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Irish Emergency Nurses’ Attitudes towards Role Expansion in, and Barriers to, Nurse Prescribing

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Irish Emergency Nurses’ Attitudes towards Role Expansion in, and Barriers to, Nurse Prescribing

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Submitted in part fulfilment of the degree of Master in Science in Nursing, Faculty of Nursing and Midwifery, Royal College of Surgeons in Ireland, Dublin.

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Abstract

Aim This study set out to explore Irish emergency nurses’ attitudes towards nurse prescribing and also to elicit their attitudes towards potential barriers to nurse prescribing.

Method A quantitative descriptive survey was used to answer the research question, a questionnaire was administered to a systematic random sample of Emergency Department nurses. This consisted of a 31 item Likert-type attitudinal scale, previously developed for a similar study.

Background Traditionally, the prescription of medications fell strictly within the realm of medicine. However, as nursing practice evolves, roles are beginning to change. Nurse prescribing is an expansion of the traditional nursing role, expanding the primary functions of nurses’ and midwives. When nurse prescribing commenced in Ireland it was initially a specialist nurse who undertook training, this is now beginning to change with staff nurses’ actively participating in prescribing training. The Emergency Department is the fastest growing area in nurse prescribing. Therefore, the writer feels that it is timely to specifically ascertain emergency nurses’ views on nurse prescribing. Identifying emergency nurses’ attitudes towards nurse prescribing, as well as the perceived barriers to role expansion, will inform practice and enable service planning to further develop this role within the Emergency Department.

Findings The findings indicate that overall emergency nurses’ attitudes were positive towards nurse prescribing as a future role expansion. However, in order to successfully implement nurse prescribing the barriers identified need to be addressed in practice.

Conclusion There is overall support from emergency nurses’ towards nurse prescribing as a future role expansion. Nevertheless, barriers exist in practice and methods to overcome these must be developed. Greater awareness and education is essential to securing support for this role development.
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1.0 Chapter 1 Introduction and Significance of the Study

1.1 Introduction

Traditionally, prescription of medications fell strictly within the realm of medicine. However, as nursing practice evolves, roles are beginning to change. Nurse prescribing is an expansion of the traditional nursing role; it expands the primary functions of nurses’ and midwives (Creedon 2010). Nurse prescribing is well established in some countries and commenced in Ireland in 2007 (Adams et al. 2010). Although nurse prescribing is relatively new to this country, it is rapidly expanding. Due to long waiting times in Emergency Departments (ED), staff nurses’ working in this clinical environment are now beginning to be trained as nurse prescribers (Drennan et al. 2009). The rationale for this role expansion is to try and improve patient care, by reducing the length of time patients have to wait to receive medication, such as analgesia for example. In order to achieve the goal of safe, patient centred care within the ED, it is important to establish whether nurses’ working in this setting are ready to take up the role of nurse prescribers. These nurses’ attitudes towards role expansion in, and barriers to, nurse prescribing will ultimately influence the active participation in this aspect of clinical care. Thus, they are of value to explore in further detail.

This chapter will outline the background and significance of the study, giving an insight into nurse prescribing from both an Irish and international perspective. The writer will provide justification of the current research setting being limited to the ED; in addition, the possible benefits of the study will be discussed. The research question and aims will be clearly identified followed by a definition of key terms; the writer will then provide a conclusion of the chapter.
1.2 Background of the study

Nursing roles have been rapidly evolving in Ireland since the publication of the Commission on Nursing (Government of Ireland 1998). This document first mentioned that nurse prescribing should be addressed as a matter of urgency. An Bord Altranais developed the Scope of Practice for nurses’ to provide guidance to nurses’ on role expansion (An Bord Altranais 2000a). In response to this, immediate transformation of the nursing profession began (National Council for the Professional Development of Nursing & Midwifery 2004). Clinical career pathways were constructed allowing nurses with extensive experience and expertise to remain in clinical practice, with the development of new nursing roles including Clinical Nurse Specialist and Advanced Nurse Practitioner roles (Government of Ireland 1998). These nurses’ soon found that their lack of prescriptive authority was restricting their ability to provide holistic patient care (Ryan & Walsh 2004). This coupled with the driving force of the Report of the National Task Force on Medical Staffing (Department of Health & Children 2003), put nurse prescribing firmly on the nursing agenda.

A major review of the need for nurse and midwife prescribing in Ireland ensued, which recommended that nurses’ should be enabled to prescribe medications (An Bord Altranais & National Council for Professional Development of Nursing and Midwifery 2005). This resulted in legislation being amended to allow nurses’ prescriptive authority in 2007 (Irish Medicines Board 2006). With the change in law, An Bord Altranais (2007a) developed a separate register, to allow each nurse prescriber to register as a Registered Nurse Prescriber (RNP). The nurse prescribing initiative was developed in collaboration with An Bord Altranais, the Health Service Executive and the Department of Health and Children and a six month education programme was initiated to allow nurses’ to train to become a RNP (Drennan et al. 2009).
Since the beginning of the nurse prescribers training programme 631 nurses’ have completed the nurse prescribing programme, 277 of these are currently prescribing medications and of these 64 are based in the ED (Office of the Nursing Services Director & Health Service Executive 2010, Office of the Nursing Services Director 2011). It is clear to see that the ED is the front runner for nurse prescribing. However, the majority of these are specialist nurses’, just 8.51% of all RNP’s surveyed were at staff nurse grade (Drennan et al. 2009). Waiting times to see a doctor in the writers ED can occasionally stretch to seventeen hours before a patient will have their first contact with a doctor (Health Service Executive 2010a). Thus, the ED is a key area to develop nurse prescribing, as it has been shown to reduce the length of time patients have to wait for medication such as, analgesia (Stenner & Courtenay 2008). Oligoanalgesia, underuse of analgesics in the face of valid indications, is a huge issue for patients within the ED and as such this has a profound effect on the patient’s experience (Singer et al. 2008, Vlahaki & Milne 2008). This problem contributed to the development of the writer’s research proposal. Furthermore, when nurse prescribing commenced in Ireland it was initially a specialist nurse who undertook training, this is now beginning to change with staff nurses’ actively participating in prescribing training. Therefore, the writer feels that it is timely to ascertain emergency nurses’ views on nurse prescribing. Identifying emergency nurses’ attitudes towards nurse prescribing, as well as the perceived barriers to role expansion, will inform practice and enable service planning to further develop this role within the ED.

Lack of knowledge and negative attitudes amongst healthcare professionals can directly inhibit the success of implementing new nursing roles (Furlong & Smith 2005). One of the main barriers to nurse prescribing is lack of support from colleagues (Otway 2001, Lockwood & Fealy 2008). When any new change is occurring in practice, it is
important to be aware of barriers that may inhibit the planned change (Curtis & White 2002). Indeed, it is only by identifying the barriers that strategies can be planned to overcome these and assist staff to develop positive attitudes. If negative attitudes and barriers can be addressed in practice, it may lead to a more positive working environment, which in turn will benefit patients.

From an international perspective, nurse prescribing is well established in some countries (Adams et al. 2010). Nurse prescribing is based on different models and each country has different requirements for entry into the education programme. Advanced practice nurses’ in the United States (US) have had prescriptive authority since 1969 (Plonczynski et al. 2003). In the United Kingdom (UK), nurses’ began prescribing in 1994, this was initially limited to community nurses’ but it has expanded rapidly since then and since 2006 trained nurses’ from all disciplines can prescribe medications and have full access to the British National Formulary (Goswell & Siefers 2009). The UK government have stated that over half of nurses’ will be able to prescribe by 2004 (Latter & Courtenay 2004). Likewise, in Sweden, nurse prescribing was introduced in 1994 and was aimed at district nurses’ however; it has not expanded past this specialist group of nurses’. New Zealand’s development of nurse prescribing is established since 2001, but has been cautious focussing only on nurses’ with advanced skills (Lim et al. 2007). It is based on this background that the writer developed the research question.

1.3 Research Question

The research question for the current study is: “What are Irish emergency nurses’ attitudes towards role expansion in, and barriers to, nurse prescribing?”

The aims and objectives of the study are:
1. To ascertain emergency nurses’ attitudes towards role expansion into nurse prescribing.

2. To determine emergency nurses’ attitudes towards the barriers to nurse prescribing, as a future role expansion.

3. To establish any significant differences between nurses’ regarding their attitudes towards role expansion into nurse prescribing.

4. To determine any significant differences between nurses’ regarding their attitudes towards potential barriers to nurse prescribing, as a future role expansion.

In order to answer the research question the writer will conduct a quantitative descriptive survey using a random systematic sample of emergency nurses’. The data collection tool will be a previously validated 31 item self-administered questionnaire, developed by Lockwood (2005). To ensure the research is carried out within the agreed timescale the writer devised a research timescale (see appendix 1) to provide guidance. A budget was also set out for the research study and can be seen in appendix 2.

1.4 Key Concepts and Abbreviations

In order to facilitate greater understanding of the current study the following key concepts will be defined.

**Emergency Department**

The emergency department (ED) is referred to in the literature as the emergency room, accident and emergency, emergency ward or casualty. For the purpose of the current study the term ED will be used. This is the area of the hospital where patient’s present for initial treatment and assessment of their condition.
Attitudes

This refers to the participant’s positive, neutral or negative feelings towards the chosen topic.

Oligoanalgesia

This term refers to the failure or inadequate supply of analgesia to treat pain.

Role Expansion

Role expansion and extension are terms used interchangeably in the literature, to ensure clarity for the current study the writer looks to the Irish Nursing Board to define role expansion:

“Expansion encompasses becoming more competent, reflective practitioners, developing expertise and skills to meet patients’/clients’ needs in a holistic manner. Expansion may refer to a change in the overall scope of practice of the professions to include areas of practice that have not hitherto been within the remit of nurses and midwives.” (An Bord Altranais 2000a: 1).

Scope of Practice

The scope of nursing practice in Ireland is ‘the range of roles, functions, responsibilities and activities which a registered nurse is educated, competent and has authority to perform’ (An Bord Altranais 2000a: 3).

UK

United Kingdom

US

United States of America
1.5 Conclusion

There has been no study to date identified on emergency nurses’ attitudes towards nurse prescribing as a future role expansion. Therefore, the writer would argue that the current study will add to the body of knowledge. By identifying emergency nurses’ attitudes and the perceived barriers to role expansion this information can be used to inform service planning and practice, in an evolving area.

The next chapter will address what is known about the topic of nurse prescribing and provide a review of the current literature. The gaps in the research to date will be identified and a rationale will be provided for the study. Chapter 3 will analyse the research paradigms and justify the chosen methodology for the study. The results will be presented in chapter 4 and chapter 5 will discuss the findings. Finally, the conclusion and recommendations will be presented in chapter 6.
2.0 Chapter 2 Literature Review

2.1 Introduction

The following chapter is an account of the available literature on nurse prescribing. It will begin by outlining the search strategy used to obtain the literature in this review. The literature review will present the history of nurse prescribing nationally and internationally giving a brief outline of the different models for prescribing. Nurse prescribing is an expansion of the traditional nursing role. Therefore, an overview of nurse prescribing and role expansion will be presented. An analysis of the education requirements will follow and the implications of this for practice. It will provide analysis of the studies to date and provide discussion of the methodological issues before drawing conclusions.

2.2 Search Strategy

In order to identify relevant publications the literature search was conducted using CINAHL, Pubmed and the Cochrane Database of Systematic Reviews. The key word search utilised the following terms: nurs*, accident and emergency, emergency department, casualty, nurs* role, nurs* attitude, nurse prescrib* and prescriptive authority. These search terms were also conducted in the Nurse Prescribing journal and manual searches were conducted in the reference lists of retrieved documents. Search terms were limited to publication dates ranging from 2000-2011 and to articles written in or later translated into English. A total 142 articles were retrieved and these were analysed for suitability. Through analysis of the literature in relation to nurse prescribing, the writer selected 46 research articles to include in the review. Data was
extracted from the literature using a literature grid, a sample of the grid used by the writer to extract data has been provided (see appendix 3).

2.3 The History of Nurse Prescribing

Nurse prescribing was implemented in Ireland in 2007. This stemmed from the publication of the Commission on Nursing (Government of Ireland 1998), which stated that the prescription of medications required review, it conceded that nurses’ may need to prescribe medications as part of their practice. The Irish Nursing Board responded to this and developed the Scope of Practice for nurses’, to provide professional guidance to nurses’ on role expansion (An Bord Altranais 2000a). Transformation of the nursing profession began and new career pathways were developed, which allowed nurses’ to remain in clinical practice and expand their role (Government of Ireland 1998). New roles emerged including Clinical Nurse Specialist and Advanced Nurse Practitioner posts. These nurses’ became specialists in their field and soon found that their lack of prescriptive authority was restricting their ability to provide holistic patient care (Ryan & Walsh 2004). This coupled with the Report of the National Task Force on Medical Staffing (Department of Health & Children 2003), which aimed to reduce doctors working hours, put nurse prescribing firmly on the agenda.

Following on from these reports, a major review of the need for nurse and midwife prescribing in Ireland ensued, recommending that nurses’ and midwives should be enabled to prescribe medications (An Bord Altranais & National Council for the Professional Development of Nursing and Midwifery 2005). Legislation was amended allowing nurses’ prescriptive authority in 2007 (Irish Medicines Board 2006). The nurse prescribing initiative was developed in collaboration with An Bord Altranais, the Health
Service Executive and the Department of Health and Children (Drennan et al. 2009). A six month education programme was developed and is delivered in two third-level institutes, the Royal College of Surgeons in Ireland and University College Cork. This is set to expand in 2011 with five new third-level institutes commencing nurse prescribing training (Office of the Nursing Services Director & Health Service Executive 2010). Successful completion of this course allows each nurse prescriber to register as a RNP, on a separate register developed by the Irish Nursing Board (An Bord Altranais 2007a).

Initially, when nurse prescribing commenced in Ireland, it was specialist nurses’ whom undertook training with just 8.5% of nurses’ surveyed at staff nurse grade (Drennan et al. 2009). These nurses’ were highly qualified, with 98% of the sample educated to a minimum of higher diploma (Drennan et al. 2009). They were also very experienced nurses’ with an average of 19 years experience post qualification (Drennan et al. 2009). A similar pattern can be seen in the UK when nurse prescribing commenced with highly qualified and experienced nurses’ undertaking the education programme first (While & Biggs 2004, Courtenay et al. 2007, Carey et al. 2009). As the education programme progresses in Ireland the number of staff nurses’ entering the course is rapidly increasing with 25% of the current RNP’s being at staff nurse level (Office of the Nursing Services Director & Health Service Executive 2010).

Ireland’s system of education has been guided by international developments in nurse and midwife prescribing. Nurse prescribing first developed in the US and is aimed at Advanced Practice Nurses’; these nurses’ are educated to Master’s level and are specialists in their area of practice. The development of prescribing has been complex
due to different regulations in each state and resistance from the medical and pharmacy professions (Plonczynski et al. 2003). Currently there are two systems in place, nurse independent prescribing and prescribing in collaboration with a physician (Plonczynski et al. 2003).

The UK and Sweden followed suit in 1994 but the nurse prescribing initiative has been an incremental process since then. It was first aimed at community nurses’ who had access to a limited formulary. It has expanded rapidly in the UK since 2006 and now trained nurses’ from all disciplines can prescribe medicines and have full access to the British National Formulary (Goswell & Siefers 2009). Two models exist in the UK and nurses’ can prescribe independently or in collaboration with a physician, the latter being referred to in the literature, as supplementary nurse prescribing (Berry et al. 2006). Contrariwise progress in Sweden has been cautious and slow to develop since 1994 due to severe resistance from the medical profession. It is aimed at District Nurses’ working in the community who independently prescribe from a limited formulary (Wilhelmsson & Foldevi 2003).

New Zealand commenced nurse prescribing in 2005; it is tightly controlled and aimed at Nurse Practitioners educated to Master’s level. They have selected the independent model of nurse prescribing (Lim et al. 2007). Likewise, in Australia, nurse prescribing is linked to the Nurse Practitioners role and they require education to Masters level (McCann & Baker 2002).
Although models differ from country to country there are two main models of nurse prescribing, independent prescribing or prescribing in collaboration with a physician. Independent nurse prescribers can assess, diagnose and prescribe independently of a physician (Davis & Drennan 2007). Prescribing in collaboration with a physician can have two dimensions to it. Prescribing can occur by using patient group directives, this requires doctor’s and nurse’s to develop a protocol for certain groups of patient’s and nurse’s can then prescribe preapproved medications for the patient group. The use of these patient group directives, do not require specialist prescribing education (Jones 2008). The other form of prescribing in collaboration with a physician requires the nurse to be trained as a RNP. The physician conducts an initial assessment and diagnosis of the patient’s condition. A clinical management plan is then drawn up between the physician, the RNP and the patient. This plan outlines the medications the RNP can prescribe for the patient therefore; this is suited to patients with chronic long term conditions. In Ireland nurses’ prescribe independently for patients but physicians have input into the development of this practice.

Ireland has developed independent nurse prescribing. In order to qualify as a RNP a nurse must complete a six month education programme. This consists of 28 days of theoretical learning and 12 days of clinical supervision (An Bord Altranais 2007b). On completion of this course the nurse and medical mentor develop a collaborative practice agreement, outlining the RNP’s scope of practice and list the medications the RNP can prescribe. This has to be submitted to the Drugs and Therapeutics committee of the employing organisation for approval. Once the collaborative practice agreement is completed, it is submitted to the Irish Nursing Board for final approval (An Bord
Altranais 2007c). Becoming a RNP is an expansion of the traditional nursing role and the writer will develop this theme in the next section.

2.4 Role Expansion

The traditional nursing role has been evolving in response to political and professional issues. The political drivers for change include the reduction in doctors working hours and cost cutting measures aimed to develop more efficient use of staff and resources (Department of Health & Children 2003). Nurse education has moved from a basic certificate course to a degree programme and new roles have developed. Nurse prescribing is an expansion of the traditional nursing role and debate exists within the literature as to whether nurses’ should broaden their scope of practice. Some argue that by expanding the nursing role the essence of nursing is lost and this can lead to confusion and resistance from other healthcare professionals (Harrison 2003, Wells et al. 2009, Stenner et al. 2010). Conversely, other literature states expansion into nurse prescribing is finally allowing nurses’ to accept accountability for a role they were already doing informally (Bradley et al. 2005, Bradley & Nolan 2007). The decision to expand the nursing role should be individual to each nurse and midwife and should be guided by the Scope of Practice framework (An Bord Altranais 2000a). The decision to expand practice should be driven by a desire to improve patient care and become a more holistic practitioner (An Bord Altranais 2010).

Role expansion into nurse prescribing has had a direct influence on the role of nursing and the majority of nurses’ have welcomed this development, as it is seen as recognition of a role they have been carrying out informally for years (While & Biggs 2004, Ryan-
Woolley et al. 2008, Stenner et al. 2010). This recognition has been shown to increase nurses’ credibility with other healthcare professionals (Bradley & Nolan 2007, Stenner & Courtenay 2008). However, this only happens where good communication processes and understanding of the nurse prescribing role exist. Indeed, it has also been noted, that a lack of understanding of the role, can act as a barrier (Carey et al. 2007). Reported benefits to the nursing role include increased autonomy, the ability to provide patient centred care and enhanced job satisfaction (Lewis-Evans & Jester 2004, Pontin & Jones 2007). Nurse prescribing has allowed nurses’ to work more efficiently saving time and their new role has enabled them to educate patients, increasing patient confidence (Nolan et al. 2001). While patient’s confidence may be increasing, there are reports in the literature that nurses’ lack confidence in diagnostic skills and knowledge (Sodha et al. 2002, Larsen 2004). However, other studies report high levels of knowledge and confidence in nurse prescribers (Courtenay et al. 2007, Courtenay et al. 2009). This difference in opinion may be due to confidence and knowledge increasing as nurses’ adapt to their new role in an ever changing healthcare system.

Lack of knowledge and negative attitudes amongst healthcare professionals can directly inhibit the success of implementing new nursing roles (Furlong & Smith 2005). Attitudes have been found to influence the behaviour of individuals (Ajzen 2005). Therefore, when any new change is occurring in practice it is vital to be aware of staff attitudes, so barriers that may inhibit the planned change can be identified (Sullivan & Decker 2005). It is only by identifying the barriers that strategies can be planned to overcome these and assist staff to develop positive attitudes. One of the main barriers found in the literature is lack of support from colleagues (Otway 2001, Lockwood &
Fealy 2008). Therefore, if negative attitudes and barriers can be addressed in practice, it will lead to a more positive working environment, which in turn will benefit patients.

Another new aspect to the RNP role is their interaction with pharmaceutical sales representatives. There appears to be a dearth of research in this area and only one study was identified in the US (Clauson et al. 2009). Nurses’ in the study of Clauson et al. (2009) perceived their interaction with pharmaceutical representatives as mainly positive, due to gaining additional knowledge about specific medications. However, there were also negative aspects reported, with 50% of the sample expressing concern that the representatives were not considerate of their time. Another startling finding was that 35.9% of RNP’s were offered incentives to promote specific drugs. The findings of this study must be viewed with caution, as a non random convenience sample was used. This is the weakest form of sampling as it does not allow biases to be controlled and the findings cannot be generalised to the target population (Burns & Grove 2007). The study was also Internet based and was reliant on participants logging onto a specific site to discover the study was being conducted thus, limiting the participants. It may be argued that the RNP should strive to maintain professional relationships with pharmaceutical representatives and ensure they are productive while maintaining ethical standards of practice (Simmonds et al. 2007, Adams 2011).

2.5 Nurse Prescribing Education

The UK government aimed to train all nurses’ in prescribing with half of all nurses’ prescribing by 2004 (Department of Health 2000). However, this has not been the case with 49,428 of 676,547 (7.3%) nurses’ registered to prescribe in 2008 (Nursing &
Midwifery Council 2008). Nurse prescribing is rapidly expanding in Ireland and the expansion of more third-level institutes for training indicates that it is set to increase. With the expansion of prescribing training sites more nurses’ are set to qualify as RNP’s. However, 15% of nurses’ who have undergone training in Ireland are currently not prescribing for a variety of reasons (Office of the Nursing Services Director & Health Services Executive 2010). Those surveyed by Drennan et al. (2009) cited lack of support from nursing management and doctors, lack of remuneration for the extended role and a change of work area, as reasons for not prescribing. The most recent figures show that 631 nurses have been funded to train as a RNP however, 354 of these nurses are not registered to prescribe, representing 56% of the total population (Office of the Nursing Services Director 2011). It could be argued that this discrepancy in figures may be due to delays in the registration process but is difficult to provide justification of this large discrepancy. These figures are concerning as nurse prescribing is still in its infancy in Ireland. However, a similar picture has developed in the UK with 44% of nurses’ surveyed by Larsen (2004) not using their qualification. This was a small scale study that was conducted prior to the formulary being fully opened up to nurses’ in 2006 and the restrictive formulary was identified as one of the main barriers in this study. Other barriers to commencing prescribing were found to be a paucity of pharmacology knowledge (Otway 2002, While & Biggs 2004), the time and cost of training, workload cover (Ryan-Woolley et al. 2008) and incorrect selection of nurses’ by their managers to undertake the course (Larsen 2004, Bradley et al. 2005, Bradley et al. 2006). This is an area of concern that requires urgent research attention. Literature is emerging that RNP’s are providing a cost effective service but this will not continue if nurses’ are training and not using their qualification (Venning et al. 2000). Nurses’ and the multidisciplinary team must be fully informed of the commitment required for successful implementation, prior to undertaking training.
Currently in Ireland a nurse must be 3 years qualified and have one years experience in the clinical area they intend to prescribe in prior to entering the prescribing programme (An Bord Altranais 2007b). Internationally the US, Australia, Sweden and New Zealand have targeted specialist nurses’ to undertake the prescribing programme (Drennan et al. 2009). The UK is the only other country that has opened up prescribing to staff nurses’. However, the UK Department of Health (2006) has recommended that a thorough assessment of the individual’s ability to undertake the course must be carried out prior to commencing the education programme. As medicine progresses, patient management is becoming more complex and nurses’ require specialist skills to prescribe successfully in practice (Stenner et al. 2010). In order to qualify as an RNP in Ireland the nurse must meet a number of competencies throughout the education programme, one of these being able to assess, diagnose and treat a patient independently (An Bord Altranais 2007b). While assessment skills are taught as part of the programme and the 12 days clinical supervision in the nurses’ work place aimed at consolidating this learning. It is difficult to ascertain at this stage if this will be sufficient to teach nurses’ with such limited experience these skills. This is an area that warrants further investigation in Ireland, to determine if the entry criteria necessitate review.

The health care crisis is set to worsen, with the country in recession and health care being targeted for more cuts in funding (McGreevy 2010). Studies have shown the benefits of nurse prescribing but it is difficult to ascertain its future success with the current clinical environment of staff shortages and lengthening patient waiting times (Latter & Courtenay 2004). Waiting times in ED’s are getting longer and can occasionally stretch to seventeen hours before a patient will have their first contact with a doctor (Health Service Executive 2010a). Oligoanalgesia, underuse of analgesics in

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the face of valid indications, is a huge issue for patients within the ED and as such this has a profound effect on the patient’s experience (Singer et al. 2008, Vlahaki & Milne 2008). Thus, the ED is a key area to develop nurse prescribing, as it has been shown to reduce the length of time patients have to wait for medication such as, analgesia (Stenner & Courtenay 2008). It is hoped by introducing nurse prescribing, the patient’s journey through the ED will be improved. Therefore, it is timely to ascertain emergency nurses’ views towards role expansion into nurse prescribing.

2.6 Methodological Issues

As nurse prescribing is in its infancy in Ireland there is a paucity of national empirical research in the literature. To date, only three Irish studies have examined nurse prescribing (Lockwood & Fealy 2008, Drennan et al. 2009, Wells et al. 2009). The first study by Lockwood & Feely (2008) is a report of the findings of Clinical Nurse Specialist attitudes towards nurse prescribing as a role expansion, which the current study is replicating in the ED. The national study conducted by Drennan et al. (2009) has provided useful information on nurse prescribing. It conducted research on a number of issues including the education programme for prescribing, an audit of prescribing practice, an evaluation of patient satisfaction with nurse prescribing, an evaluation of the key stakeholder’s perceptions of the prescribing initiative and finally an evaluation of qualified nurse prescribers. This study has certainly added to the body of knowledge from an Irish perspective. However, it was conducted soon after prescribing commenced in Ireland and it is a rapidly evolving area. Wells et al. (2009) conducted a study of mental health nurses’ view’s of nurse prescribing prior to its implementation. The study used a convenience sample of mental health nurses’ attending a conference and revealed that a third of mental health nurses’ felt nurse
prescribing should not be implemented. A similar study conducted in the UK found only 2.7% of mental health nurses’ felt they should not prescribe (Nolan et al. 2001). This difference in attitudes may be due to prescribing being more established in the UK. Caution should be exercised in interpreting these studies as they both choose convenience non random samples, which are the weakest form of sampling and do not allow the findings to be generalizable (Burns & Grove 2007). The dearth of national empirical research attention can be attributed to nurse prescribing’s early development.

2010). Research conducted was from both qualitative and quantitative paradigms, the latter being almost twice as popular. A small number of studies used mixed methods. Self-administered questionnaires and focus groups being the main method used to extract data respectively.

The themes found in the literature ranged from patients’ perspectives found in four studies (Pritchard & Kendrick 2001, Harrison 2003, Berry et al. 2006, Berry et al. 2008) professional development needs of current prescribers (Otway 2002, Pontin & Jones 2007), the role of the nurse prescriber (Humphries & Green 2000), benefits and drawbacks of nurse prescribing and the safety of nurse prescribing (Larsen 2004, Bradley et al. 2005, Carey et al. 2008, Latter 2008). The majority of the data used nurses’ in their research however, studies were identified looking at both nurses’ and doctors (Kinnersley et al. 2000, Shum 2000, Venning et al. 2000, Miles et al. 2002, Wilhelmsson & Foldevi 2003, Courtenay & Berry 2007, Jones 2008, Courtenay et al. 2009). While these studies have all provided information on nurse prescribing there was methodological weakness identified in the majority of them, ranging from single research sites, small sample sizes and low response rates. Consequently, the findings of these studies must be viewed with caution (McCarthy & O’Sullivan 2008). A third of the studies were also found to use convenience and non random sampling which are the weakest forms of sampling available (Burns & Grove 2007). No research could be found on emergency nurse attitudes towards role expansion into nurse prescribing.

The writer is undertaking the current study to explore the current attitudes of emergency nurses’ towards role expansion in, and barriers to, nurse prescribing. Ireland has been exposed to nurse prescribing since 2007 and no research attention has been given to exploring the attitudes of nurses’ since then. National research has provided insight into
the attitudes of stakeholders, patients and nurse prescribers and addressed issues of prescriptive safety and the education programme prescribers undertake (Drennan et al. 2009). While this study has provided useful data, it is now time to uncover emergency nurses’ attitudes towards role expansion in, and barriers to, nurse prescribing.

2.7 Conclusion

The literature review has provided an overview of nurse prescribing both nationally and internationally. It has shown that prescriptive authority has developed in the ED faster than in any other area of nursing. Hence, the writer chose the ED as the focus for this research. As nursing roles develop to meet patient and service need, it is vital to have an understanding of emergency nurses’ attitudes towards role expansion in, and barriers to, nurse prescribing. Evidence suggests that attitudes of nurses’ can have a direct impact on the development of nursing roles. It is only by identifying the potential barriers that strategies can be planned to overcome them in practice. As nurse prescribing is still in its infancy in Ireland, this explains the lack of Irish research available. While these studies have provided valuable information, the main research is from a UK perspective. There were methodological weaknesses found in the majority of the studies ranging from single research sites, small sample sizes and low response rates. Convenience and non random sampling was found in a third of literature reviewed. There still remains a paucity of national empirical research in the literature to allow for meaningful conclusions to be drawn.

Nurse prescribing has been shown internationally to have many benefits to patients, nurses’ and services. Role expansion is individual to each nurse and midwife, and nurses’ must use their scope of practice to guide them when making the decision to expand their practice. The current study will highlight emergency nurses’ attitudes
towards the perceived barriers to role expansion. It is only by identifying the barriers that strategies can be planned to overcome these issues. The findings from the current study will provide insight into this phenomenon that may add to the body of knowledge. The following chapter will address the methodological issues to be borne in mind when conducting the research study.
3.0 Chapter 3 Research Design

3.1 Introduction

This chapter outlines the research methods used to uncover the attitudes of emergency nurses towards role expansion into nurse prescribing. It addresses key issues including: the research question; an overview of the research paradigms; philosophical underpinnings; the chosen research methodology; population, sample and sampling; the study setting; data collection and analysis; pilot study; reliability and validity; and ethical considerations. Finally, the limitations of the study are discussed and conclusions drawn.

3.2 Research Question

The research question for the current study is: “What are Irish emergency nurse’s attitudes towards role expansion in, and barriers to, nurse prescribing?”

The aims and objectives of the study are:

1. To ascertain emergency nurses attitudes towards role expansion into nurse prescribing.
2. To determine emergency nurses’ attitudes towards the barriers to nurse prescribing, as a future role expansion.
3. To establish any significant differences between nurses regarding their attitudes towards role expansion into nurse prescribing.
4. To determine any significant differences between nurses regarding their attitudes towards potential barriers to nurse prescribing, as a future role expansion.
In order to answer the research question the writer conducted a quantitative descriptive survey using a systematic random sample of emergency nurses. The data collection tool was a previously validated 31 item self-administered questionnaire, developed by Lockwood (2005) (see appendix 4).

3.3 Research Paradigms

A paradigm refers to a set of beliefs that guides the researcher’s approach to inquiry (Crookes & Davies 2004). Two main paradigms dominate nursing research today, qualitative and quantitative. Qualitative research is defined by Polit & Beck (2010: 565) as the ‘investigation of phenomena, typically in an in-depth and holistic fashion, through the collaboration of rich narrative materials using a flexible research design’. Quantitative research is defined as the ‘investigation of phenomena that lend themselves to precise measurement and quantification, often involving a rigorous and controlled design’ (Polit & Beck 2010: 565).

The philosophical perspective of positivism is routed in 18th century philosophy and is said to be objective and scientific (Crossan 2003). According to Pilot & Beck (2008) quantitative research is the traditional, positivist, scientific method which refers to a general set of orderly, disciplined procedures used to acquire information. The quantitative researcher operates on the basis of logical positivism and the emphasis on research is the measurement and quantification of observable data (Dodd 2008). A quantitative approach is recognised as an efficient method of gaining an abundance of information (Cormack 2005), although a limitation of this approach is that it does not provide in-depth knowledge (LoBiondo-Wood & Haber 2006).
Conversely, the post-positivist movement acknowledges that it is impossible to be completely objective when studying humans, although this remains its goal (Begley 2008). This approach permits more in-depth exploration of the phenomena under investigation and analysis is based on themes and concepts (Lawal 2009). Qualitative designs are approaches that are used to discover knowledge and to understand rich descriptions of meanings from social experiences from the participants’ perspective. It concedes that humans are complex beings and in order to gain true understanding of a phenomenon, the researcher must interact with the participants in order to gain a holistic approach (Burns & Grove 2007).

3.4 Philosophical Underpinnings

Florence Nightingale is renowned for her research conducted in nursing, during the Crimean War (Burns & Grove 2007). Nursing research was initially slow to develop but has rapidly evolved over the past thirty years. In order for nursing to gain credibility as a profession, it needed to develop a scientific research base (Weaver & Olson 2006). Positivism and post positivism are two of the paradigms that underpin nursing research today. The philosophical underpinnings of quantitative research stem from a philosophy known as logical positivism, which is derived from 18th century philosophy (Weaver & Olson 2006). The belief held, is that scientific truth can only be derived, from that which is observable by the human senses (Gerrish & Lacy 2006). Philosophers saw mathematics as a scientific way in which to explain and predict human behaviour (Parahoo 2006). This approach is conducted to test theory and permits quantitative measurement of the variables associated with the phenomena under investigation. Furthermore, positivism is based on the tenet that valid knowledge can only be discovered when the researcher occupies a position of detached observer (Crookes &
Davies 2004). Conversely, post positivism stems from the behavioural and social sciences and is a method used to explore human experience, perceptions, motivations, intentions and behaviour. Nurses’ began using qualitative research methodologies in the 1970’s and it has grown in strength since then. The philosophical underpinnings of qualitative research are interpretive, humanistic and naturalistic and aim to uncover life experiences and give them meaning (Burns & Grove 2007).

3.5 Research Methodology

The philosophical perspective of positivism was chosen to answer the research question in the current study. This approach permits quantitative measurement of the variables associated with the phenomena under investigation. A quantitative descriptive survey was used to answer the research question. The decision to choose this method will now be examined. Using a descriptive survey is an efficient method of gaining an abundance of information. However, it does not provide the in-depth knowledge that would be obtained using a qualitative tool. Qualitative methodology provides insight into the experiences and usually involves selection of a small sample and therefore, cannot be generalised to the population. In quantitative research the sample size is larger and data collection methods are predetermined. If the findings were to benefit the population, they need to be generalizable. Although the sample size was limited, the findings will be generalizable to the department. In addition, qualitative methods are characterised by the interaction between the researcher and participants. In some cases, information provided by participants may be of a personal nature and possibly participants may not feel comfortable divulging this. Moreover, the writer is employed within the chosen hospital for the current study and has close working relationships with some of the emergency nurses’. This could further affect the openness of participants and introduce bias (Burns & Grove 2007). For this reason a quantitative design was chosen to allow
participants’ the freedom express their views, while maintaining anonymity (Parahoo 2006). The limitations of a quantitative design are minimised by using an instrument which has been previously validated and developed specifically towards capturing nurses’ attitudes towards nurse prescribing in Ireland. In addition this method allows participants time to consider their responses (LoBiondo-Wood & Haber 2006, Parahoo 2006).

3.6 Population, Sample and Sampling

The population for the current study was all emergency nurses working within an Irish urban academic teaching hospital ED, the hospital serves a population of between 400,000 to 500,000 people (Health Service Executive 2010b). A population is defined as the total number of subjects, which information can be obtained, that meet the inclusion criteria (Polit & Beck 2010). A sample is a proportion or subset of the population. It is not feasible to include all nurses working within ED’s in Ireland due to budgetary and time constraints and it would be outside the scope of a novice researcher (Parahoo 2006). The ED has been chosen as the research site as the writer feels this is an area, where nurse prescribing will impact on patient outcomes. The ED is the fastest growing area for nurse prescribing in Ireland. Therefore, the findings from the current study will provide the greatest impact. Systematic random sampling was used and a sample was taken from the target population (LoBiondo-Wood & Harber 2006). The goal of quantitative sampling is to generalise the findings from the sample back to the target population.

Two types of sampling exist in nursing research probability and non probability sampling. In probability sampling each participant in the target population has an equal
chance of being randomly selected. The aim of this is to ensure the sample is representative of the target population (Burns & Grove 2007). If this is achieved data can then be generalised to the target population. Within probability sampling four different methods exist: simple random sampling, cluster sampling, stratified random sampling and systematic sampling. Conversely, non probability sampling does not allow an equal chance for the participants to be selected (Parahoo 2006). Therefore, the findings cannot be generalised to the target population. Within non probability sampling five different methods exist. Convenience and quota sampling are two of these and are mainly used in quantitative research. Whereas, purposive sampling, network sampling, and theoretical sampling are more often used in qualitative research. The writer chose to use systematic sampling to ensure a representative sample was obtained and the justification for this is outlined below.

The population for the current study was 64 nurses, of these 59 participants met the inclusion and exclusion criteria outlined below. The sample size was calculated using an online sample size calculator. The population was 59 participants and the sample size was calculated using a confidence interval of 95% and a confidence level of 5, resulting in a required sample of 51. A systematic random sample of 51 was selected from the population of 59 by using the staff duty list, names are listed based on length of time working in the department. The names on the list were assigned consecutive numbers and the writer used the numbers to select the sample. This prevented the writer having knowledge of the names during selection. The sample was selected by choosing a random starting point and then choosing every third number on the list until the total sample was obtained. Systematic random sampling allowed the margin of bias to be reduced.
The inclusion criteria for the study were emergency nurses working in one urban ED for a minimum of one year and are three years qualified, as these are the entry requirements to the nurse-prescribing course. The exclusion criteria for the study was nursing students, new staff members, agency staff nurses and staff on long-term sick leave and maternity leave.

Ethical approval was obtained from the hospitals Research Ethics Committee in July 2010 (see appendix 5). Following ethical approval, a letter was written to the Director of Nursing seeking permission to access the ED nursing staff (see appendix 6), permission was granted from the hospitals Director of Nursing in November 2010 (see appendix 7). Letters were also written to the Assistant Director of Nursing, Clinical Nurse Manager 3 and the Consultants within the ED informing them of the study (see appendix 8). Prior to commencing data collection a poster was displayed for two weeks in the ED, informing emergency staff that a research study would be taking place and a random number of emergency nurses would be selected to participate in the study (see appendix 9).

3.7 Data Collection

A descriptive survey was used to collect data from a systematic random sample of the population. The objective was to describe the phenomenon under investigation using a questionnaire to generate data which was then analysed using statistics. A questionnaire is a printed self-report form administered to the sample in the study to elicit specific information (Burns & Grove 2007). From the data, patterns or trends may emerge and possible links between variables can be included in data analysis.
The research took place in an urban Irish ED over a period of four weeks. The questionnaire was distributed via the internal mail. It was accompanied by a letter inviting participants to partake in the study (see appendix 10) and an information letter providing instructions on how to complete the questionnaire was included (see appendix 11). A second poster was displayed in the department advising participants that the study had commenced. This was larger than the first poster and the colouring was changed to gain participants attention (see appendix 12). Completed questionnaires were placed in a sealed envelope provided and deposited into a box, located in the department’s staff room. This box was emptied on a weekly basis. A reminder letter (see appendix 13) was sent out after two weeks to all participants as a method to improve response rates (Parahoo 2008). Data was stored in a locked cabinet and only the writer had access to the raw data. Data was transcribed and entered into a password protected computer. Data will be kept for a period of five years and then destroyed.

The data collection tool was a 30 item self-administered questionnaire developed by Lockwood (2005) (see appendix 2). Permission was obtained from the authors to use this tool for the study (see appendix 14). The tool required minor alterations as it was originally developed for use with Clinical Nurse Specialists, any changes required made prior to the pilot study are outlined below. The questionnaire comprised of three sections and was anticipated to take no longer than ten minutes for respondents to complete. Responses were scored on a scale of 1-4, one being the most negative response and four the most positive response.

Section A, entitled ‘Barriers to Nurse Prescribing as a Future Role Expansion’ sought to identify attitudes towards the perceived barriers to nurse prescribing, as an aspect of role expansion. This section consisted of a nine-item Likert barriers scale where the
participants were asked to indicate their choice from ‘strongly disagree’ ‘disagree’ ‘agree’ to ‘strongly agree’ to a series of declarative statements. A tenth open ended question allowed participants to list further barriers.

Section B, entitled ‘Attitudes towards Nurse Prescribing as a Future Role Expansion’ sought to uncover attitudes towards nurse prescribing. This consisted of an eleven-item Likert scale where the participants were asked to indicate their choice from ‘strongly disagree’ ‘disagree’ ‘agree’ to ‘strongly agree’ to a series of declarative statements. This also included an open-ended question which allowed participants to comment on what developments they would like to see in relation to nurse prescribing.

Section C, consisted of eight items designed to collect demographic data of the sample including gender, age, qualifications, length of time qualified as a nurse, if the participant worked in a hospital with pre/post-registration students and which speciality the participant worked in. This demographic data was used to describe the population and allow comparisons to be drawn.

Following extensive review of the literature Lockwood (2005) developed the tool as there was a gap identified in the literature. The writer felt the tool developed by Lockwood (2005) was the most suitable as it was developed for use in Ireland and nurse prescribing is relatively new here. Using a tool developed for Ireland can reduce confusion over definitions and role boundaries. This tool was piloted by Lockwood (2005) and the reliability of the tool was tested and yielded a test-retest reliability coefficient of 0.72, which is a satisfactory score (Polit & Beck 2008). It was also reviewed by a panel of experts to ensure content and construct validity.
The following amendments were made to the tool prior to the pilot study and justifications for this are outlined below. Firstly, the layout of the tool was amended to provide logical sequence, aid readability and colour was also used, this can help to increase the response rate and reduce participant burden (Parahoo 2008). In doing so the demographic section was changed to section A. The last three questions were removed from this section, two of these questions sought information on student training in the participant’s hospital. As the current study was being conducted in a large academic teaching hospital, that offers training to both pre/post-registration students, this question was not relevant. The last question sought information on the area of speciality the nurse worked; as the study was only being conducted in the ED this question was also deemed irrelevant. A final question was added, to ascertain the length of time the emergency nurse had worked in this area of practice.

Secondly, section B had three further barriers added and these included: lack of support from nursing colleagues, added workload and poor staffing levels. Lockwood (2005) identified these additional barriers through the use of the open-ended question in her study and the literature review conducted in the previous chapter supports these findings. Finally, section C only had its title amended to remove ‘Clinical Nurse Specialist’s’ and replace it with ‘Emergency Nurses’ (see appendix 15 for the final questionnaire).

3.8 Pilot Study

A pilot study is defined as a smaller version of the proposed research, which tests the feasibility of the main study (Harber 2006). The main reason for undertaking a pilot study was to test the feasibility of the revised questionnaire and ensure the research design was appropriate (Burns & Grove 2007). The pilot study was conducted one
month before to the main study. Although the chosen tool had been previously piloted it required retesting as it was being used on a different population. The questionnaire was given to 5 nurses from the study population who were selected by simple random sampling. The participants were asked to comment on readability, layout and clarity of the questionnaire and to comment on any questions that may be ambiguous (Hallberg 2008). Those participants included in the pilot study were excluded from the main study. Data collected during the pilot phase was handled in the same manner as the main study but was excluded from the main findings. The data obtained from the pilot was inputted into the computer and a trial analysis was carried out, to test the research tool. This enabled each step of the research process to be evaluated, the aim being to improve the quality of the research (Hallberg 2008).

Feedback from the pilot study was found to be overall positive and participants all noted that the use of colour and the table format made the questionnaire easy to read. As estimated, the questionnaire took no longer than ten minutes to complete. Three of the participants suggested that a no opinion option be added to the Likert scale, so this was amended accordingly. Also, the wording to question 12 in section B was changed from ‘Lack of remuneration’ to ‘Lack of additional pay for additional responsibility’. As no difficulties were identified with the pilot study, the writer made the minor amendments and proceeded with the main study.

3.9 Data analysis

Information collected in a study is referred to as data. In order to analyse data obtained in the study, it must be assigned a numerical value to aid computer analysis (Atkinson 2008). Data analysis gives numerical data meaning and generates a clear picture of the information obtained. The demographic data obtained in section A, used closed
questions utilising a tick box system, these were coded to allow computer analysis. Closed questions are considered suitable for demographic data where the researcher considers that they are aware of all the potential replies and respondents are offered a choice of alternative replies (Parahoo 2006). The data gathered from the Likert scales were assigned a numeric value, with 1 being the most negative response and five being the most positive response. The two open ended questions allowed respondents to identify other barriers to role expansion into nurse prescribing and comment on developments they would like to see in relation to nurse prescribing. Using open ended questions allows respondents the opportunity to provide additional information. However, Parahoo (2006) warns that including too many of these will increase burden on the participants and may lead to superficial or missing data. The data obtained in these questions was analysed using thematic content analysis.

The data was analysed using SPSS (version 18.0), allowing data to be displayed both descriptively and visually with the use of tables. Frequency distributions, means, medians and modes were calculated for each scale item. The first stage of data analysis began with the use of descriptive statistics which, were used to describe and summarise the data (Burns & Grove 2007). Once this was completed, inferential statistics were applied to allow full understanding of the data (Watson 2008).

Further analysis was conducted to determine if any of the participants’ demographic characteristics influenced the overall attitudes. The total attitude scores were calculated for both attitude scales and these were tested using Mann-Whitney U or Kruskal-Wallis, as appropriate. Inferential statistics using non-parametric testing were used to examine for statistically significant differences. The Mann-Whitney U test uses the medians to test for differences between two independent groups on a continuous measure (Pallant
The Kruskal-Wallis test is similar to the Mann-Whitney U test but it allows you to compare more than two groups (Pallant 2010).

For the purpose of the current study the level of significance was set at $p=0.05$, as this is an acceptable level for educational and social research (Pallant 2010). The significance level is the probability level given to the current findings. The significance level informs the researcher whether there were statistically significant differences between the mean scores. If the $p$ value was below 0.05, then the finding was statistically significant. Alternatively, if the $p$ value was above 0.05, the finding was not statistically significant.

### 3.10 Reliability and Validity

#### 3.10.1 Reliability

Reliability refers to the consistency of a tool in measuring proposed variables, the higher the consistency of the tool the more reliable it is said to be (Polit & Beck 2008). Testing reliability focuses on three aspects including; internal consistency, stability and equivalence. The use of internal consistency to establish reliability of a tool assumes that if the scale is to measure the same concept that the items should have a strong relationship with the concept and therefore, with each other (LoBiondo-Wood & Harber 2006). Cronbach’s alpha is a method used to estimate the split-half correlation. This method produces a coefficient ranging from 0-1, the higher the score the more reliable the research instrument is thought to be. A coefficient of above 0.7 is deemed satisfactory (Polit & Beck 2008).
The test-retest reliability demonstrates instruments stability over time to produce similar results. The original questionnaire by Lockwood (2005) underwent a test-retest method yielding a correlation coefficient score of 0.72. A score above 0.7 is thought to be satisfactory (Polit & Beck 2008). This test needs to be conducted on a stable concept as it is acknowledged that concepts can change over time. Therefore, while it would provide useful data the findings must be interpreted with caution. Due to time constraints, the writer did not conduct this test.

Equivalence is a method used usually in observational studies where two different researchers are asked to complete the same form and then they are assessed through inter-rater reliability. This can also be achieved by getting participants to complete two different forms of an instrument to measure the same concept. This concept was not thought to be suitable for use in the current study, due to lack of a second instrument and the additional time burden on participants.

3.10.2 Validity

Validity is defined as the ability of a tool to measure what it is designed to measure; the types of validity consist of criterion, construct and content validity (LoBiondo-Wood & Harber 2006). Comparing the content of the tool following an extensive review of the literature ensured content validity. Following the literature review three additional barriers were identified and included in the questionnaire. In addition to this, the tool was presented to a panel of experts consisting of a lecturer of nurse prescribing, the writer’s supervisor as well as a practicing nurse prescriber, and as a result of this feedback minor amendments were made to the questionnaire prior to the pilot study. Although the tool had been piloted by the original author Lockwood (2005), it required further testing as the population differed.
3.11 Ethical Considerations

The Irish Nursing Board states that nurses must be aware of the ethical principles when undertaking or participating in research (An Bord Altranais 2000b). Following on from this, the Irish Nursing Board developed a document to provide nurses and midwives with guidance on ethical matters relating to research, to ensure the protection of the rights of all those involved in research (An Bord Altranais 2007d). Research conducted must be consistent with the ethical guidelines and principles of the researchers practice (Polit & Beck 2010). Therefore, the writer must be aware of both local and national ethical policies and procedures. The writer adhered to these guidelines by gaining both ethical and local approval to conduct the research (see appendix 5 & 7). The ethical principles that must be adhered to when conducting nursing research include respect for persons/autonomy, beneficence, non-maleficence, justice/fairness, veracity, fidelity and confidentiality. These are now addressed in further detail.

3.11.1 The Principle of Respect for Human Dignity and Autonomy

People have a right to be treated as autonomous agents and choose if they wish to participate in research (Polit & Beck 2008). In order to respect a person’s right to autonomy and self-determination, the subjects were informed that they had the right not to participate in the study, without prejudice. Informed consent was sought from participants by providing them with information outlining the nature of the study, including the risks and benefits of participation. Postal questionnaires are one of the few data collection methods that allow respondents to maintain anonymity. Measures to ensure anonymity were outlined. This information was conveyed in a letter accompanying the study, allowing the participants to make an informed choice (see appendix 10). Participants were advised that completion of the questionnaire implied consent.
3.11.2 The Principle of Beneficence/Non-Maleficence

Researchers have an ethical duty to balance the potential benefits against potential risks and to minimise potential risks to the greatest possible extent, thus safeguarding and protecting the participants. The principle of beneficence is the promotion of good (Haigh 2008). The generation of new knowledge will contribute to the body of nursing knowledge, benefiting both the individual and society as a whole (Parahoo 2008). Under the principle of non-maleficence research participants have the right not to be harmed. These principles were borne in mind from the outset of the research design. The writer ensured that mechanisms were in place to protect participants. The questionnaire and topic chosen were not deemed as a sensitive area. However, participants may feel threatened that their anonymity may not be upheld. Reassurances were provided in the information letter so participants were fully informed of data handling and anonymity. Potential harm was minimised by the writer by ensuring the rights of the participants were not violated. The questionnaires were distributed in sealed envelopes and placed into a sealed envelope and deposited into a box. There was no way of identifying the participants as no coding system was used and participants were not required to give any identifying personal details. Finally, the anonymity of the site where data is collected must be upheld, should the findings be disseminated (Haigh 2008).

3.11.3 Principles of Justice, Veracity and Fidelity

The principle of justice states that the researcher must treat participants equally and fairly, throughout the research process (An Bord Altranais 2007d). In order to achieve this, the writer used systematic random sampling to ensure a non discriminatory sample was obtained. Justice was also borne in mind when data analysis occurred, as it is vital to present the findings objectively (Haigh 2008). Veracity was upheld by ensuring
participants were fully informed of all aspects of the study (Parahoo 2006). The principle of fidelity is the building of trust between the researcher and the participants’; this was upheld through the information provided with the study. The participants’ were provided with contact details for the writer, should they have required further information on the study.

In conclusion, using the accepted ethical principles for research as a framework, the ethical implications of the current study have been identified. The methods for safeguarding the rights of the participants in relation to the identified implications have been addressed. These safeguards were applied and implemented throughout the study.

3.12 Limitations of the Study

There are many limitations to the current study however, the writer has borne these in mind throughout the research process and attempted to minimise them. Bias refers to any effect or act, which may distort the findings (Burns & Grove 2007). The research took place in the writers department and while this is may introduce bias the writer choose a self-administered questionnaire which guaranteed anonymity to the participants. It was hoped that by providing reassurance to the participants that this assisted in overcoming bias (Bowling 2002). The writer concedes that participants may have felt obliged to complete the questionnaire and that they may have changed their answers to what they feel the writer desired, this is known as the Hawthorne effect (Bowling 2002). While the writer attempted to overcome these biases, they are accepted as limitations of the study.

The single research site affects the generalizability of the studies findings. However, the findings may be of use to similar urban hospitals. Currently there is no research
available in Ireland on emergency nurses’ attitudes to role expansion into nurse prescribing. Therefore, the writer would argue that the current study will add to the body of knowledge. By identifying emergency nurses’ attitudes and the perceived barriers to role expansion this information can be used to inform service planning and practice, in an evolving area.

3.13 Conclusion

This chapter has set out the methods and procedures used to gather data for the current study. It has identified the research question and provided justification for the methodology chosen. The population, sample and sampling methods are described, setting the scene of where the research was conducted. The tool is described and data collection and analysis procedures explained. This chapter demonstrates how the ethical principles of research were upheld in the study and outlines the pilot process. Reliability and validity were also discussed. The writer concedes the limitations of the study, which need to be borne in mind when interpreting the findings. The findings of the current study are outlined in chapter four.
4.0 Chapter 4 Presentation of Findings

4.1 Introduction

This chapter presents the current study’s findings and outlines the methods used for data analysis. The current study set out to explore emergency nurses’ attitudes towards nurse prescribing and also to elicit their attitudes towards the potential barriers to nurse prescribing. The research question for the current study was: “What are Irish emergency nurse’s attitudes towards role expansion in, and barriers to, nurse prescribing?” The aims and objectives of the study were: to ascertain emergency nurses attitudes towards role expansion into nurse prescribing; to determine emergency nurses attitudes towards the barriers to nurse prescribing, as a future role expansion; to establish any significant differences between nurses’ regarding their attitudes towards role expansion into nurse prescribing and to determine any significant differences between nurses regarding their attitudes towards potential barriers to nurse prescribing, as a future role expansion.

In order to answer the research question the writer conducted a quantitative descriptive survey using a systematic random sample of emergency nurses. The questionnaire had 31 items including 2 open-ended questions. The questionnaire was adapted from an Irish study conducted by Lockwood (2005). This chapter outlines: the demographic data of the participants; participants attitudes towards role expansion into nurse prescribing; participants attitudes towards the barriers to nurse prescribing, as a future role expansion; the total attitude scores of the participants and; content analysis of two open-ended questions. The chapter then concludes.
4.2 Demographic Characteristics

Response rate

Of the total study population (n=51) 45 questionnaires were returned yielding a response rate of 88%.

Gender

The gender of the participants was predominately female 71% (n=32) with 29% being male (n=13).

Age

The largest section of the participants were aged between 31-40 years, representing 53% (n=24) of the participants. The least number of participants (5%, n=2) were aged between 51-60 years. There were an equal number of participants aged between 21-30 years and 41-50 years, each representing 20% of the sample (n=9). One respondent chose not to answer this question.

Professional Qualifications

All participants were qualified as Registered General Nurses (n=45). Of these 4% held a dual qualification as a Registered Midwife (n=2) and a further 4% held a dual qualification as a Registered Psychiatric Nurse (n=2).
Academic Qualifications

Academic qualifications of the participants ranged from Certificate to Masters Degree, the majority of the sample 53% held a Bachelors Degree (n=24). Only 4% were educated to Masters level (n=2) and none were educated to PhD level. Of the remaining sample, 22% held a certificate (n=10), 42% held a Diploma (n=19), 16% held a higher diploma (n=7) and 40% held a post graduate diploma (n=18). A further 8% of the sample identified holding additional qualifications including a diploma in anatomy and physiology, a diploma in pharmacology, a degree in professional development and a BTEC in social studies.

Length of time Qualified as a Nurse

The largest section of the participants were qualified between 6-10 years, representing 34% (n=15) of the sample. Twenty percent of the participants were qualified as a nurse between 11-15 years and likewise, a further 20% of the participants were qualified for 16-20 years. Thirteen percent of the participants were qualified between 1-5 years and the remaining 13% were qualified greater than 20 years. Table 1 outlines the results obtained from the questionnaires.
Table 1: Length of Time Qualified as a Nurse

<table>
<thead>
<tr>
<th>Length of time Qualified as a Nurse</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>6-10 years</td>
<td>15</td>
<td>34</td>
</tr>
<tr>
<td>11-15 years</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>16-20 years</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>

Length of Time Working as an Emergency Nurse

The participants were asked to identify the number of years working in emergency nursing. The largest section of participants 55% (n=25) were found to be working in emergency nursing for between 4-10 years. Thirteen percent of participants (n=6) were working in emergency nursing for 1-3 years. The remaining 25% (n=11) of participants were working in emergency nursing over 12 years.

4.3 Emergency Nurses’ Attitudes towards Nurse Prescribing as a Future Role Expansion

The participant’s attitudes to nurse prescribing were assessed using an eleven item section of the questionnaire, rating their attitudes on a 5 point Likert scale. Participants were asked to indicate their choice from strongly disagree, disagree, no opinion, agree to strongly agree, responses were scored on a scale of 1-5 respectively. The lowest score achievable was eleven and the highest score achievable was fifty five. A twelfth open-
ended question allowed participants to provide additional comments on the developments they would like to see in relation to nurse prescribing.

For questions 1, 5, 6 and 7 the participants agreed or strongly agreed (96%, 98%, 93%, 91% respectively) with the statements. For question 2, 3, 8 and 11 the participants disagreed or strongly disagreed (75%, 83%, 87%, 91% respectively) with the statements. Whereas the response to questions 4, 9 and 10 showed that opinions were split. The lowest overall score for the participants was 24 and the highest was 48, with an overall median score of 32. Therefore, overall attitudes were positive towards role expansion into nurse prescribing. See table 2 for an outline of the participants’ responses in the study.
## Table 2: Emergency Nurses Attitudes towards Role Expansion

<table>
<thead>
<tr>
<th>Emergency Nurses Attitudes</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My role has expanded significantly since qualification</td>
<td>0% (n=0)</td>
<td>4% (n=2)</td>
<td>0% (n=0)</td>
<td>62% (n=28)</td>
<td>34% (n=15)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>2. Nurse prescribing is taking on a Doctor’s role</td>
<td>15% (n=7)</td>
<td>60% (n=27)</td>
<td>0% (n=0)</td>
<td>18% (n=8)</td>
<td>7% (n=3)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>3. Nurse prescribing would take me from essential nursing care</td>
<td>16% (n=7)</td>
<td>67% (n=30)</td>
<td>0% (n=0)</td>
<td>13% (n=6)</td>
<td>4% (n=2)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>4. Nurse prescribing should only be for specialist nursing practice</td>
<td>13% (n=6)</td>
<td>40% (n=18)</td>
<td>2% (n=1)</td>
<td>31% (n=14)</td>
<td>14% (n=6)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>5. Nurse prescribing would support my professional development</td>
<td>0% (n=0)</td>
<td>2% (n=1)</td>
<td>0% (n=0)</td>
<td>62% (n=28)</td>
<td>36% (n=16)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>6. Nurse prescribing would greatly enhance the delivery of holistic nursing care</td>
<td>0% (n=0)</td>
<td>7% (n=3)</td>
<td>0% (n=0)</td>
<td>49% (n=22)</td>
<td>44% (n=20)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>7. The issue of nurse prescribing has occurred as a result of service need</td>
<td>0% (n=0)</td>
<td>9% (n=4)</td>
<td>0% (n=0)</td>
<td>71% (n=32)</td>
<td>20% (n=9)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>8. Nurse prescribing should be for every grade of nurse</td>
<td>25% (n=11)</td>
<td>62% (n=28)</td>
<td>0% (n=0)</td>
<td>9% (n=4)</td>
<td>4% (n=2)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>9. I do not feel educationally competent to nurse prescribe</td>
<td>24% (n=11)</td>
<td>38% (n=17)</td>
<td>0% (n=0)</td>
<td>31% (n=14)</td>
<td>7% (n=3)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>10. I do not feel clinically competent to nurse prescribe</td>
<td>25% (n=11)</td>
<td>49% (n=22)</td>
<td>0% (n=0)</td>
<td>22% (n=10)</td>
<td>4% (n=2)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>11. Nurses should not prescribe medication</td>
<td>53% (n=24)</td>
<td>38% (n=17)</td>
<td>0% (n=0)</td>
<td>7% (n=3)</td>
<td>2% (n=1)</td>
<td>100% (n=45)</td>
</tr>
</tbody>
</table>
4.3.1 Influence of Demographics on Attitudes towards Nurse Prescribing

Further analysis was conducted to determine if any of the participants’ demographic characteristics influenced their overall attitudes. The analysis was conducted using the Mann-Whitney U test or the Kruskal-Wallis test, as appropriate. Gender, length of time qualified as a nurse and length of time working in emergency nursing, had no statistically significant influence on overall attitudes to nurse prescribing, \( p=0.642 \), \( p=0.212 \), \( p=0.374 \) respectively. A statistically significant effect of age on attitudes was identified \( p=0.022 \). Participants aged between 51-60 years were more positive in their attitudes towards nurse prescribing.

Analysis was also conducted to determine if the participants’ educational qualifications influenced overall attitudes. The educational qualifications of Certificate, Higher Diploma, Post Graduate Diploma, Degree and Masters Degree had no statistically significant influence on overall attitudes to nurse prescribing, \( p=0.433 \), \( p=0.276 \), \( p=0.129 \), \( p=0.191 \), \( p=0.698 \) respectively. However, a statistically significant effect of education to Diploma level on attitudes was identified, \( p=0.024 \).

Additional Comments

Question 12 was an open-ended question which allowed participants to provide additional comments on the developments they would like to see in relation to nurse prescribing. Analysis of this open-ended question yielded three themes: support, patient centred focus and personal issues surrounding education. These themes were already addressed in the questionnaire but the additional comments suggest the participant’s strength of feeling on this subject.
This section of the questionnaire sought to identify participant’s attitudes towards potential barriers to nurse prescribing, as an aspect of future role expansion. This section consisted of a twelve item Likert barriers scale where participants were asked to indicate their level of agreement or disagreement with each statement. Participants were asked to indicate their choice from strongly disagree, disagree, no opinion, agree to strongly agree, responses were scored on a scale of 1-5 respectively. The lowest score achievable was eleven and the highest score achievable was sixty. A thirteenth open-ended question allowed participants to list additional barriers.

Of the twelve barriers identified participants agreed or strongly agreed that questions 3, 5, 9, 10, 11 and 12 (74%, 74%, 74%, 80%, 85%, 83% respectively) represented a barrier to nurse prescribing. Variance was identified in the answers to questions 1, 2, 4, 6 and 7. While response’s to these questions were still mainly positive there was a higher proportion of participants disagreeing, or strongly disagreeing, that these items represented barriers to nurse prescribing (20%, 31%, 29%, 24%, 31% respectively). One exception was found in the answer to question 8, ‘support from nursing colleagues’, where 56% disagreed or strongly disagreed with this statement. However, a third of participants felt this did represent a barrier to nurse prescribing (See table 4 for an outline of responses). The lowest overall score for the participants was 21 and the highest was 56, with a median score of 43. Therefore, there was a high level of agreement that the items listed were potential barriers to nurse prescribing.
## Table 3: Emergency Nurses Attitudes towards Potential Barriers to Nurse Prescribing

<table>
<thead>
<tr>
<th>Potential Barriers</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lack of Financial Support</td>
<td>2% (n=1)</td>
<td>18% (n=8)</td>
<td>22% (n=10)</td>
<td>45% (n=20)</td>
<td>13% (n=6)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>2. Lack of Education</td>
<td>2% (n=1)</td>
<td>29% (n=13)</td>
<td>11% (n=5)</td>
<td>45% (n=20)</td>
<td>13% (n=6)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>3. Lack of Knowledge of Nurse Prescribing</td>
<td>2% (n=1)</td>
<td>13% (n=6)</td>
<td>11% (n=5)</td>
<td>54% (n=24)</td>
<td>20% (n=9)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>4. Lack of Experience</td>
<td>2% (n=1)</td>
<td>27% (n=12)</td>
<td>9% (n=4)</td>
<td>53% (n=24)</td>
<td>9% (n=4)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>5. Not an Established Practice in Ireland</td>
<td>0% (n=0)</td>
<td>13% (n=6)</td>
<td>13% (n=6)</td>
<td>34% (n=15)</td>
<td>40% (n=18)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>6. Lack of Support from Nursing Management</td>
<td>0% (n=0)</td>
<td>24% (n=11)</td>
<td>16% (n=7)</td>
<td>24% (n=11)</td>
<td>36% (n=16)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>7. Lack of Support from Medical Colleagues</td>
<td>0% (n=0)</td>
<td>31% (n=14)</td>
<td>13% (n=6)</td>
<td>40% (n=18)</td>
<td>16% (n=7)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>8. Lack of Support from Nursing Colleagues</td>
<td>2% (n=1)</td>
<td>53% (n=24)</td>
<td>11% (n=5)</td>
<td>25% (n=11)</td>
<td>9% (n=4)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>9. Fear of Legal Consequences</td>
<td>2% (n=1)</td>
<td>20% (n=9)</td>
<td>4% (n=2)</td>
<td>45% (n=20)</td>
<td>29% (n=13)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>10. Added Workload</td>
<td>2% (n=1)</td>
<td>18% (n=8)</td>
<td>0% (n=0)</td>
<td>53% (n=24)</td>
<td>27% (n=12)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>11. Poor Staffing Levels</td>
<td>2% (n=1)</td>
<td>9% (n=4)</td>
<td>4% (n=2)</td>
<td>54% (n=24)</td>
<td>31% (n=14)</td>
<td>100% (n=45)</td>
</tr>
<tr>
<td>12. Lack of Additional Pay for Additional Responsibility</td>
<td>2% (n=1)</td>
<td>11% (n=5)</td>
<td>4% (n=2)</td>
<td>52% (n=23)</td>
<td>31% (n=14)</td>
<td>100% (n=45)</td>
</tr>
</tbody>
</table>
4.4.1 Influence of Demographics on Emergency Nurses Attitudes towards the Potential Barriers to Nurse Prescribing

Further analysis was conducted to determine if any of the participants’ demographic characteristics influenced the overall attitudes towards potential barriers to nurse prescribing. The analysis was conducted using the Mann-Whitney U test or the Kruskal-Wallis test, as appropriate. Gender, age, length of time qualified as a nurse and length of time working in emergency nursing, had no statistically significant influence on overall attitudes to nurse prescribing, \( p=0.960, p=0.651, p=0.114, p=0.306 \) respectively.

Analysis was also conducted to determine if participants’ educational qualifications influenced overall attitudes. The educational qualifications of Certificate, Higher Diploma, Post Graduate Diploma, Degree and Masters Degree had no statistically significant influence on overall attitudes to nurse prescribing, \( p=0.642, p=0.339, p=0.798, p=0.066, p=0.490 \) respectively. However, a statistically significant effect of education to Diploma level on attitudes was identified, \( p=0.003 \).

Additional Barriers

Question 13 sought to elicit additional barriers to nurse prescribing. This question was an open-ended question that allowed participants to identify any additional barriers towards role expansion into nurse prescribing. An additional four comments were made in this section. These related to time constraints in doing the course, lack of supervision, the course being aimed at specialist nurses and lack of enthusiasm from nurses.
4.5 Conclusion

This chapter has presented the findings of the data using descriptive and inferential statistics. The process of data analysis including scoring methods and statistical analysis was outlined. The findings from the current study seem to indicate that attitudes towards nurse prescribing are generally positive. However, in order to successfully implement nurse prescribing the barriers identified need to be addressed. Methods to overcome the barriers need to be developed. The findings have implications for education, practice and service planning. The open-ended questions were subjected to content analysis. The following chapter will provide a detailed discussion of these findings.
5.0 Chapter 5 Discussion of Findings

5.1 Introduction

The current study set out to explore emergency nurses’ attitudes towards nurse prescribing and also to elicit their attitudes towards the potential barriers to nurse prescribing. The findings suggest that overall attitudes are positive towards role expansion into nurse prescribing. Furthermore, overall nurses were in agreement that potential barriers to nurse prescribing existed. This chapter will discuss the key findings in relation to the current literature available. As the current study is, in part, a replication of a study conducted by Lockwood (2005), comparisons between the two studies will be alluded to. The research question and the studies aims and objectives will be outlined. The key findings of the study will be discussed under the following themes: demographic comparisons; role expansion; education and training; autonomy and scope of practice; attitudes, barriers and facilitators and finally, support and resistance. The chapter will then conclude.

5.2 Research Question

The research question for the current study was: “What are Irish emergency nurses’ attitudes towards role expansion in, and barriers to, nurse prescribing?”

The aims and objectives of the study were:

1. To ascertain emergency nurses attitudes towards role expansion into nurse prescribing.
2. To determine emergency nurses attitudes towards potential barriers to nurse prescribing, as a future role expansion.

3. To establish any significant differences between nurses regarding their attitudes towards role expansion into nurse prescribing.

4. To determine any significant differences between nurses regarding their attitudes towards potential barriers to nurse prescribing, as a future role expansion.

5.3 Demographic Comparisons

As previously stated this research is in part a replication of a study conducted by Lockwood (2005). The study by Lockwood (2005) returned 173 completed questionnaires, representing a response rate of 64%. This writer’s study had a response rate of 88% (n=45) however, the sample size in the current study was smaller and the population differed. Therefore, direct comparisons cannot be made although comparisons will be alluded to.

The gender of the participants in the current study was predominantly female 71% (n=32) with 29% being male (n=13) whereas 99% of the participants surveyed by Lockwood (2005) were female. Both of these findings differ from the national average, where 92% of the total population of nurses are female (An Bord Altranais 2009). The majority of participants in both studies were aged between 31-50 years, with 84% of Lockwood’s (2005) participants and 73% of the current study’s participants matching this category. Twenty percent of the participants in the current study were aged between 21-30 years; this higher percentage of younger nurses can be attributed to the fact that they were not specialist nurses and therefore would have a younger age profile (Lockwood & Fealy 2008, Drennan et al. 2009). Professional qualifications of both
studies found all nurses to hold a Registered General Nurse qualification. However, a higher percentage of nurses in Lockwood’s (2005) study (26%) were also qualified midwives, only 4% of participants in the current study held similar dual qualification.

Surprisingly the academic qualifications of both groups were similar. Forty two percent of participants in the current study held a diploma, compared with 49% in Lockwood’s (2005) study. Fifty six percent of participants in both studies have held either a post graduate diploma or higher diploma qualification. A larger proportion (56%) of participants in the current study held a degree, compared with 27% of participants in the study conducted by Lockwood (2005). Finally, 11% of Lockwood’s (2005) participants were educated to Masters level, whereas only 4% had a Masters degree in the current study. This similarity in diploma level qualification between the studies may be due to the ED being classed as a specialist area of practice, where staff are encouraged to pursue specialist education. As anticipated, participants in Lockwood’s (2005) study were qualified longer than participants in the current study, with 79% of participants qualified longer than 11 years compared with 53% of participants in the current study. This difference in experience can also be attributed to the fact that Lockwood (2005) surveyed Clinical Nurse Specialists whom would generally have been qualified for a greater number of years.

5.4 Role Expansion

The traditional nursing role has been evolving in response to professional, political, economic, social and technological issues. Ninety six percent of participants in the current study agreed or strongly agreed that their role had expanded significantly since
qualification. Likewise, 92% of participants in Lockwood’s (2005) study agreed or strongly agreed that their role had expanded. Role expansion in nursing should occur to meet patients needs in a holistic way, it requires the nurse to become a reflective competent practitioner and this may include expanding into areas of practice that were traditionally not considered to be within the remit of nursing practice (An Bord Altranais 2000a).

The professional drive for role expansion in Ireland stemmed from the report of the Commission on Nursing (Government of Ireland 1998). It was this report that recommended nursing become a university based degree programme. New clinical career pathways were recommended and developed which allowed nurses to remain in clinical practice. The Irish Nursing Board responded to this role development by developing the Scope of Practice document which provided nurses with a framework to guide their role expansion (An Bord Altranais 2000a). As nurses began to specialise, they soon found that their lack of prescriptive authority was restricting their ability to practice autonomously (Ryan & Walsh 2004). The Commission on Nursing conceded that nurses may need to prescribe medications as part of their practice and this aspect required review (Government of Ireland 1998). In 2005, the Irish Nursing Board, in collaboration with The National Council for Professional Development of Nursing and Midwifery, conducted a review of the need for nurse and midwife prescribing. This report recommended that nurses and midwives should be enabled to prescribe medications (An Bord Altranais & National Council for Professional Development of Nursing & Midwifery 2005). An Bord Altranais, the Health Service Executive and the Department of Health and Children worked in collaboration to bring about nurse prescribing. This led to the development of a six month nurse prescribing education
programme which was first piloted in 2007 (Drennan et al. 2009). As nurses did not have previous authority to prescribe medications, legislation was amended accordingly, prior to the pilot of the nurse prescribing programme (Irish Medicines Board 2006).

The political, economic, social and technological drivers for role expansion in nursing have come from a desire to improve efficiency in services and develop more cost effective ways of working, while aiming to provide a quality service aimed at improving patient care (Harrison 2003). These potential benefits were outlined in a report published by the Department of Health and Children (2003) which aimed to reduce doctors working hours in line with the European Working Time Directive. Nurses were identified as key professionals that could expand their role into new areas and thereby reduce the burden on doctors while enhancing care delivery (Pritchard & Kendrick 2001, Carr et al. 2002). While literature is emerging demonstrating that nurses provide a cost effective and safe prescribing alternative to doctors, in order to continue these standards, it remains important that nurses are carefully selected for this aspect of role expansion (Venning et al. 2000, Larsen 2004, Bradley et al. 2006, Drennan et al. 2009).

Economic pressures in the health service in Ireland are set to increase as the country remains in recession and the health service is targeted for cuts in spending (McGreevy 2010). It is difficult to ascertain the future success for nurse prescribing in the current economic climate against a background of job losses and reduced staffing levels (Latter & Courtenay 2004, McGreevy 2010). Indeed, participants in the current study cited added workload and poor staffing levels as important considerations in undertaking nurse prescribing, with 80% and 85% respectively, agreeing or strongly agreeing that
these represented a barrier to nurse prescribing. The literature supports these findings with concerns being raised about increasing workloads and reduced staffing levels (McCann & Baker 2002, Lewis-Evans & Jester 2004, Bradley et al. 2005, Bradley & Nolan 2007, Carey et al. 2009).

Ireland’s development of nurse prescribing has been influenced by international practice. The United States, New Zealand, Australia and Sweden have been cautious in their development of nurse prescribing and have targeted specialist nurses to undertake prescribing training, the majority of which are educated to Masters level (Drennan et al. 2009). The United Kingdom and Ireland have opened up prescribing to staff nurses with three years experience. The majority of participants in the current study (91%) agree or strongly agree that nurse prescribing has occurred as a result of service need. This finding is an increase from the study conducted by Lockwood (2005) where 86% of participants felt nurse prescribing occurred as a result of service need. This increase may be due to the pressures being faced in the health service with augmented pressure demanding enhanced efficiency and cost effective service delivery.

Initially nurse prescribing in Ireland was aimed at specialist nurses, with just 8.5% identified to be at staff nurse grade in the first review of nurse prescribing in Ireland (Drennan et al. 2009). The number of nurses entering nurse prescribing training has rapidly increased and now 25% of these nurses are at staff nurse grade (Office of the Nursing Services Director & Health Service Executive 2010). This will probably increase further as new training sites are developed. A similar pattern was seen in the UK when nurse prescribing commenced with specialist nurses entering the training programme first (While & Biggs 2004). The UK Department of Health (2000) aimed to
train all nurses in prescribing but this has not been achieved, with just 7.3% of nurses registered to prescribe in the UK in 2008 (Nursing & Midwifery Council 2008). In order for nurse prescribing to remain cost effective, nurses entering training must use their qualification. However, the literature suggests that 15% of nurses who underwent training in Ireland are not practicing (Drennan et al. 2009). A similar picture was found in the UK with 44% of nurses not using their qualification to prescribe (Larsen 2004). Ireland needs to learn from international nurse prescribing trends to prevent a similar picture developing here.

Findings from the current study indicate that the majority of emergency nurses (87%) disagree or strongly disagree that nurse prescribing should be for every grade of nurse. However, opinions showed more variance when participants were asked if nurse prescribing should be restricted to specialist practice. Fifty three percent of participants disagreed or strongly disagreed that nurse prescribing should be restricted to specialist practice, whereas, 45% of participants agreed or strongly agreed and 2% had no opinion. These findings are in conflict with Lockwood’s (2005) study, where 36% disagreed or strongly disagreed and 64% agreed or strongly agreed that nurse prescribing should be restricted to specialist practice. This change in attitudes may be due to prescribing becoming more established in Ireland. However, it is clear that nurses feel strongly that nurse prescribing should only be for more senior grades of nurses. Indeed the UK Department of Health (2006) now recommends that managers should carefully select nurses to undergo training. This is in contrast to their aim in 2000 to educate all nurses in prescribing (Department of Health 2000). The writer would argue that Ireland needs to look to the UK system of nurse prescribing and learn from their
challenges. Otherwise nurse prescribing may well fail to provide a cost effective service to patients.

5.5 Education and Training

The participants in the current study showed variance in their attitudes towards whether they felt educationally competent to nurse prescribe. Thirty eight percent of participants agreed or strongly agreed that they were not educationally competent to nurse prescribe. A higher percentage of Lockwood’s (2005) participants (52%) felt they were not educationally competent to nurse prescribe. While it could be argued that participating in nurse prescribing training would rectify this deficit, the writer would argue that this finding must be considered. In order for nurses to successfully complete the nurse prescribing education programme, they must be able to study at degree level (Drennan et al. 2009). Therefore, this may be the reason participants did not feel educationally competent to nurse prescribe. A high percentage (58%) of participants cited a lack of education as a significant barrier to progressing to become a nurse prescriber. Likewise, 75% of Lockwood’s participants cited this as a barrier. In a UK study by Sodha et al. (2002) concerns were raised regarding the level of pre-registration pharmacology education nurses received. In Ireland pharmacology remains a core subject in the current undergraduate nursing education, but this is was not the case in the traditional nursing education (Fealy 2002). As the majority of the participants (53%) trained over eleven years ago they may not have had the same level of pharmacology content provided during training, and this may have contributed to these findings.
There is a dearth of research regarding educational preparation for the prescribing role. From a UK perspective a number of studies have found that there is not enough pharmacological content in nurse prescribing training (Otway 2002, Bradley et al. 2006, Latter et al. 2007a). However, the national evaluation of nurse prescribing in Ireland, conducted by Drennan et al. (2009), found that nurses were satisfied with the pharmacological content of their course. It must be borne in mind that these participants were mainly practicing at Clinical Nurse Specialist or Advanced Nurse Practitioner level and over half of them were educated to Masters level. Drennan et al. (2009) found that participants expressed dissatisfaction with the level of workload the course required. This is concerning considering the sample in Drennan’s study was highly educated and experienced (Drennan et al. 2009). The early cohort of participants surveyed by Drennan et al. (2009) may not adequately represent the overall profession as they were highly educated and experienced nurses.

As the prescribing programme expands nurses with less experience and lower qualifications are entering the programme (Office of the Nursing Service Director & Health Service Director 2010). As a result, concerns may emerge about the competency and motivation of later training cohorts, due to their lack of experience and education. Similar findings from the UK literature showed that there was a rise in the number of nurses not completing their nurse prescribing training due to the intense workload of the course (Bradley et al. 2005, Bradley et al. 2006). Concerns have been raised in the UK literature about the content of nurse prescribing programmes. Variance is reported on the level of workload required across different Trusts and also regarding the level of pharmacological content (McCann & Baker 2002, Bradley & Nolan 2007). This finding is of relevance to the Irish setting as the number of centres providing the prescribing
programme increases. It may be argued that each university will develop their programme based on the guidelines provided by the Irish Nursing Board (An Bord Altranais 2007b). However, the universities may not have the same access to specialists in pharmacy and medicine, required to lecture on the programme. This is one of the difficulties faced in the UK and has resulted in course participants being dissatisfied with the pharmacological content of their prescribing programme (Otway 2002, Bradley et al. 2006, Latter et al. 2007a).

In the current study, participants attitudes showed variance when asked if they felt clinically competent to nurse prescribe, with 26% of participants agreeing or strongly agreeing that they did not feel clinically competent to nurse prescribe. A similar finding was identified by Lockwood (2005), with 32% of participants citing that they did not feel clinically competent to nurse prescribe. Sixty two percent of participants in the current study and 67% of participants in Lockwood’s (2005) study stated that lack of experience represented a barrier to becoming a nurse prescriber. In order to undertake the prescribing programme in Ireland, a nurse must be qualified for three years and have been working in the area they intend to prescribe in for the past year (An Bord Altranais 2007b). Ireland has adopted the independent model of nurse prescribing, this requires the RNP to independently assess, diagnose and treat patients (An Bord Altranais 2007b). Assessment skills are incorporated into the education programme and nurses must complete 12 days of clinical supervision with their medical mentor to consolidate this learning (An Bord Altranais 2007b). During this time nurses must also complete a number of clinical competencies. However, it is difficult to ascertain if this clinical component of the prescribing programme will be sufficient for nurses with limited nursing experience. Research conducted in the UK found that nurses lacked clinical
examination skills (Latter et al. 2005, Latter et al. 2007a). If highly qualified and experienced nurses found the level of coursework challenging it is reasonable to assume that nurses who only meet the basic entry requirements may find the course even more difficult. The large percentage of participants in the current study (62%) and Lockwood’s study (67%) that cited a lack of experience as a barrier to becoming a nurse prescriber, demonstrates the importance nurses place on experience. Clinical experience alongside educational ability is required to practice at an advanced level and nurse prescribing is identified as an advanced level of practice (Banning 2005). The majority of research available on nurse prescribing internationally has found that nurses are highly experienced (While & Biggs 2004, Courtenay et al. 2007, Carey et al. 2009, Drennan et al. 2009). Therefore, caution must be exercised when interpreting the findings as they may not represent the overall population of nurse prescribers.

The participants in the current study demonstrated variance in their attitudes towards whether lack of financial support acted as a barrier to nurse prescribing. Fifty eight percent of participants agreed or strongly agreed that this represented a barrier. Whereas a smaller number (43%) of Lockwood’s participants agreed or strongly agreed that it represented a barrier. Twenty two percent of participants had no opinion and 20% disagreed or strongly disagreed, that lack of financial support represented a barrier to nurse prescribing. The participants in Lockwood’s (2005) study may have placed less importance on financial aspects as they identified nurse prescribing as beneficial to their Clinical Nurse Specialist position. Currently, the nurse prescribing course in Ireland is funded by the Health Service Executive and they provide full funding for the payment of college fees. However, there are additional costs to students which are not covered. Students have the added expense of travel costs, academic materials and time off work.
When the prescribing programme commenced the majority of course participants received study leave for the full duration of the prescribing programme (Drennan et al. 2009). However, the granting of study leave is at the discretion of the employing organisation and the majority of organisations have reduced or ceased the provision of study leave. Therefore, students may have to attend the course on their own time which may involve the use of annual leave, which in itself represents a significant cost to the individual. Indeed Drennan et al. (2009) found some participants reported difficulties in negotiating study leave in order to participate in the education programme. This reduction in study leave will result in added pressure on students time and may result in increasing numbers of drop-out from the programme. It may also result in a decline in applications to undertake the prescribing programme.

5.6 Autonomy and Scope of Practice

The Scope of Practice framework was developed by the Irish Nursing Board to provide guidance to nurses on role expansion (An Bord Altranais 2000a). There is on-going debate in the literature as to whether nurses should broaden their Scope of Practice. Concern has been expressed in previous studies that expansion of the nursing role can lead to confusion and resistance from other healthcare professionals and essentially the essence of nursing may be lost (Harrisson 2003, Wells et al. 2009, Stenner et al. 2010). Conversely, other literature states that expansion into nurse prescribing is finally allowing nurses to accept responsibility and accountability, for a role they were already doing informally (Bradley et al. 2005, Bradley & Nolan 2007). The current study demonstrates the overall support from nurses regarding developing the Scope of Practice of emergency nurses.
Participants in the current study disagreed or strongly disagreed (74%, 83% and 91% respectively) that nurse prescribing was taking on a doctor’s role, that nurses should not prescribe medications and that nurse prescribing would take from essential nursing care. Similar findings were noted by Lockwood (2005) with 68%, 85% and 89% of participants respectively, disagreeing or strongly disagreeing with the above statements.

In the current study participants also felt strongly that nurse prescribing would support their professional development and enhance the delivery of holistic nursing care, with 83% and 87% of participants respectively agreeing or strongly agreeing with these statements. Lockwood (2005) obtained similar findings with 87% and 89% of participants respectively agreeing or strongly agreeing with the above statements. The Irish Nursing Board advocates that the decision to expand nursing practice should be driven by a desire to improve patient care and become a more holistic practitioner (An Bord Altranais 2010). International literature has shown that nurse prescribing can support the professional development of nursing and enhance holistic patient care (Lewis-Evans & Jester 2004, While & Biggs 2004, Stenner & Courtenay 2008, Carey et al. 2009).

In the study conducted by Drennan et al. (2009) nurses were found to be practicing with varying degrees of autonomy. To be truly autonomous the nurse must be able to make prescribing decisions independently. However, it could be argued that healthcare professionals are never truly autonomous as they work within multidisciplinary teams. As a RNP, the nurse accepts accountability and responsibility for their decision-making at an advanced practice level. Drennan et al. (2009) found that nurse prescribing enhanced nurses ability to practice autonomously and the wider literature supports this claim (Lewis-Evans & Jester 2004, Pontin & Jones 2007). This enhanced level of
autonomy is widely reported as one of the benefits of nurse prescribing. Nurses practicing at an advanced level such as Clinical Nurse Specialists and Advanced Nurse Practitioner grades found their inability to prescribe medications prevented them from providing holistic nursing care (Ryan & Walsh 2004). Indeed it is incongruous to have nurses assess and diagnose a patient and be unable to complete the episode of care by prescribing medications if warranted. Nurse prescribing has the ability to increase a nurses’ autonomy but it is dependant on the level the nurse is practicing.

5.7 Attitudes, Barriers and Facilitators

Globally nurses’ attitudes are generally found to be positive across a wide variety of settings (Edwards et al. 2001, McCarty et al. 2001, Puffer & Rashidian 2004, Chambers et al. 2010, Saunamaki et al. 2010). Therefore, it was not surprising that emergency nurses overall attitudes towards nurse prescribing, in the current study, were found to be positive. If attitudes are generally positive towards nurse prescribing, one could question why all these nurses are not availing of the training to become a RNP. Attitudes and beliefs are thought to influence intention and are determinants of health behaviour (Pender 2003, Ajzen 2005). Therefore, it is vital when implementing change in practice to understand attitudes. Positive attitudes do not always correlate to the actual behaviour being carried out which, in this case would be nurses entering the prescribing programme (Mason & Whitehead 2003). Nurses may choose to not expand their practice into nurse prescribing for numerous reasons, some of which may include their perception that the barriers are too great.
Behaviour is a complex phenomenon and variables such as personality, environment and demographics can influence behaviour (Ajzen 2005, Perkins et al. 2007). Participants overall attitudes in the current study were explored to ascertain if any of the demographic variables influenced them. Age was found to have a statistically significant effect on participants attitudes, \( p=0.022 \). Participants aged between 51-60 years, were found to have a statistically significant more positive attitude towards role expansion into nurse prescribing. Although the sample size was small, it does suggest that age has a positive effect on attitudes. Analysis also revealed that education to diploma level had a statistically significant effect on attitudes, \( p=0.024 \). Nurses educated to diploma level may have been the first cohort of undergraduate nurses to have pharmacology as a core subject and this additional education during their initial training may have influenced their attitudes.

An individual’s attitude towards a particular phenomenon can provide valuable information about their behavioural intentions but research shows there appears to be a gap between attitudes and actual behaviour (Ajzen 2005, Perkins et al. 2007). In order to gain a deeper understanding of the participants’ attitudes, it was deemed necessary to uncover their attitudes towards potential barriers to nurse prescribing. Uncovering participants’ attitudes towards the potential barriers to nurse prescribing inform practice at a deeper level.

Participants in the current study were asked to rate their attitudes towards the potential barriers to nurse prescribing as a future role expansion. Poor staffing levels were reported by participants to represent the most significant barrier, with 85% agreeing or strongly agreeing with this statement. This finding is supported in the wider literature
and is associated with concerns regarding the cost of replacing staff during periods of study leave (Larsen 2004, Bradley et al. 2005). This problem is compounded by reduced staffing levels due to cuts in services (Larsen 2004, Bradley et al. 2005). Bradley & Nolan (2007) warn that overloading the nursing role will lead to burn out. Indeed, in the current study participants were in agreement (80%) that the increase in workload represented an additional barrier and there is widespread agreement with this in the literature (McCann & Baker 2002, Lewis-Evans & Jester 2004, Bradley et al. 2005, Courtenay & Berry 2007, Carey et al. 2009).

Lockwood (2005) found that a fear of legal consequences and the fact that nurse prescribing was not established in Ireland represented the most significant barrier to nurse prescribing with 89% of participants in agreement with these statements. While participants in the current study found both of these to remain a barrier to nurse prescribing there has been a notable reduction in the strength of agreement, which may be attributed to the development of nurse prescribing in Ireland since its inception.

Increased responsibility without sufficient pay was cited by 83% of participants in the current study as representing a barrier to nurse prescribing. Lockwood (2005) found a much lower level of participants (68%) citing this as a barrier to nurse prescribing. Indeed a study by Courtenay & Berry (2007) only found 40% of participants citing this as a disadvantage. It is interesting to note that participants in Drennan’s study cited lack of additional pay as one of the reasons they had undergone nurse prescribing training and then failed to use their qualification (Drennan et al. 2009). This increase in attitudes in the current study may be driven by the current economic climate where health
services are demanding more from healthcare professionals against a background of job losses and salary cuts (McGreevy 2010).

Additional barriers to nurse prescribing included role conflict between peers, lack of communication, inadequate training and lack of support systems. Facilitators to role expansion into nurse prescribing included good working relationships, mutual trust and effective communication between the interdisciplinary team members (Bradley & Nolan 2007, Pontin & Jones 2007, Carey et al. 2009). Developing a supportive environment is the key to influencing behaviour in practice (Ajzen 2005, Perkins et al. 2007).

5.8 Support and Resistance

In order for new roles to be successfully implemented in practice, support systems must be in place. Lack of support systems can act as a barrier towards role expansion (Drennan et al. 2009). Participants in the current study were asked to rate their attitudes towards support from nursing management, medical and nursing colleagues and whether these represented a barrier to nurse prescribing. Participants showed variance in their attitudes towards all three groups. Support from nursing management was seen as the most significant barrier to undertaking nurse prescribing. Sixty percent of participants agreed or strongly agreed that lack of support from nursing management would represent a barrier to role expansion into nurse prescribing. Sixteen percent provided no opinion and 24% of participants did not feel that lack of support from nursing management would represent a barrier. Lockwood (2005) found a similar result with 54% of participants citing lack of support from nursing management, as representing a barrier. These findings are not surprising; in order for a nurse to proceed
to train as a RNP they must liaise with their manager to gain their support prior to application. The wider literature has found that support from nursing management is essential and without this conflict can occur (Drennan et al. 2009, Wells et al. 2009).

Support from medical colleagues revealed variance in the responses from participants. Fifty six percent of participants cited lack of support from their medical colleagues as representing a barrier to nurse prescribing. A higher percentage was cited by the participants (69%) in the study conducted by Lockwood (2005), this may be due to the fact that Clinical Nurse Specialists would have closer working relationships with their medical colleagues and therefore, would place a higher level of importance in gaining their support. The additional qualitative comments obtained in the current study highlighted support from doctors to be of particular importance. Indeed, the literature suggests that good working relationships with medical colleagues, enhances teamwork and credibility (Pritchard & Kendrick 2001, Carr et al. 2002, Lewis-Evans & Jester 2004, Carey et al. 2009).

Fifty five percent of participants in the current study disagreed or strongly disagreed that lack of support from nursing colleagues represented a barrier to nurse prescribing. However, 34% of participants felt it did represent a barrier to nurse prescribing. This is in contrast to the findings in the literature, where lack of support from nursing colleagues is found to be a barrier to nurse prescribing (Otway 2001, Lockwood & Fealy 2008). Despite overall attitudes towards nurse prescribing being positive, there is obvious difference of opinions among the participants of the current study. In order for new roles to be implemented successfully in practice support systems must be in place.
Support is a broad concept found in the literature and can range from formal supports such as, employing organisations and commissioning bodies, to more informal support systems such as colleagues. Support is a vital component when any change occurs in traditional work practice and role expansion into nurse prescribing is seen as a development of the traditional nursing role (Nolan et al. 2001, Ryan-Woolley et al. 2008). Ascertaining participants attitudes and their perceived barriers to nurse prescribing, provides insight into intended behaviour (Ajzen 2005, Perkins et al. 2007). While barriers will always exist in practice an individual will weigh up the advantages and disadvantages to role expansion. An individual may possess positive thoughts and beliefs but they require support systems in place to overcome barriers. Nurses who have already undergone the training to become a RNP should promote their role in a positive light as this can assist in developing a positive work environment. Without such systems resistance from healthcare professionals may occur.

The literature can offer some explanation for resistance from healthcare professionals, including a lack of understanding of the role and blurring of role boundaries (Carr et al. 2002, Wells et al. 2009, Stenner et al. 2010). When examining the understanding of the nurse prescribing role there was evidence that of a lack of clarity can act as a barrier towards nurse prescribing, with 74% of participants agreeing or strongly agreeing that this would represent a barrier towards nurse prescribing. Lockwood (2005) also found that 79% of participants to agreed or strongly agreed that a lack of knowledge of nurse prescribing would represent a barrier. Drennan et al. (2009) found that although overall attitudes were positive towards nurse prescribing, there was evidence of resistance from pharmacists. The qualitative comments of Drennan’s study added insight into this stating that education of pharmacists assisted in resolving resistance (Drennan et al. 2009).
Indeed the wider literature has documented resistance from pharmacists, doctors and nurses conceding that confusion of roles can disrupt team functioning (Hay et al. 2004, Gray et al. 2005, Lloyd & Hughes 2007). Greater exposure to nurse prescribing alongside education and training can have a direct impact on support for new roles (Considine & Martin 2005).

The majority (75%) of participants in the current study did not view role expansion into nurse prescribing as taking on a doctor’s role. However, evidence suggests that role development into an area that was traditionally the domain of medicine can result in blurring of roles and can lead to resistance in practice. Several studies have warned of the danger that role expansion could lead to the medicalization of nursing and in turn the essence of nursing as a caring profession could be lost (Tye & Ross 2000, Harrison 2003). The Irish Nursing Board would contest this notion and emphasises that the decision to expand practice should be driven by desire to become a more holistic practitioner (An Bord Altranais 2010). Resistance from healthcare professionals has been reduced where good communication processes and an understanding of the role exists (Stenner & Courtenay 2008). Indeed when this occurs, nurses’ credibility with other healthcare professionals has been shown to rise (Bradley & Nolan 2007).

5.9 Conclusion

The current study has shown that overall emergency nurses’ attitudes are positively disposed to nurse prescribing. It has highlighted the potential barriers, as perceived by the participants and this has allowed for deeper understanding. As nursing roles develop to meet patient and service need, it is vital to have an understanding of emergency
nurses’ attitudes towards role expansion in, and barriers to, nurse prescribing. Evidence suggests that attitudes of nurses’ can have a direct impact on the development of nursing roles. It is only by identifying potential barriers that strategies can be planned to overcome them. Nurse prescribing has been shown internationally to have many benefits to patients, nurses’ and services.

The results obtained are consistent with both national and international studies and the findings have implications for education, practice and service management. Nurse prescribing provides emergency nurses with the opportunity to expand their professional practice. However, the decision to expand practice must be driven by a desire to improve patient care. The findings from the current study have provided insight into nurse prescribing from the emergency nurses’ viewpoint.

It is clear that role expansion in nursing has occurred in response to professional, political, economic, social and technological issues. The main aim of implementing nurse prescribing is to improve patient care while providing a quality cost effective service that is acceptable to patients. The United Kingdom is the only other country that shares the same entry requirements to the prescribing programme as Ireland. Initially, the United Kingdom aimed to train all nurses as prescribers. However, this has not been the case and the government have changed their recommendations stating that nurses entering the prescribing programme should be carefully selected by their nursing managers. This change occurred as a result of rising numbers of nurses entering the prescribing programme and then not using their qualification. Data is already emerging from an Irish perspective that a similar pattern is occurring. Therefore, the writer would contend that the entry criteria to the prescribing programme in Ireland warrants review.
Indeed, the majority of participants in the current study and international literature contend that nurse prescribing should be aimed at senior nursing grades.

As the prescribing programme expands in Ireland, caution must be exercised to ensure the new centres have the same access to specialists in pharmacology and medicine required. Otherwise a similar picture to the United Kingdom may develop, with variance being reported on the pharmacological content and the level of workload required for the prescribing programme. Nurse prescribing provides nurses the opportunity to broaden their scope of practice and in turn increase their autonomy. For this to occur, support systems must be in place. The following chapter will provide the recommendations for practice and draw conclusions.
6.0 Chapter 6 Conclusion and Recommendations

6.1 Introduction

The current study set out to explore emergency nurses’ attitudes towards nurse prescribing and also to elicit their attitudes towards the potential barriers to nurse prescribing. The findings suggest that overall emergency nurses are positively disposed towards nurse prescribing in terms of future role expansion. The current study highlights emergency nurses’ attitudes towards potential barriers and provides an insight into these. The writer would argue that role expansion into nurse prescribing has the ability to meet patient and service need. However, the entry requirements into the prescribing programme may require review and the nurse prescribing initiative should be aimed at senior nurses with more experience, to ensure its success.

The objective of this chapter is to reflect on the findings of the current study and to consider the studies strengths, as well as, its limitations. The implications for nursing practice, education and management will be addressed and recommendations for future research will be outlined. Dissemination of the findings will be presented and the writer will include a personal reflection on the research process as a whole. Final conclusions will then be drawn.

6.2 Research Question

The research question for the current study was: “What are Irish emergency nurses’ attitudes towards role expansion in, and barriers to, nurse prescribing?”
The aims and objectives of the study were:

1. To ascertain emergency nurses attitudes towards role expansion into nurse prescribing.
2. To determine emergency nurses attitudes towards potential barriers to nurse prescribing, as a future role expansion.
3. To establish any significant differences between nurses regarding their attitudes towards role expansion into nurse prescribing.
4. To determine any significant differences between nurses regarding their attitudes towards potential barriers to nurse prescribing, as a future role expansion.

6.3 Strengths and Limitations

The findings of the current study can be viewed as one of the studies strengths, as it is the first study of its kind in the Irish healthcare setting. The response rate obtained for the current study was 88% which is considered a high response rate for the research methodology used. As the study sample was relatively small it allowed the study to be completed within a limited time frame. Therefore, an obvious strength is that it allowed the research question to be answered in a short time frame. As the writer aims to publish the studies findings it also reduces the time delay between conducting the research and dissemination of the findings.

Although the current study has provided useful data the limitations of the study must be borne in mind when interpreting the findings. This is a small scale study which aimed to uncover emergency nurses’ attitudes towards nurse prescribing and also to elicit their attitudes towards the potential barriers to nurse prescribing. The relatively small sample
size used within the current study precludes generalisation of the studies findings beyond the study population. The findings are not representative of nurses from any other speciality nor indeed do they relate to any other healthcare profession. However, the findings are comparable to those identified in other specialities where nurses prescribe medications. The main reason for limiting the scale of the study was due to the budgetary and time constraints of the writer. The writer felt that conducting a large scale study was outside the scope of a novice researcher. There is also potential for bias as the writer works in the area the study was conducted in. Methods to reduce this and other methodological weaknesses have been outlined in detail in the methodological section of the current study.

6.4 Implications for Nursing Practice

The findings suggest that overall emergency nurses’ attitudes are positive towards role expansion into nurse prescribing. Furthermore, overall emergency nurses were in agreement that potential barriers to nurse prescribing existed. One of the findings from the current study suggests that support is central to the implementation of new nursing roles. Support from nursing management, medical and nursing colleagues was viewed as essential. Therefore, qualified nurse prescribers should act as role models to promote and encourage nurses who express an interest in expanding their role by becoming a RNP. Nurses ought to ensure they are fully informed of the requirements and course content prior to entering the course. RNP’s should provide clarification and education about their role and responsibilities within the multidisciplinary team to assist in the elimination of resistance. The RNP is required to audit their practice, dissemination of the findings within the multidisciplinary team may also help to dispel resistance and foster an environment of communication and support. Nurse prescribing has been
shown to have many benefits and can enhance patient care. Therefore, it is essential that its implementation is planned carefully to ensure its success.

6.5 Implications for Nursing Education

The educational content of the nurse prescribing programme in UK has been shown to have discrepancies across different Trusts. Therefore, as the nurse prescribing programme expands in Ireland the regulation of the programme content needs to be closely monitored, to ensure continuity. Nurses need to be fully aware of the workload and academic requirements prior to commencing the prescribing programme. The findings of the current study suggested that over one third (38%) of participants did not feel educationally competent to nurse prescribe. It could be argued that the education programme will redress this but the writer would contend that this finding should be given serious consideration, as nurses must be able to complete the educational programme. Findings from the current study also noted that 26% of participants did not feel clinically competent to nurse prescribe. The writer would contend that although the nurse prescribing programme teaches clinical examination skills, participants may have felt that they required further experience before undertaking this aspect of role expansion. Future nurse prescribers may be required to mentor nurse prescribers during their training. Therefore, they must have the ability to act in this capacity. A requirement of qualified RNP’s is to conduct audits of their practice, this may require new skills on the part of the RNP and organisations must support the RNP in this. Continuing professional development is a requirement laid down by the Irish Nursing Board for all RNP’s and they may be required to provide evidence of this in the future. Nurses are the one constant in the patient’s journey in the healthcare system and nurse prescribing will enable nurses to educate their patients to a higher level. Nurse
prescribing is a complex role development which will enable the nurse to work in a different way, therefore serious consideration of this should be done prior to undertaking the educational programme.

6.6 Implications for Nursing Management

The findings from a UK perspective have shown that there are a large number of nurses training to prescribe medications and not using their qualification, and a similar pattern is beginning to emerge in Ireland. Therefore, nursing management should carefully select nurses to train as RNP’s. They should ensure each nurse is fully informed of the workload required and possesses the ability to study at degree level. Support from nursing management was cited by participants as particularly important. If nurse prescribing is going to be implemented into practice, nurse managers must ensure support systems are in place. The granting of study leave is individual to each healthcare organisation and should this be approved it will require nursing management to incorporate this into work rotas. Clinical supervision hours during the education programme may require nursing management to rearrange current work practices. Indeed, once the nurse becomes a RNP, nursing management will have to consider working arrangements as the RNP will require protected time to participate in audit. In order for nurse prescribing to succeed nursing managers will have to provide a supportive environment which is key to its successful implementation.

6.7 Recommendations for Future Research

As nurse prescribing is a relatively new phenomenon in Ireland there is a huge gap in the literature from an Irish perspective. As nurse prescribing is well established in the
UK the writer has looked at the UK literature for guidance on research priorities. A nationwide study is needed to ascertain nurses’ attitudes to role expansion into nurse prescribing, from an Irish perspective. The information yielded from this would allow the findings to be generalised to the population and this would inform the development of the prescribing initiative in Ireland. As the national independent review of nurse prescribing was published two years after nurse prescribing commenced, the writer would suggest that a similar review should be conducted to allow comparison of the findings, as nurse prescribing becomes more established. More in-depth research is needed to ascertain why nurses are qualifying as RNP’s and then not using their qualifications. Otherwise nurse prescribing will fail to provide a cost effective service to patients. Research is needed to understand the decision making process used by RNP’s. Research is also needed to ascertain if the entry criteria to the nurse prescribing programme require review. The findings of the current study suggest that emergency nurses felt nurse prescribing should be available to all specialities. However, participants felt it should be restricted to more senior grades. It is vital that the development of nurse prescribing in Ireland be guided by research. The writer would argue that research needs to be conducted using both qualitative and quantitative methodologies, indeed the former may yield richer findings and offer more in-depth understanding to the more complex areas.

6.8 Dissemination of Findings

The dissemination of findings from a research study is often overlooked and is an essential component of the research process. Findings from the current study will be presented at local level within the department where the research took place. As the current study received funding, the findings will be presented at the hospitals annual
general meeting. The findings will also be disseminated at local, national and international conferences. A copy of the completed research will be placed in the library of the university affiliated with this Masters programme and in the writer’s place of work. The writer also hopes to publish the findings of the current study in an international nursing journal.

6.9 Personal Reflection

Reflective practice is a common theme found in nursing literature today and has been implemented into nurse-training programs in Ireland (Nicholl & Higgins 2004). An Bord Altranais regulates the nursing profession in Ireland and identifies that nurses need to become reflective practitioners. In order to achieve competence in a new area of practice nurses must acquire the skills of problem solving, critical analysis, decision-making and reflective skills and abilities, which are essential to nursing. The aim of reflecting on practice is to stimulate personal and professional growth, with an aim to bridge the theory practice gap (Kinsella 2007).

It is with this in mind that the writer felt it essential to reflect on the journey of writing the thesis. During the past two years the writer maintained a journal documenting the research process. The choice of topic posed challenges for the writer due to the paucity of research available. However, the paucity of research also provided the writer the opportunity to add to the body of knowledge from an Irish perspective. Ideally the writer would have liked to conduct the research in more than one setting. But due to budgetary and time constraints a single research site was selected. This allowed the writer to concentrate on the research process as a whole.
Overall, the thesis process was a positive educational experience. Aside from the educational benefits, the process also proved to enhance the writer’s work ethic. The writer was provided with submission dates for each section and this assisted in setting goals. The writer feels this experience will be instrumental in career development and help to set her apart from her nursing peers.

6.10 Conclusion

Findings from the current study indicate that overall emergency nurses perceive role expansion into nurse prescribing, as a positive step. Although emergency nurses possess positive attitudes towards nurse prescribing, as a future role expansion, organisations must be committed and provide a supportive environment. The current study has uncovered the potential barriers to nurse prescribing as perceived by emergency nurses, and these must be borne in mind when services plan to initiate nurse prescribing. Initially when nurse prescribing commenced it was the ‘high flying’ specialist nurse whom undertook training. Therefore, the findings of the Irish evaluation of the prescribing programme deeming it a success, must be viewed with caution. As the numbers of nurses entering the prescribing programme increase, employers will need to offer guidance to prospective applicants, to ensure nurses entering the programme are suitable. Indeed nurses choosing to develop their role in this way should be fully aware of the skills and qualities required to undertake this expanded role. Academic centres should provide clear guidance to prospective students on the level of workload expected during the programme, to assist in minimising expensive and damaging drop-out.
Further research is needed into nurse prescribing as there were methodological weaknesses identified and under researched areas that exist. While the present study is relatively small the findings have implications for nursing practice, education and management. The findings of the current study offer insight into nurse prescribing, as a future role expansion and identify the potential barriers that may exist in practice. It is vital to have an awareness of potential barriers that may prevent the successful implementation of nurse prescribing, so strategies can be planned to overcome them.

The findings of the current study are to be confined within the studies limitations, which are clearly set out. The implications and recommendations for nursing practice, education and management are considered. The writer put forward the methods for dissemination of the studies findings. Ultimately, the aims and objectives of the current study have been achieved and the research question has been answered. It has been established that overall emergency nurses possess positive attitudes towards nurse prescribing as a future role expansion. While potential barriers exist, these can be overcome with improved collaboration, communication and education amongst the multidisciplinary team. Nurse prescribing has the potential to improve patient care by improving their access to medication and its management. It will also allow multidisciplinary teams to work collaboratively towards the goal of patient centred care.
Reference List


Health Service Executive (2010a) Health Stat Dashboard XXX Hospital, April 2010. Health Service Executive, Dublin. (Online) Available at: http://www.hse.ie/eng/staff/Healthstat/hospitalresults/xxx/April_2010_XXX.pdf


Appendix 1

Research Timescale
Appendix 2

Research Budget
## Research Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poster</td>
<td>€85.00</td>
</tr>
<tr>
<td>Paper x 2 boxes</td>
<td>€24.98</td>
</tr>
<tr>
<td>Envelopes x 200</td>
<td>€32.00</td>
</tr>
<tr>
<td>Ink x 3</td>
<td>€88.50</td>
</tr>
<tr>
<td>Memory Stick</td>
<td>€22.00</td>
</tr>
<tr>
<td>Inter Library Loans</td>
<td>€28.00</td>
</tr>
<tr>
<td>Thesis binding 4 copies</td>
<td>€250.00</td>
</tr>
<tr>
<td>Nursing Research Conference</td>
<td>€60.00</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>€590.48</strong></td>
</tr>
</tbody>
</table>

Please note the researcher will be conducting this research on their own time. The researcher will use their personal computer and printer.
Appendix 3

Literature Grid
<table>
<thead>
<tr>
<th>Authors</th>
<th>Study aims/results</th>
<th>Methodology and Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larsen 2004</td>
<td>This study was undertaken to uncover factors that influenced ED’s, minor injury units and walk in centres on sending nurses to complete the prescribing course. It also examined nurses who had completed the course to establish if they were using their new qualification in everyday practice.</td>
<td>A descriptive quantitative research design using a self-completion postal questionnaire sent to 307 units. A total of 316 questionnaires were sent out yielding a response rate of 75%.</td>
</tr>
<tr>
<td>Berry et al. 2006</td>
<td>Attitudes and information needs of the public in relation to supplementary nurse prescribing. Public had confidence in nurse prescribing but wanted more information on medicines, especially on their side effects.</td>
<td>Questionnaire completed by a convenience sample of 74 members of the UK public (they had no previous experience of nurse prescribing).</td>
</tr>
<tr>
<td>Carey et al. 2007</td>
<td>This study explores the prescribing practices of supplementary nurse prescribers who prescribe for patients with dermatology conditions. A minority of the nurses used supplementary prescribing. Lack of peer support and management structures, alongside doctors and pharmacists understanding of the role are cited as the barriers to implementing supplementary prescribing.</td>
<td>A quantitative research design using a self-completed postal questionnaire was given to a convenience sample of 580 nurses, with a response rate of 89%.</td>
</tr>
<tr>
<td>Lockwood &amp; Fealy 2008</td>
<td>This study was conducted on clinical nurse specialists in Ireland to uncover their attitudes to nurse prescribing and identify perceived barriers to this role expansion.</td>
<td>A quantitative research design using a survey questionnaire was administered to a simple random sample of 283 nurses, with a response rate of 64%.</td>
</tr>
</tbody>
</table>
Appendix 4

Lockwood (2005) Original Questionnaire
SURVEY ON THE ROLE OF FUTURE NURSE PRESCRIBING  This short questionnaire seeks information from you on your current practice and your views in relation to nurse prescribing as a future role expansion. This survey is anonymous. You need not include your name when completing the questionnaire.

Section A: Below is a list of possible barriers to nurse prescribing. From the list, please tick [✓] the appropriate box which best reflects the extent to which you disagree/agree with each statement. Please tick [✓] one box only for each statement.

<table>
<thead>
<tr>
<th>Barriers to nurse prescribing</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of financial support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of knowledge of nurse prescribing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not an established practice in Ireland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of support from nursing management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of support from medical colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of Remuneration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of the legal consequences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section B: Clinical Nurse Specialists attitudes towards nurse prescribing as a future role expansion

Below is a list of statements about the nurse prescribing role. From the list, please tick $[\checkmark]$ the appropriate box which best reflects the extent to which you agree/disagree with each statement. Please tick $[\checkmark]$ one box only for each statement.

<table>
<thead>
<tr>
<th>Attitudes Toward Nurse Prescribing</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My role has expanded significantly since my qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse prescribing is taking up doctors’ roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse prescribing would take from essential nursing care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse prescribing would be for the specialist practice nurse only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse prescribing would support my professional development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse prescribing would greatly enhance the delivery of holistic nursing care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The issue of nurse prescribing has occurred as a result of a service need</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse prescribing should be for every grade of nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not feel educationally competent to nurse prescribe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not feel clinically competent to nurse prescribe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses should not prescribe medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please provide any comments on what developments, if any, you would like to see in relation to nurse prescribing.

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________
Section C: To indicate your chosen response to each item, please insert a tick [✓] in the appropriate box.

<table>
<thead>
<tr>
<th>1. Gender</th>
<th>tick[✓] one box only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Age</th>
<th>tick[✓] one box only</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td></td>
</tr>
<tr>
<td>31-40</td>
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<td>41-50</td>
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<tr>
<td>51-60</td>
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</tr>
<tr>
<td>61-65</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Professional Qualifications: (Please tick as many as appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGN</td>
</tr>
<tr>
<td>RM</td>
</tr>
<tr>
<td>RSCN</td>
</tr>
<tr>
<td>RPN</td>
</tr>
<tr>
<td>RMHN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Qualifications (please tick appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB Courses</td>
</tr>
<tr>
<td>Certificate Courses</td>
</tr>
<tr>
<td>Diploma (s)</td>
</tr>
<tr>
<td>Higher Diplomas</td>
</tr>
<tr>
<td>Degree</td>
</tr>
<tr>
<td>P.G.diploma</td>
</tr>
<tr>
<td>MSC</td>
</tr>
<tr>
<td>Other (Please Specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Time since initial qualification obtained.</th>
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</thead>
<tbody>
<tr>
<td>tick[✓] one box only</td>
</tr>
<tr>
<td>- 1 yr</td>
</tr>
<tr>
<td>1-5 yrs</td>
</tr>
<tr>
<td>6-10 yrs</td>
</tr>
<tr>
<td>11-15 yrs</td>
</tr>
<tr>
<td>16-20 yrs</td>
</tr>
<tr>
<td>20 yrs +</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.a Do you work in a hospital/area that trains pre-registration nursing students?</th>
</tr>
</thead>
<tbody>
<tr>
<td>tick[✓] one box only</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Do you work in a hospital/area that trains post-registration nursing students?</th>
</tr>
</thead>
<tbody>
<tr>
<td>tick[✓] one box only</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. In which area do you currently work as a Clinical Nurse Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>tick[✓] one box only</td>
</tr>
<tr>
<td>Medical</td>
</tr>
<tr>
<td>Surgical</td>
</tr>
<tr>
<td>Emergency</td>
</tr>
<tr>
<td>Geriatric</td>
</tr>
<tr>
<td>Sexual Health</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

Thank you Very Much For Your Help!
Appendix 5

Ethical Committee Approval

(Please note this has been edited to protect the organisations identity)
Mrs. Michelle Hogan

July 21st 2016

Please quote this reference in any follow up to this letter: 2016/07/22 Chairman’s Action

Re: What Are Irish Emergency Department Nurses Attitudes Towards Role Expansion into Nurse Prescribing?

Dear Michelle,

Thank you for your recent submission of the above proposal to the Research Ethics Committee.

The Chairman, having reviewed the proposal, has given ethical approval on behalf of the Committee.

Yours sincerely,

__________________________
Ms. ........
Secretary [Research Ethics Committee]
Appendix 6

Letter to the Director of Nursing Seeking Permission to Conduct the Research Study
Dear Director of Nursing,

I am a staff nurse in the Emergency Department and am currently undertaking an Msc in Nursing in the Royal College of Surgeons in Ireland. In part fulfilment of this programme I am required to complete a research project.

I have chosen to explore emergency nurses’ attitudes towards role expansion into nurse prescribing. To conduct this study I propose giving a questionnaire to a random sample of emergency nurses working in the Emergency Department.

I am writing to you to seek permission to carry out this study.

I have obtained ethical approval from the hospitals ethics committee. I assure you that anonymity and confidentiality of the participants will be protected at all times. Furthermore, any future publication of the research findings will not identify the participants or the organisation in any way.

I would be most grateful for your permission to conduct this research. A copy of the research proposal is available from me. Should you require any further information, please do not hesitate to contact me on XXX.

Yours Sincerely,

_______________________

Michele Hogan
Appendix 7

Permission from the Director of Nursing
Office of the Director of Nursing

13th November 1989

Ms. Michele Hogan,

Re: MSc Nursing research

Dear Ms. Hogan,

I acknowledge receipt of your letter dated 15th November in relation to your proposed research as part of your MSc in Nursing in the Royal College of Surgeons in Ireland.

I can confirm that you have my permission to conduct your research by way of questionnaire in the Emergency Department.

Yours sincerely,

[Signature]

Director of Nursing

[Handwritten Name]
Appendix 8

Letters to the Assistant Director of Nursing, Clinical Nurse Manager III and the Emergency Consultants
Dear Assistant Director of Nursing,

I am a staff nurse in the Emergency Department and am currently undertaking an Msc in Nursing in the Royal College of Surgeons in Ireland. In part fulfilment of this programme I am required to complete a research project.

I have chosen to explore emergency nurses’ attitudes towards role expansion into nurse prescribing. To conduct this study I propose giving a questionnaire to all the emergency nurses working in the Emergency Department.

I am writing to you to seek permission to carry out this study.

I have obtained ethical approval from the hospitals ethics committee. I assure you that anonymity and confidentiality of the participants will be protected at all times. Furthermore, any future publication of the research findings will not identify the participants or the organisation in any way.

I would be most grateful for your permission to conduct this research. A copy of the research proposal is available from me. Should you require any further information, please do not hesitate to contact me on XXX.

Yours Sincerely,

______________

Michele Hogan
Dear Clinical Nurse Manager III,

I am a staff nurse in the Emergency Department and am currently undertaking an Msc in Nursing in the Royal College of Surgeons in Ireland. In part fulfilment of this programme I am required to complete a research project.

I have chosen to explore emergency nurses’ attitudes towards role expansion into nurse prescribing. To conduct this study I propose giving a questionnaire to all the emergency nurses working in the Emergency Department.

I am writing to you to seek permission to carry out this study.

I have obtained ethical approval from the hospitals ethics committee. I assure you that anonymity and confidentiality of the participants will be protected at all times. Furthermore, any future publication of the research findings will not identify the participants or the organisation in any way.

I would be most grateful for your permission to conduct this research. A copy of the research proposal is available from me. Should you require any further information, please do not hesitate to contact me on XXX.

Yours Sincerely,

________________________

Michele Hogan
Dear Emergency Consultants,

I am a staff nurse in the Emergency Department and am currently undertaking an Msc in Nursing in the Royal College of Surgeons in Ireland. In part fulfilment of this programme I am required to complete a research project.

I have chosen to explore emergency nurses’ attitudes towards role expansion into nurse prescribing. To conduct this study I propose giving a questionnaire to all the emergency nurses working in the Emergency Department.

I am writing to you to seek permission to carry out this study.

I have obtained ethical approval from the hospitals ethics committee. I assure you that anonymity and confidentiality of the participants will be protected at all times. Furthermore, any future publication of the research findings will not identify the participants or the organisation in any way.

I would be most grateful for your permission to conduct this research. A copy of the research proposal is available from me. Should you require any further information, please do not hesitate to contact me on XXX.

Yours Sincerely,

__________________________

Michele Hogan
Appendix 9

Poster Displayed 2 Weeks Prior to the Research Study
What are Irish Emergency Nurses Attitudes Towards Role Expansion in, and barriers to, Nurse Prescribing?

A study will be commencing in your department in two weeks. A simple random sample of nurses’ working in the Emergency Department has been selected to participate in the study.

*Do you have something positive or negative to say about role expansion into nurse prescribing in the Emergency Department? If so here is your chance to give your view. A short questionnaire, which will take no longer than 10 minutes to complete will be circulated via the internal mail in two weeks time.*

This study is being conducted as part fulfilment of a Masters in Nursing in the Royal College of Surgeons in Ireland and is supervised by Dr. Zena Moore. The Hospital Ethics Committee has granted ethical approval for this study. Confidentiality and anonymity is assured to all participants. So please complete this questionnaire as honestly as possible. Please use the envelope provided to post your completed questionnaire in the confidential box, provided in your staff room. For any queries on this study please do not hesitate to contact the researcher Michele Hogan on XXX

Your Participation in this Study would be Greatly Appreciated
Appendix 10

Letter of Invitation to the Participants
Dear Prospective Participant,

I would like to invite you to participate in a study exploring the attitudes of emergency nurses towards role expansion and nurse prescribing in emergency department in Ireland.

Do you have something positive or negative to say about the role expansion and nurse prescribing in the Emergency Department? If so here is your chance to give your view. Please complete this short questionnaire, which will take no longer than 10 minutes to complete.

This study is conducted as part of a Masters in Nursing in the Royal College of Surgeons in Ireland. Both the University and Hospital have granted ethical approval for this study. Confidentiality and anonymity is assured to all participants. So please complete this questionnaire as honestly as possible. Please use the envelope provided to post your completed questionnaire in the confidential box provided in your staff room. For any queries on this study please do not hesitate to contact the researcher on XXX.

Your participation in this study would be greatly appreciated.

Yours Sincerely,

Michele Hogan

The Researcher
Appendix 11

Information Letter to the Participants
Dear Participant,

Many thanks for choosing to complete this questionnaire. Your opinions and attitudes towards Emergency Department staff nurse roles are invaluable. Remember this questionnaire is anonymous so please answer honestly. The questionnaire should take no longer than ten minutes of your time to complete. Please complete sections A, B and C.

Once completed please place the questionnaire in the envelope provided and deposit it into the sealed box. This is provided in your Emergency department staff room.

Thanking you,

Michele Hogan

The researcher
Appendix 12

Poster Displayed During the Research Study
A study has commenced in your department. A simple random sample of nurses’ working in the Emergency Department has been selected to participate in the study.

*Do you have something positive or negative to say about role expansion into nurse prescribing in the Emergency Department? If so here is your chance to give your view. A short questionnaire, which will take no longer than 10 minutes to complete has been circulated via the internal mail to the selected participants in your department. Please note random sampling has been used to select the participants.*

This study is being conducted as part fulfilment of a Masters in Nursing in the Royal College of Surgeons in Ireland and is supervised by Dr. Zena Moore. The Hospital Ethics Committee has granted ethical approval for this study. Confidentiality and anonymity is assured to all participants. So please complete this questionnaire as honestly as possible. Please use the envelope provided to post your completed questionnaire in the confidential box, provided in your staff room. For any queries on this study please do not hesitate to contact the researcher Michele Hogan on XXX

Your Participation in this Study would be Greatly Appreciated
Appendix 13

Reminder Letter
Dear Prospective Participant,

I would like to remind you of a study taking place within your department exploring the attitudes of emergency nurses towards role expansion into nurse prescribing. The researcher has previously invited you to participate in this study and would like to inform you that there is only two weeks remaining to partake in this study. Should you have mislaid your questionnaire, I have provided additional questionnaires beside the sealed box, for your convenience. If you have already participated in this study I would like to take this opportunity to thank you again.

Do you have something positive or negative to say about role expansion and nurse prescribing in the emergency department? If so here is your chance to give your view. Please complete this short questionnaire, which will take no longer than 10 minutes to complete.

This study is conducted as part of a Masters in Nursing in the Royal College of Surgeons in Ireland. The hospital has granted ethical approval for this study. Confidentiality and anonymity is assured to all participants. So please complete this questionnaire as honestly as possible. Please use the envelope provided to post your completed questionnaire in the sealed box provided in your staff room. For any queries on this study please do not hesitate to contact the researcher on XXX.

Your participation in this study would be greatly appreciated.

Yours Sincerely,

Michele Hogan

The Researcher
Appendix 14

Permission from Lockwood to use the Questionnaire
Emily Lockwood  
Advanced Nurse Practitioner  
Emergency Department  
Waterford Regional Hospital  
Co. Waterford.

1st April 2010

To Whom It May Concern:

This is to confirm that I authorise Michele Hogan to use Lockwood’s “Barriers and Attitudes to Nurse Prescribing Questionnaire” in her dissertation at the Royal College of Surgeons in Ireland. She is free to place it in an attachment within the dissertation, as long as the original author is acknowledged.

Yours Sincerely,

Emily Lockwood
Appendix 15

Amended Questionnaire used for this Research Study
Section A: Demographic, Academic and Professional Profile

Please answer the following questions as they apply to you and your employment. Where indicated please tick the appropriate box.

1. Please indicate you gender
   Female  ☐                      Male  ☐

2. What is your age?
   21-30  ☐                       51-60  ☐
   31-40  ☐                       61-65  ☐
   41-50  ☐

3. Please state your professional qualifications; you may tick as many as held.
   Registered General Nurse  ☐
   Registered Midwife  ☐
   Registered Psychiatric Nurse  ☐
   Registered Children’s Nurse  ☐
   Registered Nurse Intellectual Disability  ☐

4. Please tick the academic qualifications you currently hold.
   Certificate  ☐
   Diploma  ☐
   Higher Diploma  ☐
   Post Graduate Diploma  ☐
   Bachelors Degree  ☐
   Masters Degree  ☐
   PhD  ☐
   Other (Please state) _________________________
5. Please state length of time qualified.

1-5 years □ 16-20 years □
6-10 years □ > 20 years □
11-15 years □

6. Please state length of time working in emergency nursing.

__________________________

PLEASE TURN OVER
Section B: Barriers to Nurse Prescribing

Below is a list of possible barriers to nurse prescribing. From the list, please tick the appropriate box which best reflects the extent to which you agree or disagree with each statement. Please tick only one box for each.

<table>
<thead>
<tr>
<th>Barriers to Nurse Prescribing</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lack of financial support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lack of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Lack of knowledge of nurse prescribing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Lack of experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Not an established practice in Ireland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Lack of support from nursing management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Lack of support from medical colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lack of support from nursing colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLEASE TURN OVER
### Barriers to Nurse Prescribing

<table>
<thead>
<tr>
<th>Barriers to Nurse Prescribing</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Fear of legal consequences</td>
<td></td>
<td></td>
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<tr>
<td>10. Added workload</td>
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<td></td>
</tr>
<tr>
<td>11. Poor staffing levels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Lack of additional pay for additional responsibility</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

13. Other (please specify)

________________________________________________________________________________________

________________________________________________________________________________________
Section C: Emergency Department Nurses’ Attitudes towards Nurse Prescribing as a Future Role Expansion.

Below is a list of statements about the nurse prescribing role. From the list, please tick the appropriate box which best reflects the extent which you agree or disagree with each statement. Please tick only one box for each. Please turn over for final question.

<table>
<thead>
<tr>
<th>Attitudes Toward Nurse Prescribing</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>1. My role has expanded significantly since my qualification</td>
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<td>2. Nurse prescribing is taking on a doctors role</td>
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<td>3. Nurse prescribing would take me from essential nursing care</td>
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<td>4. Nurse prescribing should only be for specialist nursing practice</td>
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<td>5. Nurse prescribing would support my professional development</td>
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<td>6. Nurse prescribing would greatly enhance the delivery of holistic nursing care</td>
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<td>7. The issue of nurse prescribing has occurred as a result of service need</td>
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<td>8. Nurse prescribing should be for every grade of nurse</td>
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<td>9. I do not feel educationally competent to nurse prescribe</td>
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<td>10. I do not feel clinically competent to nurse prescribe</td>
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<td>11. Nurses should not prescribe medication</td>
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</table>
12. Please provide any additional comments on what developments, if any, you would like to see in relation to nurse prescribing.


THANK YOU SO MUCH FOR TAKING TIME TO COMPLETE THIS SURVEY