shouldn't really, because

there is not enough staff around, they're aU really busy.'

This finding correlates with that of Harber (1992), where the nurse feels professionally obliged to jeopardize herself for patient care and Philpin (1999) that sociahsation into adopting procedures that are less than ideal can be mediated through economic constraints such as staffing levels.

Students also identified that conflicts arose when time pressures, work-load and staff resources were compounded by unreaUstic systems of work i.e. handling plans.

2nd year student - Interview 2

'It is fine putting a handling plan at the back of the bed which requfres two for turning and getting out of bed, but when there is only five staff for twenty patients the figures just don't add up'

Students felt that these resource issues were more acutely felt under a high workload. Under these conditions the quickness of a move was a significant factor in its choice, particularly so when confronted with a requirement to act quickly, such as when a patient needed toileting and the required handling equipment was unavailable. In these cases the speed and ease of a move enhanced its chance of use, even if it was not considered the best option, 'getting the job done' was an oft-quoted phrase.

2nd year student - Interview 4

'Everybody is short staffed and if you're busy, it is very difficult to run and fetch this and that and sometimes you can't find the stuff

As identified by ConnoUoy, Wilkinson, Flanagan, & MuUey, (1990) and McGuire et al (1995) the student's perception was that finding and using equipment reduced speed and was a disincentive to using it.

1st year student - hiterview 23

'The patient is the number one priority, then there's the move, the quickness of it. While we are putting a sliding sheet in or getting the hoist we could have the patient moved by sUding them on a bed sheet.'

A second year student stated that staff were unwilling to use a hoist if it meant going to fetch it, preferring to manually move patients.

The perception is that the use of equipment equates with a non-acceptable pace of work. Even so, most students adamantly denied they participated in exfreme bad practice, but the question remains as to what happens when, as experienced by one ward they had no hoist. The assertion that students take a pragmatic approach to handling underlines one of Smither's & Bircumshaws (1988) reasons for the theory practice gap, in that they differentiate between the 'idealistic' and the 'realistic'. The idealistic as represented by the handling plan and the ideal technique is seen as unworkable,

because they are too busy and short staffed to implement it, therefore it is ignored in the belief that what is being done is in the best interests of the patient. This supports Yassin (1994)'s assertion that theory is ignored when systems of work cannot accommodate it. This dissonance between ideal handling and actual handling practice is now examined in more detail.

6.1f Influence of systems of work (handling care plans)

Each ward had a manual handling assessment document, but the depth and breadth of the assessment varied. Often it was mdimentary and failed to give clear guidance on the handling procedures to adopt. The handling observations identified that students made little reference to these written assessments and the interview data served to confirm they played little part in guiding student handling. On several wards the existence of patient handling plans appeared outside of the student's experience, as neither they nor other staff had ever referred to one. One student on their first placement indicated they saw them as of secondary importance to the influence of other personnel.

1st year student - Interview 8

'They (handUng care plans) probably play a part further into the course, but on your first placement you sort of go along with what your mentor says or whoever is working with you. You don't really think about them.

This concurs with the findings of (Philips et al 1996, Fitzpatrick et al 1996 and Wilkinson et al 1998) that students look to the practice of their mentor before all else.

The prevailing practice in all areas was generally to ignore the formal assessment Peto (1994). When a patient needed to be moved, an immediate assessment of patient ability was the route of choice, with sometimes a supplement of verbal information from other staff This appears to confirm McGuire (1995)'s finding that the patients ability to co-operate, as dictated by their size, physical and mental ability is a significant factor. Anther factor inhibiting use of handling plans was the Health Care Assistant. Students stated they often worked with Health Care Assistants and that they largely ignored care plans.

1st year student - Interview 23

'When a Patient is admitted we do risk assessments and care plans, but the Health Care Assistants don't look in the care plans. They have got no idea of what care plans people have.....not all staff know about them, so I don't think they are useful at all.'

Some students acknowledged the existence of handling care plans, but intimated they did not use them. In response to a question asking if moving and handling assessments were done, one student replied.

1st year student - Interview 8

'They might do, I know staff routinely check on moving and handling, but I am not sure to what degree it happens'.

Others knew of their existence, but questioned their value. Students said they infrequently referred to the plan and tended to check information with another member

of staff A fact confirmed by the observation data.

1st year student - Interview 10

'They're in the 'Kardex' for all the patients, but I don't know whether they are actually a lot of use. I sometimes refer to them, but I still check with staff dealing with the patient'

Some of the scepticism concerning handling care plans was attributed to the fact that the information rapidly went out of date and regular updating did not take place.

1st year student - Interview 18

'I have had a look at the handling sheet sometimes and I have been told "well they don't do that anymore" (referring to the patients ability to move).

Hignett and Richardson (1995) questioned the validity of formal handling assessments because of the rapidity with which information becomes dated and this study support this. Student nurses perceived verbal reports as a quicker and more accurate representation of the patient's ability. All students identified the accessibility factor as significant. A plan, which was conveniently visible, was more likely to be referred to.

1st year student - Interview 5

'. . ..If it (the handling care plan) is there in front of you, like here where it is above the bed, obviously you are going to look at it, but if it is at the bottom of the bed or in a file

you are less likely to look at it.'

Third year students indicated that reference to care plans was mainly limited to those occasions when one was unfamiliar with the patient's ability. Their emphasis was on an immediate assessment.

In summary students accepted the need for a handling assessment, but largely disregarded the formal assessment of patient handling in favour of established clinical practice. This supports the findings of Kane (1994a) and Peto (1994). The limited influence of patient handling by written information is mirrored by the restricted reference to it during patient hand-over. All students stated that very little discussion of moving and handling took place during the patient hand-over.

1st year student - Interview 13

'They don't really discuss it. It is not really effective'

When discussion did take place students stated it was to draw attention to patients who posed a moving and handling problem. Only general information was given in these cases and this failed to identify how the patient should be moved.

1st year student - Interview 8

'They sometfrnes say "Oh they are a bit shaky on their feet" or "they are not very mobile" but it is never sort of really discussed on how you actually move them.'

All students stated that no area undertook formal evaluations of the moving and handling procedures they practiced. Some students stated they personally reflected on individual handling events, but did not follow a consistent or stmctured approach and it was impossible to determine the impact of this reflection on their practice.

6.1g Influence of knowledge of manual handling policy & legislation

The Tmst Moving and Handling Policy was available on each ward, but this was not common knowledge for first year students. Some thought a policy existed, others did not. A minority of students admitted to having looked at it, but none was familiar with its contents. Students accepted the document was a potential shaper of practice, but stated that it had not influenced them personally.

1st year student - Interview 8

'I mean we have been told all about the policies, but I think at the end of the day when you are doing it that is not the first thing which springs to mind, you are too busy to think about it'

Without exception all minimized its relevance to clinical practice.

1st year student - Interview 13

'Well there are loads of policies on all the wards and everything telling you how to do moving and handling, but nobody really reads them.'

One student indicated her handling was influenced by the policy, but when questioned further as to the specific policy retorted.

1st year student - Interview 19

'I don't know really. I mean I don't sit and read them I must admit.'

The majority of the second year students were ignorant of the existence of the policy, but several knew of it and said they had read it. They could not recall any of its content and stated it merely reflected what they had been told in school. Third year students were aware of the existence of a poUcy, but were no more knowledgeable as to its content than other students. The analysis of student responses indicates that the tmst handlfrig policy was not an frifluential factor.

2nd year student - Interview 20

'Sometimes you think, this (handling practice) doesn't really go along with what the Government say we should be doing, but then you think 'If I don't do it what are people going to think of me' you tend to ignore it because you feel you have to.'

This finding supports Owen's (1998) assertion that only limited numbers of staff are aware of hospital policies. With regard to legislation no respondent made reference to the Manual Handling (Operations) Regulations (1992), the legal requirement to assess manual handling or the Code of Practice for the Manual Handling of Patients. This is worrying because students do not appreciate the legal risk incurred by not adhering to the handling policy and negates the emphasis in the nursing curriculum on professional

conduct. However ignoring the policy is consistent with Napier (1999)'s statement that groups can have a tacit understanding of policies, but can choose not to comply with them if they feel it is expedient to do so.

The resuhs point to student accommodation to prevailing clinical moving and handling practices, as promoted through the socialising influences of staff and clinical systems.

6.1h. Influence of Socialisation.

Resuhs from the interview data indicate that both first and second year student nurses have a need be accepted (Argyle 1967), be liked by staff (Kane 1994) and gain approval through a good report Cahill (1996) and achieve their placement outcomes. This supports Holland (1999)'s finding that diploma students still expect to have to 'fit in' to the clinical environment.

Students are also subject to and still accept what Napier (1999) identified as the low status and subservient role of the student nurse. Student consensus was that if they spoke out in a manner confrary to the popular view, then they would not be Ustened to Cahill (1996) and it would have little or no impact. Because of the need to gain approval, fit in, achieve and their perceived low status students are unlikely to speak out early in their placement, as the desire to become one of the team constrainsthem.

1st year student - Interview 5

'People don't want some kid tellmg them what they should do'

2nd year student - Interview 3

'It is always in the back of your mind, wanting people to like you, wanting them to give you a good report.'

These statements support Kane (1994b)'s assertion that students wish to avoid becoming unpopular, create friction and elicit negative reactions from staff. The student nurse needs to 'fit in' and become a group member (Philips et al 1996, Gray & Smith 1999). Fitting in is contingent on a willingness to conform to the norms set by clinical staff (Pennington 1986). The impression was that students underwent a process of sociahsation described by Merton (1957 p.278) as:-

"The process by which people acquire the values and attitudes, the interests, skills and knowledge, in short the culture of the current group in which they are, or seek to become a member".

2nd year student - Interview 15

'You take notice of what everyone says, but as soon as you go to another ward you adopt thefr practices'.

A further factor aiding socialisation to clinical norms arose from students statements indicating recognition of and sympathy for the clinical pressures on ward staff The result was a willingness to compromise their moving and handling by accepting ward practice.

Students did qualify their acceptance of procedures by stating that if safety was an issue, they may either speak out or withdraw from the situation, as previously identified by Kane (1994b). Students stated that if they expressed an opinion on grounds other than safety and the result was a negative response from clinical staff, then they would be cautious about repeating the experience (CalUster 2001).

2nd year student - Interview 7

'I am not the person to speak out if I thought I would get frodden on.'

This statement suggests that Philpin's (1999) finding of negative sanctions being applied in high dependency areas to promote acceptance of established clinical norms may, in some measure also occur in ward areas.

Student conformity to the handling practices of the clinical area is perhaps best highlighted by their responses as to whether they would speak out about bad moving and handling practice. The majority of first year students thought it was a good idea, but difficult to do. The case would have to be extreme, such as a compromise of patient safety. Second year student nurses held similar views, but appeared more likely to express their disquiet. Important modifying factors to the reporting of bad practice were if student confidentiality could not be guaranteed or the member of staff involved was of high status. If a senior member of staff were involved then students felt they lacked sufficient experience to identify bad practice and risked retribution and exclusion from the ward team if they spoke out.

1st year student - Interview 5

'You don't want to make too many waves, you want to blend in'

The reason for the general unwillingness to challenge the accepted practice of the group was the impact of normative influences, the fear of possible rejection by the group (Agyle 1967) and the difficulty of being assertive when in a minority (Smithers & Bircumshaw 1988). However, third year students were adamant they did not submit to pressures of socialisation and conformity and stated they would have no reservations about reporting bad moving and handling practice. This is a qualified finding, as none had felt the need to do so. Such feelings may reflect Sampson (1990)'s finding that, as they are more experienced third year students' feel more able to challenge practice.

6.1 i Influence of equipment

Students generally felt placements were satisfactorily equipped with moving and handling equipment. Some indicated that moving and handling would be easier if a wider variety and increased amount of equipment was available and if basic equipment like beds was better maintained (Love 1997).

Although a lack of or unavailability of equipment was not generally identified as a problem, first year students did state that its unfamiliarity and the necessity to request assistance inhibited its use. First and second year students thought that equipment, (particularly slide sheets), was not used to its maximum as it was too much frouble to fetch, particularly when busy.

2nd year student - Interview 20

'I don't think the sliding sheets have been out of the cupboard_they need to be on the end of the bed, if you have got to start finding them, that tends to be a big reason for why things aren't used as they should be.'

Students felt under utilisation was related to poor staffing levels, time pressures and was a reflection of the handling culture of the ward, as some placements favoured use of equipment more than others. The level of utilisation of equipment, such as hoists, was also linked to limitations within the clinical environment.

6.1 j Influence of the Environment

The foremost environmental consfraint identified by all students was the lack of space within the ward areas. The causes were beds being too close together and the associated clutter created by other fumiture, bed curtains and equipment, a finding supported by McGuire (1995), Hignett and Richardson (1995), Green (1996) and Love (1997). The result was a disincentive to use hoists, as it was difficult to manoeuvre them into position (Hignett and Richardson 1995).

1st year student - Interview 5

'You have not got much space between our beds and a lot of people need hoisting.'

1st year student - Interview 19

'You have to manoeuvre the hoist round a bed and a chair and a locker with curtains

around and getting it undemeath beds with wires is very difficult.'

Away from the patient's bed area the issue of space was less pronounced, the exception being toilets. Here access and egress was a problem, and some were too low, making it difficult for patients to get up from them.

Finally, confrary to the finding of Love (1996) and White (1998), students did not identify deference to patient choice as a reason for not employing hoists. On the confrary patient or relative preferences appeared to play little or no part in influencing patient moving and handling.

6.1k Patient / relative preference

Consideration of the patient's wishes was largely ignored. In the majority of cases patients were asked for their consent, but not thefr preferences and passively accepted the technique adopted by staff

1st year student - Interview 8

'You have always got to ask them if it's ok if you do this, you have always got to get their consent, I mean whether they actually agree with the way you do it.'

All students painted a similar picture of a staff lead handling process. Patients' preferences were not sought and students appeared to interpret the term 'preference' as acceptance or not of the staff's choice. However if a patient stated that a move caused discomfort or pain, some consideration was given to this, but only to make sure patient and staff safety was not compromised.

CHAPTER SEVEN

CONCLUSION

This chapter summarizes the findings in relation to the set outcomes of the study and makes recommendations for fiiture moving and handling fraining and practice.

7.1. Conclusion

Comparing and confrasting the observations and interview statements of student nurses clinical moving and handling practice with the principles taught during their pre-regisfration education indicates that students are more influenced by their clinical practice than their education. Increased levels of handling training and curriculum emphasis on reflection and critical thinking appear to have been ineffective. The reason for this is multi-factorial, but is primarily because of the sfrength of their occupational socialisation as identified by Kneafsey (2000) in her literature review of occupational sociahsation and its impact on nurses' handling practice.

The exploration of the relative influence of educational, environmental, social and work culture influences on student nurses moving and handling skills revealed that whilst moving and handling training provides a foundation for practice, its artificiality, inability to accurately simulate practice and the limited time for students too consolidate leaming creates a theory practice gap which devalues it (Oddy 1993, McGuire 1995). Interview statements supported by observation of practice support the conclusion that the current training has only a minimal influence due to its association with settings and using equipment which fail to effectively mimic clinical

practice (Stubbs 1983, St Vincent & Tellier 1989). Training settings do not reflect the complex handling problems of clinical areas and therefore fail to develop the problem solving ability of students. Further, in clinical practice students experience a theory practice gap whereby manual handling principles stressed during training and upheld by hospital policy are not effectively implemented i.e. handling care plans, with the consequence that effective individual manual handling assessments are not available (Peto 1994). Students leam that handling care plans and the manual handling policy are not valued and are generally ineffective in guiding practice. The result is that they do not have a common guide for their handling and lacking confidence they fall under the major influence on their practice, the discretion of more 'experienced' members of staff Clinical staff are perceived as having more experience than the student (Argyle 1994, Gregory 1996) and generally without assessment and planning decide the handling technique, and students passively acquiesce. The consequences are that students do not effectively call on or use recommended planning procedures or handling techniques and participate in dangerous practices (Swain et al 2003). Whilst this study confirms this finding of Swain et al's findings, its observations noting no dissent in participating in dangerous practices of 1st and 2nd year students questions Swain et al (2003)'s finding that only 17% of students say they would comply with a staff nurse's dangerous technique. The same observations also challenge this study's student statements that they would question ill conceived and dangerous handling as often as they suggest. What both observations and interview data confirm is that students at all stages of the course fail to adopt a systematic handling assessment and appropriate handling principles.

Stiident statements indicate that they encountered a handling norm created in each area by clinical staff employing similar handling techniques. This norm then became the predominant influence on student handling (Ashworth and Morrison 1989). Whilst some students may start off with good intentions regarding correct handling, under the influence of staff dictated procedures and environmental limitations of space and architecture they rapidly adapt to and assimilate the handling practices encountered in clinical practice (Wilson and Startup 1991). This conformity is attributable to a socialisation process facilitated by the student's lack of power (Cahill (1996) and thefr wish to fit in (Gregory 1996), be liked (Gross 1987, Sleutel (2000) and to obtain a good report. Student rationalisation for conformity arises from well-established nursing ideologies. That of putting the patients needs first, particularly safety and thereby justifying risk to one-self by doing what is best for the patient (Hignett and Richardson 1995). Secondly the nursing work ethic of completing tasks as quickly as possible (Melia 1987). This second ideology perpetuates the view that the utilisation of equipment is too-time consuming, particularly when confronted by the clinical realities of heavy workloads, insufficiency of staff and time pressures.

Kane (1994) advances that the assertiveness and confidence of the individual serves as a counter balance to socialisation and conforming. This assumption appears flawed in this study for students on their initial clinical placements, but may have some validity for older, experienced and more senior students who have a greater regard for their own safety. This is in line with Du Toit (1995)'s concept that intrinsic to the socialisation process are the modifying factors of the individuals past experiences and personal

qualities. This study does not support the findings of Swain et al (2003) that age is not a factor and that males conform more than females, but the study is too limited to be categorical on this point and clarification is required in an expanded study.

7.2 Recommendations

The fulfihnent of the outcome to suggest potentially more effective methods of student moving and handling fraining must acknowledge and respond to the fact that clinical moving and handling practice is the greatest influence on student practice. As students have neither the power nor the assertiveness to overcome clinical norms the focus must be on influencing those who set them (Kneafsey 2000).

The directorates used within the Tmsts have responded to the 1992 Moving and Handling Operations Regulations by providing equipment and fraining, but this indicates a limited understanding of the issues. Attention should now be focused on development of an integrated handling sfrategy, which addresses not only issues of fraining and equipment, but also environmental, manpower and cultural factors.

Management commitment to a safe environment as identified under clinical governance D.O.H (1999) should be identifiable by an update of and increased emphasis on adherence to the manual handling policy, with a pledge to make staff more aware of its goals. A revised, mandatory, ward based handling fraining programme is advised, developed with rather than for staff to estabUsh and reinforce a norm of a safe handling and provide competent clinical role models for students.

Ward managers should be responsible not only for arranging staff fraining and assuring updates, but also for auditing of thefr areas to estabUsh and encourage safe patient handling. Management should provide adopt an ergonomic multifactoral approach to patient handling by providing suitable and sufficient equipment and modifying environments and working procedures to encourage good moving and handling practice (Hignett 1994). In service fraining should be ergonomic in focus, clinically based and adopt a problem solving approach based on departmental risk assessments. Unit evaluations and auditing should monitor the impact of these measures. Such audits and subsequent improvements might best achieve their objectives if carried out by the moving and handling link nurses.

Training in the School of Nursing provides a foundation for practice and students should leam basic handling knowledge and skills in a safe environment, but more attention must be given as to how handling fraining might be more clinically focused and integrated to ensure comparability and uniformity of practice between service and school. To this end teachers should liaise with placement areas, to ensure moving and handling fraining keeps in step with clinical developments. Handling fraining should also adopt a more realistic problem solving approach, thus minimizing the effect of the artificial environment created by the classroom and reducing the theory practice gap. Consideration should be given to fransferring some tuition to the 'live' clinical environment to reinforce the principles learnt in the classroom, enable students to leam by reflection and develop assertive skills Green (2002). This might be achieved by the frivolvement of the school's Practice Leaming Teams organising integrated clinical staff

and student handling sessions. This underlines Wilkinson et al's (1998) assertion that students need to have experience of the application of theory within practice in order to consolidate leaming.

Estabhshment of a common practice between the school and the clinical environment would reduce the problem of student nurses being pressured to adopt inappropriate techniques and facilitate a seamless progression of handling practice from student to diploma nurse.

7.3 Limitations

Qualitative research has been criticised for its susceptibility to observer error and bias in the collection and analysis of data and the potential for generaUsation. However this method was thought most appropriate because of the depth of data it produces.

Preconceived assumptions and the subjectivity of the researcher may induce bias (Robson 1993). In this case an example is my knowledge of moving and handling research and the constmction of an interview schedule which arose from and explored themes identified in literature as responsible for influencing moving and handling practice. As these themes were subjectively chosen they could be criticised as an incomplete and unrepresentative list, the result being omission of significant influences. Whilst my knowledge of moving and handling literature could be considered a potential bias, a counter argument is that uncovering the meaning of data requires a knowledge and appreciation of the context in which the phenomena is occurring (Shutz 1994).

With regard to method an unstmctured interview might have produced a richer recall of experience, but because of my relative inexperience in research, this more complex method was rejected.

The collection and analysis of qualitative data is susceptible to subjective observer error and bias. This may arise from the inherent preconceived assumptions and subjectivity of the researcher (Robson 1993). My inexperience required critical reflective monitoring of the data collection methods and careful interpretation and analysis of the data. For this reason efforts were made to minimize observer error and bias. Face validity of the observation instrument and interview schedule was sought from experienced colleagues and both were extensively piloted. Independent verification of the concepts used for data analysis and the generation of themes and categories was subject to peer review. This verification process did not lead to significant variations from the themes and sub-groups determined by the researcher. A selection of the students reviewed the data interpretation (Bumard 1991).

Two pints were noted however during data analysis. First when seeking clarification during an interview inexperience in the skill of probing occasionally resulted fri the interviewee being lead. Second comparative analysis of the observation and interview data highlighted that during the interviews some respondents had given answers which served to put them in the best possible light by suggesting what they thought 'should happen'.

Qualitative studies can be criticised for their potential for generalization to other areas. The conclusions drawn from the study will require vahdation by a larger study involving more than one tmst and the inclusion of a greater proportion of senior students. Such study by a different researcher would determine the reproducibility of the results and validity of this study's findings; it would also test the constmct validity of the observation and interview schedules, as both these instruments were new.

7.4 Suggestions for further research

The sample size could be considered unrepresentative and limits the research to an exploratory study. A further larger study should consider using a sample drawn from a wider variety of clinical areas and other tmsts. A longitudinal case study using a participant observer method would offer personal insight and appreciation of the normative and socialisation factors influencing student-handling practice. This type of study would also clarify if these factors are mitigated by the evolution of student nurses moving and handling skills during the course and clarify the dissonance between this study and that of Swain et al (2003) as to what factors modify compliance.

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A less stmctured interview was another option, but the researcher was unfrained and inexperienced in this technique.

A literature search was used as the basis for identifying factors responsible for influencing moving and handUng and also for tiie interview and observation schedules. These themes were subjectively chosen and could be criticized as an incomplete and

unrepresentative list of the influential concepts.

The time devoted to the observations, particularly those of the third year students could have been extended to obtain a more detailed appreciation of student handling practice. The study is exploratory and could be considered unrepresentative, as only a small convenience purposive sample was used. This makes it difficult to generalise the findings. Further work using a larger sample drawn from a wider variety of clinical areas and using more than one nursing school should be considered. Also as the student nurses' experience and time served on the clinical placements varied, their level of expertise and the degree of socialisation into the ward culture also varied. A longitudinal study of the evolution of student nurses moving and handling practice within the diploma programme, would help clarify how this changes as their level of experience grows.

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Appendices

Note - The appendices relating to permission to undertake; the study, access clinical areas and approach students have been edited to remove all logo's, references to locations and individuals. This has been done to maintain anonymity. The original documents are held by the author and are available for inspection on request.

Appendix G - Letter of permission from the head of the nursing school.

The original letter granting approval to proceed and to access the students was mislaid. The included letter was supplied by the then head of school confirming that the approved process for gaining permission to embark on the study was followed and that this was granted along with permission to access students.

Appendix A

Observation Schedule

Appendix A

OBSERVATION SCHEDULE

DEMOGRAPHIC DETAILS

Area:

Date:

Number and status of staff on duty:

Status of person in charge of ward:

Moving and handling equipment available:

Ward activities during observation period.

St/n DETAILS

Number of days worked since last day off:

Number of patients with whom St/n under observation is working:

Dependencies of these patients:

Legend of Dependencies: 1 - Independent
2 - Assistance 1 carer
3 - Assistance 2 carers
4 - Assistance 2 + carers

DETAILS OF CO-WORKER

Status of co-worker working with observed student nurse:

Age: 20-29, 30-39, 40-49, 50-59

MOVING AND HANDLING OBSERVATION

Observation code:

Shift: M/A Time into shift: Location within ward:
Purpose of move:

Patient details

male/female: age: dependency category:

Nurse working alone: Yes/No

Lead taken by:

Nurse..... Co-worker:

Communication Patient Co-Worker

Nurse

Summary of communication:

_____

_____

_____

Moving/Handling assessment available: Yes/No
Reference to written M&H assessment: Yes/No
Moving/Handling assessment carried out during period of observation: Yes/No

On the spot risk assessment carried out: Yes/ No
Determination of Weight: Yes/No
Deficits: Yes/No

Initiator of Assessment: Nurse Co-worker Neither

Planning:

Task:

Choice of Move: Hoist Sliding Manual handling:

Inclusion of patient: Yes/No

Equipment usage by other staff influenced the handling incident: Yes/No.

Environment Influences

Space: Yes/No
Attachments: Yes/No
Others

Handler Influences

Help: Yes/No
Number of helpers: 1 2 3 4.
Status of helpers: Nurse/ aux /student / physio' / relative / Dr /Occ' therapist.
Assessment of fitness for task: Yes/No

Evaluation of Task observed: Yes/No.

Resume of Handling / Moving event.

Appendix B

Interview Schedule

Appendix B

INTERVIEW SCHEDULE

Date of interview:
Time of interview:

ETHICAL STATEMENTS.

1) Infroduction. Who you are (interviewer).

2) Describe the purpose of the study.

3) Explain why interviewing the interviewee.

4) Confidentiality, consent, tape recording and field notes.

5) Switch on the tape recorder and repeat confidentiality code and ask respondent to assent to the taping of the interview.

6) Rewind the tape and play back to check recording quality and check with the respondent for agreement of the statement.

QUESTIONS RELATED TO STUDY.

Explore background information relating to the Training/Knowledge/Practice of the Student Nurse.

Training

1) * Can you describe for me the moving and handUng fraining you have received to date?
2) * How appropriate do you feel your fraining was for the moving and handling situations you now encounter?

Personal Experiences

3) * How easy is it for you to apply the moving and handling principles you have leamt?

4) *What would you describe as the major influences on your practice of moving and handlfrig? Has it been influenced by a role model/critical incidents?

5) * Has your practice of M&H changed over time?
Identify the reasons for the changes?

6) * Considering your practice of moving and handlfrig how much is it influenced by other staff?
(Different grades of staff)

7) * Is your own practice of moving and handling of patients different from that of other workers?
If it varies try to identify the reasons.

8) * Are there any policies which shape your present moving and handling practice?
References to directorate policies.
M&H Initiatives.

9) * In your opinion are there any difficulties which impede safe moving and handling practice on this ward?

10) * Have you encountered any fi:usfrations with regard to moving and handling?

11) * When handling a patient what influences the type of move used?
Is a systematic approach used?
What are the influences i.e patient/relatives/staff?

12) * What part does the patients own wishes play?

13) * How much priority do staff put on moving and handling safety? as a priority issue?

14) * In your opinion how much does the quickness and ease of a move influence its choice?

15) * If you experience a difference of opinion over load handling, how much does the other member of staff s opinion influence your practice?

Custom and Practice (ward).

16) * How would you summarize the staff's attitude to moving and handling on this ward?

17) * How much of an influence do you feel management have on nurses moving and handling practice on the unit?

18) * In your opinion what do you feel are the most significant factors which influence moving and handling on this ward?

(Time/numbers of staff skill mix/personalities/workload/fatigue/stress).
ward layout/furniture/building (space limitations).

19) * In your opinion does the ward have sufficient and appropriate moving and handling equipment
* Do people know how to use it properly.

20) * How useful is the moving and handling equipment?
Which piece of equipment gets the most use?

21) * Do you feel risk assessments and moving and handling care plans play a part in the moving and handling of patients?

22) * Does the discussion of patients moving and handling problems during handover influence practice?

23) * In your opinion which members of staff most influence the moving and handling carried out on this ward?

24) * How valuable is the evaluation of moving and handling on the ward?
reflective practice, audit, etc.

Group relationships.

25) * Do you feel you fit in well in this ward?
Do you feel your opinion is respected?

26) *What is the most important influence on your practice during a placement?

27) * What are your feelings about students reporting bad moving and handling practice?

Physical influences.

28) * Have you at any time suffered from a back injury and if so how has this influenced your approach to moving and handling.

29) * How influential has your knowledge of colleagues who have suffered back injuries been on your own approach to moving and handling?

30) * How significant is the possibility of suffering an injury on your moving and handling practice?

DEMOGRAPHIC DETAILS.
Name:
Age:
Gender:
Intake code:
Observer influence
*Did you feel that the presence of an observer altered the normal moving and handling practice?

Appendix C

Moving and Handling Equipment Inventory

Appendix C

Ward Handling Equipment

Ward	Equipment	Notes
A	1- Standing hoist, 1- Bathing Hoist, 6- SUding sheets (large) 2- Sliding sheets (small)	Located in annex off the main patient area.
B	2- General purpose hoists 2- Bathing hoists 1- Standing hoist 3- Patient mover's (patient sitting) 1- Tuming aid (patient standing) 1- Pat slide (lateral transfer aid) 1- Sliding sheet (extra large) 2- Sliding sheets (large) 1- Sliding sheet (medium) 1- SUding sheet (small)	
C	1- Bathing Hoist 2- General purpose hoists 1- Standing hoist 1 - Raised toilet seat 3- Sliding sheets (small) 1- Sliding sheet (large)	One General purpose hoist had no sling and was not in use. Kept in bags at end of patient bay.
D	3- General purpose hoists 1- Standing hoist 1 - Tuming aid (patient standing) 1- Patient mover (patient sitting) 3- Sliding sUeets (large) 2- Sliding sheets (small)	Area has notices requesting staff to check the safety of equipment and report defects.
E	1- Bathhoist 1- Standing hoist 1- General purpose hoist 1 - Pat slide (lateral transfer aid) 6- SUding sheets (large)	
F	1- General purpose host 1 - Bathing hoist 1- Standing hoist 6- Sliding sheets (large)	Standing hoist located in a store-room out of use.

G	1- Bathing hoist	
	1- Standing hoist	
	1- General purpose hoist	
	1- Pat slide (Lateral transfer aid)	
	4- Sliding sheets (large)	
H	0- Hoists	
	1 - Pat slide (lateral transfer aid)	
	1- Tuming sheet	
	2- Slide sheets (small)	Kept in a draw in clinic room.
	1- Handling belt	
	3- Handling slings (plastic)	Obsolete equipment.
I	1- General purpose hoist	
	1- Bathing hoist	
	1- Standing hoist	
	2- Tuming aids (patient standing)	
	1- Shower table	
	1- Pat slide (lateral transfer aid)	
	1 - Patient mover (patient sitting)	
	5- Sliding sheets (large)	
	5- Sliding sheets (small)	
	1- Bath hoist	Not in use
	1- General purpose hoist	Not in use

Appendix D

Letter Requesting Permission From Student

Appendix D

Faculty of Medicine and Health Sciences
School of Nursing Undergraduate Division
Medical School
9 May 2001

Dear

I am a Nurse tutor at ********* centre and as part of my Masters in Research Degree I am researching the moving and handling practice of student nurses. As a preliminary exercise I need to pilot the observation and interview schedules to be used in my research and would be grateful if you would consider volunteering to help me.

The pilot involves my observation of you undertaking a number of moving and handling events and one tape-recorded interview. To minimise inconvenience to yourself the interview will be arranged to coincide with a duty period or at a time convenient to yourself All data is confidential and will be used purely to determine the reliability and validity of the observation and interview schedules.

I hope you will be able to assist me and will be happy to respond to any questions or queries you may have. My telephone number is School of Nursing********. I will contact you within the next few days for your decision.

Thank you for your kind attention to this request.

Kindest regards,

Mike Abbott (Nurse Teacher)

Appendix D

Faculty of Medicine and Health Sciences
School of Nursing

23 October 2001

Dear

I am a Nurse tutor at ******** centre and as part of my Masters in Research Degree I am researching the influences on the moving and handling practice of student nurses and I would be grateful if you would consider volunteering to be a participant in the project

The methodology will involve my observation of you carrying out a number of moving and handling events, supplemented by a recorded interview with yourself The interview will be approximately 45minutes and carried out at a suitable opportunity during your clinical placement. May I emphasise that the anonymity of both you and the ward area, will be respected at all times and the data obtained will be used solely for the purpose of my research. A transcript of the interview will be made available to you and if you so wish, following completion of the research, the recorded tape will be made available to you to erase.

I hope you will be able to assist me and will be happy to respond to any questions or queries you may have. If you wish to contact me my telephone number at the School of Nursing is **********. I will contact you within the next few days for your decision.

In order to attain a sufficient number of respondents I am sending this letter to a few more students than I need. Subject to their replies I may achieve the required number of volunteers before 1 contact you. If you do not hear firom me, it will merely be because a sufficient number of your colleagues have already generously volunteered. Should this occur may I thank you for your co-operation in considering my request and wish you every success m your course.

Thank you for your kind attention.

Kindest regards,

Mike Abbott (Health Lecturer)

Appendix £

Letter Requesting Permission From Directorate Manager

Appendix E

Mr M Abbott,
Health Lecturer,
Faculty of Medicine & Health Sciences,
School of Nursing,
Undergraduate Division.
Medical School,

16 October 2000

Dear Mr. Abbott,

Thank you for your letters dated 18 September and 9 October. Subject to the following, I confirm that, as part of your Masters in Research Degree, I will make the necessary arrangements to allow you access to medical wards within **********.

The results are only used for the purpose of the study

The Trust remains anonymous

Approval is sought flrom Consultant Medical Staff

Yours sincerely,

****

MRS **********
ACTING DIRECTOR OF NURSING SERVICES, MEDICAL SERVICES UNIT

Appendix E

Nurse Manager's Secretary'

Your Ref:

27 October 2000

Mr M Abbott
Health Lecturer
School of Nursing Undergraduate Division A Floor
Medical School

Dear Mr Abbott

I have discussed your request to undertake research at ********** with the Ward Managers, and in principle they are in full agreement. You will, of course, need to contact the Consultants directly, the names and telephone numbers of which are given below: -

****

Direct contact with the Ward Managers would be appreciated, and they are normally available Monday to Friday between 9 am -5 pm.

Yours sincerely

Nurse Manager

Appendix F

Letter Requesting Permission From Lead Consultant

Consultant Physicians
Dr ******* **********
Dr ******* **********

21 December 2000

Mr M Abbott RGN Dip N (Lond) Cert Trop Med RNT
Faculty of Medicine and Health Sciences
School of Nursing
The University of **********
Medical School
****

Dear Mr Abbott

Dr ****** raised the issue of your research at the Medical Staffing Committee meeting of the Community Hospitals.

We would be very happy for you to carry out your project on the wards at *********Hospital and ********** Community Hospital providing you have the necessary ethical approval.

I will circulate a copy of this letter and your original letter to Dr ***** and to the Ward Managers on the medical wards at the Community Hospitals, so that they know about you. We wish you all the best in your project.

Yours sincerely

****
****

Dr ********** Chairman
Medical Staff Committee

Copies to:

Dr ********* Consultant Physician

Ward Managers at: **********

Appendix F

10 January 2001

Mr M Abbott
Health Lecturer
Faculty of Medicine and Health Sciences
School of Nursing

Dear Mr Abbott

1 am pleased to inform you that, having circulated my consultant colleagues, I have received no objections whatsoever. We can therefore assume that they are all happy for you to proceed with your research as outlined in my previous correspondence to them. As I remember you already have ethical committee approval. Might I offer you the best of luck with your proposed research.

Best wishes

Yours sincerely
****

Copies to
****
****

Appendix G

Letter Requesting Permission From Head of Nursing School

Faculty of Medicine and Health Sciences
School of Nursing

TO WHOM IT MAY CONCERN

Re: Mike Abbott - permission for access

This letter is to confirm that in March 2001, Mike Abbott was given written permission by the ********** School of Nursing to approach Diploma students at the ********* Centre of the School. Mr Abbott was seeking students' permission to participate in his research 'Investigating influences on nurses moving and handling practices'. The letter of permission was written following Mr Abbott's submission of his proposal to the School Executive. The proposal included an outline of the ethical issues of the project. The proposal was seen, discussed and approved by the School Executive.

Please accept this letter as confirmation that all procedures were properly followed, in the absence of the original letter of permission.

Professor of Nursing Studies
(Head of School of Nursing at time of proposal submission)

Head of School: Professor *****

Appendix H

Patient Information Sheet

Appendix H

PATIENT INFORMATION SHEET

Dear Sir/Madam

My name is Mike Abbott and I am a Health Lecturer at XXXXXXXXXXX School of Nursing. I am looking at the way nurses help you to move as they look after you. To do this I would be grateful if you would allow me to watch the way nurses help you to move, for example when the nurses help you get out of bed, move you into a chair, or up the bed.

The only information I will need to write down about you, is whether you are male or female and your age. This is so that I can compare my results with other studies. I will not need to write down your name or any other information about you.

I will ask your permission before I start to watch the nurses and you can decide not to take part at any time.

Thank you for taking the time to read this and hope you will be able to help me. If you have any questions I will be happy to come and talk to you.

Mike Abbott. (Health Lecturer)

Tel XXXXXX Extension XXXXX

Appendix I

Letter Requesting Permission From The Ethics Committee

Appendix I

Faculty ox Medicme and Health Sciences
School of Nursing

17 January 2001

Dear Mr Abbott

ENQUIRY REGARDING RESEARCH ETHICS APPROVAL

Thank you for your enquiry regarding research ethics approval for your study.

Department of Health guidelines suggest that an LREC be consulted about research protocols that include, for instance, recruitment of NHS patients or access to the records of NHS patients. As your study does not involve patients, or require access to patient records I suggest that LREC approval is not required.

Also, please find enclosed, the criteria for the format of the Patient Information Leaflet which you requested.

Yours sincerely

Dr *** **** Chairman

********** Local Research Ethics Committee