

**An Action Research Study of Nurses' Provision of the Health Information and
Advice Aspects of Telehealth Nursing in Ireland**

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Introduction

It is recognised that nurses are playing an integral role in delivering health information and advice to patients and their carers in their daily practice. The aims of this telehealth nursing study are: first, to improve an aspect of Irish nurses' practice regarding the provision of remote health information and advice to the public by Irish Accident and Emergency nurses; second, to involve a group of Irish nurses to bring about change in their work place. The main objectives which have emerged as essential for this study to achieve its stated aim are, firstly to identify and describe the way in which Irish nurses currently provide remote health information and advice. Secondly, is to identify existing and international guidelines governing the practice of providing remote health information and advice. Thirdly, our study will elicit the barriers which impede and the factors which facilitate the implementation of telehealth nursing in Ireland. Growing out of this, we will examine what actions are required to establish the best standards of practice. We will then move on to develop, with the aid of Accident and Emergency nurses, an information package which can be used as a guide for the practice of giving remote health information and advice.

Background

Telehealth nursing can be defined as the use of information and telecommunications technology in the delivery of remote nursing services such as providing health information and advice, support, education, triage, referral and co-ordination of patients' care (Greenberg 2000, Wahlberg 2004, Hartford 2005, McGinley and Lucas 2006, Moehr et al. 2006, Robyn et al. 2006, Sorrells et al. 2006). For the purposes of this study, the term telehealth nursing is being used, as this term gives a broader and more inclusive picture of a number of interventions previously described under various terms such as 'telehealthcare', 'telephone nursing', 'telekidcare', 'telenursing', 'telephone advice nursing' and 'telehomecare'.

Telehealth nursing aims to remove time and distance barriers, to connect patients in their homes to health care professionals, to identify callers' health care needs, especially those suffering from chronic illness. It can prove especially useful for dealing with elderly patients or for those recently discharged from hospital care who may need particular multi-faceted treatments (Greenberg, 2009). The mechanism for delivering health information and advice using telehealth nursing service innovation varies. Some programs use single-line phone-video systems, wireless satellite technology or dedicated high-speed lines, while others use internet networks and point-to-point connections that link major hospitals to smaller hospitals, clinics, community health centres, or school-based clinics (Sorrells et al., 2006).

Significance of and Rationale for the Study

According to the Department of Health and Children (2007), the population of Ireland is growing rapidly and has increased by almost 16% in the last decade (DoHC, 2007). The number of people over the age of 65 is projected to increase by about 80% to over 800,000 people between 2007 and 2025 (DoHC, 2007). According to the Central Statistic Office in Ireland, about 467,900 persons

(11.0% of the total population of 4.2 millions) were aged 65 & over in 2006 and the number of people aged 65 & over has increased by 54,000 persons in the last decade (CSO, 2007). In this context, population aging is a key feature that has clear implications for health service planning because people will require supported care as they become older, leading to a significant rise in the public health expenditure. Chronic illnesses in particular are associated with an aging population. Such illnesses are undeniably linked to attendances at a busy GPs' clinics and even hospital emergency and outpatients departments. Substantially increasing the number the number of elderly patients who can be cared by the use of telehealth nursing service has the potential to have a profound effect on the delivery and overall cost of providing a high quality service to an expanding portion of the overall population.

Indeed, conventional approaches to health and social care delivery are unsustainable, there is an ever-intensifying pressure to use information and telecommunication technology for planning, monitoring, reforming and modernising the Irish health services (DoHC, 2009). In Ireland, as in other countries such as the United States of America (USA), the United Kingdom (UK), Canada, Australia and Sweden, the development of information and telecommunication technology, including telehealth services such telemedicine and telehealth nursing, have been considered pivotal to achieving the vision and the expectations of the Irish health care system. To date, it is not yet clear to what extent telehealth nursing substitutes for rather than augments existing systems of delivering health care. So far there is a dearth of Irish research and detailed studies concerning the practice of providing health information and advice aspects of telehealth nursing. There is a distinct need for clear guidelines to facilitate the safe delivery of health information and advice using telehealth nursing.

The rationale for this study concerning the use of telehealth nursing service is that this service has the potential to provide some solutions to the problems that face the Irish health care system. It may also allow more patients to be cared for in their own homes, it may advance the treatment of chronic illness, thus reducing the length of hospital stay and help to reduce hospital visits (Polisena *et al.* 2009). It can be used as a tool to provide health information and advice, educational programmes or appointment scheduling, pre-admission intake, discharge follow-up and disease management (Greenberg & Cartwright, 2001).

Literature review

Within this chapter, the researcher discussed how telehealth nursing has been implemented and is considered an effective tool to enhance the delivery of health care system in countries such as USA, UK, Canada, Australia, Sweden and Ireland. The literature review chapter has identified that nurses' practice of providing remote health information and advice is conducted on an ad hoc basis without the use of a formal paper or computerised-based guidelines. This suggests that the advice and health information given to the callers were sometimes inappropriate and potentially dangerous (Rendell 1999, Crouch et al. 2000, Andrews et al. 2002, Black 2007). To augment the information gained from the literature and to support the need for this study to be carried out, the researcher carried out a fact-finding exercise.

According to Coghlan and Brannick (2001), a fact-finding exercise is a pre-step in the action research project to understanding the context and the purpose of the project under study, and helps

to focus on the desired future steps to be undertaken. Therefore, I conducted an informal telephone interview with the Clinical Nurse Managers III (CNM III) in the Accident and Emergency departments in different rural and urban hospitals in Ireland. All the managers were contacted by telephone. Each call lasted for three to five minutes. All the managers in the A& E departments stated that there are no formal guidelines to guide nurses' practice in delivering health information and advice to the public. They also stated that this service is conducted on an ad hoc basis where the calls are answered by any nurse available and directed to the shift leader nurse or the available doctor. All the CNM III stated that, as currently operated, this service is a danger to the both the nurses and the public.

When I phoned the A&E department at one of the children's hospital in an urban area, the call was directed to an answer machine where it says that if worried about your child contact General Practitioner (GP) or visit the nearest A&E department.

Research design and methodology

The research questions for this telehealth nursing are guided by the finding of the literature review in both chapter one and two. Working with nurses, the researcher intends to explore the following:

1. How do Irish nurses give health information and advice to the public in their daily practice?
2. How can Irish nurses attempt to improve their practice of providing remote health information and advice aspects of telehealth nursing in Ireland?

This study will employ an action research strategy to best answer these research questions. The study will be carried out in two phases. Phase one where to employ an explorative qualitative methodology based on in depth interview to gain an understanding and insight to what nurses do in their work place regarding giving remote health information and advice. phase two which will employ action research methodology to solve the problem under investigation and to bring about change. This will be accomplished by employing clinical learning and appreciative inquiry methodology based on appreciative meeting for gathering data.

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