



Nursing contributions to mobilizing older adults following total hip replacement in Ireland

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KEYWORDS

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Summary Little is known on the nursing contributions to the mobilising of older adults following hip replacement surgery. This paper presents the findings from a study on nurses' views of the contributions they make to the mobilising of older patients recovering from total hip replacement. A specific focus was laid on pain management and interpersonal care. The results show that Irish nurses reject mechanistic models of care in favour of contemporary approaches. The work of other authors is discussed extensively.

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Editor's comment

This study explores nurses' perceptions related to mobilising patients. How we view patients dramatically affects the care we provide. PD

Introduction

Patterns of increased longevity contribute to the changing demographic trends of the Irish population. The [Central Statistics Office \(2004\)](#) reported that the projected life expectancy will increase by 7.4% for Irish males and 6.6% for Irish females between 2002 and 2036. Chronic pain, loss of mobility and function are the consequences of degenerative musculoskeletal conditions prevalent in the older population. Hip replacement surgery can be performed safely on adults over 65 years

old, providing excellent pain relief and improved functional outcome ([Cuttfield \(2002\)](#), [O'Brien, 2003](#)). Nursing priorities for patients recovering from hip replacement surgery are the management of pain and discomfort, impaired mobility and anxiety relating to knowledge deficit of the rehabilitation process ([Schoen, 2000](#)).

Previous research has been focussed on the experiences of the patients in relation to the physical elements such as pain management and comfort promotion and interpersonal elements such as professional characteristics and relational capacity. A third category comprised a combination of the above, relating to nurses' competencies, patient monitoring, patient safety, holistic care and ward environment. Nurses contribute to

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meeting such needs through pain management, comfort promotion, professional interpersonal relations, competent and holistic practice, patient monitoring and safety promotion. However, little is known about nurses' perceptions of their contribution to mobility rehabilitation of the patients following total hip replacement.

Pain was reported to be more intense than expected by patients following hip replacement surgery (Montin et al., 2002). Patients' willingness to become active following THR surgery is believed to be dependent upon their pain tolerance (Nussenzveig, 1999). While effective therapeutic pain management is essential for early mobilization, nurses perceive that physical outcomes can also be gained by non-therapeutic methods. Non-therapeutic methods are closely aligned to interpersonal care. However, interpersonal issues associated with the rehabilitation of mobility of patients following THR receive little attention in the literature. Insights into interpersonal issues may be gleaned from patients' accounts of their experiences of undergoing total hip replacement surgery. Findings from a qualitative study by Montin et al. (2002) suggested that it was positive interpersonal relationships, professional characteristics and nurses attentiveness to patient safety that most enhanced the rehabilitative milieu of patients recovering after hip replacement surgery.

The presence of an 'engaged' nurse was portrayed as a positive experience by the patients recovering after hip replacement surgery in a phenomenological study by Kralik et al. (1997). The qualities/characteristics of an 'engaged' nurse are acknowledgement of the physical, emotional, spiritual and environmental dimensions of the individual; uses confident, firm and supportive physical touch; displays an understanding of the patients' situation and preserves patients' dignity. The 'engaged' nurse was perceived as authentic and engaged in the patient's humanness. Patients, therefore, gained psychological comfort from being cared for by nurses with such characteristics. Relationships that allowed for the exposure of 'humanness' of both patients and nurses were acknowledged by patients. Authentic demeanour and capacity to display happiness and cheerfulness influences not only the nurse-patient relationship but also that of family members. Consulting with patients about the planned nursing care provided the patient with a sense of control. Informing the patients of the plan of care for the day was important because they were eager to understand what was expected of them. Female patients felt particularly vulnerable when feeling unwell and unsafe when mobilizing alone. Close monitoring by nurses

therefore comforted patients. Nursing care arises therefore from biophysical and interpersonal needs of the patient. The studies highlight how the relational capacity of the nurse plays a major role in promoting the well-being of patients. Despite the limitations of the small sample size ($n = 9$) the studies reviewed support DeSouza (2002) contention that the concept of nursing care must be described with a focus on the patient as a whole person.

However, a question arises as to whether nurses value the contribution of physical and interpersonal care to patients and whether they perceive such aspects of care as enabling patients' mobility following total hip replacement. Further research was needed therefore on nurses' perceptions of their contribution to the rehabilitation of mobility of patients following total hip replacement.

Methods

The aim of this study was to describe nurses' perceptions of their contribution to the mobilising of older adults following surgery for total hip replacement. The research questions were (a) what are nurses' perceptions of their contribution to the physical care of patients concerning pain management with respect to mobility following total hip replacement surgery; (b) what are nurses' perceptions of their contribution to the interpersonal care of patients following total hip replacement with respect to mobility.

A quantitative approach employing a non-experimental descriptive design was carried out. A convenience sample of registered nurses ($n = 30$) were selected from the entire population of 140 nurses employed at an orthopaedic hospital in the south of Ireland.

The inclusion criteria for participants were registered general nurses working on wards where patients are nursed following total hip replacement surgery and who had at least one month's experience as an employee at the hospital at the time of the study. Student nurses were excluded from the study because they did not meet the sample definition. Access to the population was obtained with the permission of the Director of Nursing and the Ethics Committee.

A two-part multi-item instrument consisting of nine questions including nurses views on rehabilitation, pain management and nursing contributions to physical, interpersonal and combined aspects of nursing care was developed by the researcher. Question formats included forced choice, Likert scale, checklist, and ranked order. To improve the content validity of the instrument it was pilot-

tested by five nurses who shared the same characteristics as the main sample. A nurse academic with experience in orthopaedic nursing also confirmed content validity through review of the questions.

Results

Twenty-three nurses responded representing a response rate of 77%. Over half of the nurses ($n = 13$) regarded rehabilitation as focussing on the maintenance of existing abilities and roles, the promotion of health, the prevention of further impairment, the reduction of disability, the restoration of function and roles and the minimisation of handicap. Less than half ($n = 10$) of the nurses considered that rehabilitation emphasised the contribution of physical, social and psychological well-being. While nurses perceived that nursing contributions are greatest with respect to physical care 65.2% ($n = 15$) their contribution to the patient's interpersonal care emerged as significant also.

Findings reflecting nurses' assumptions on pain management portray that over ninety percent of the nurses ($n = 21$) agreed with the statement 'there is more to patient comfort than administering analgesics. Furthermore, 65.2% ($n = 15$) respondents agreed that nurses rely mostly on the patients to let them know of their need for analgesia. Over half of the nurses ($n = 13$) agreed that nurses are sometimes inattentive to patients needs for analgesics' and furthermore 34.8% ($n = 8$) of respondents consider that nurses are indeed 'inattentive to patients' analgesia requirements. Over 69% ($n = 16$) of nurses perceive that patients' willingness to engage in physical activity is dependent on their pain tolerance, yet 17.4% ($n = 4$) disagree and 13.0% ($n = 3$) were unsure.

Problems of a physical nature contribute to the patient's complications following hip replacement surgery and may delay mobilization and discharge. Nurses were asked to rate the degree to which nursing contributed to a patient's mobilisation. Nursing contributions were reported as follows: pressure area care (78.3%), management of patients' pain (69.6%), toileting and personal care needs (69.6%) and the prevention of wound infection (65.2%), prevention of deep venous thrombosis (47.8%) and dislocation of the hip (47.8%). Nursing contributions were perceived lowest with regard to the prevention of neurovascular impairment (26.1%) and with the delivery of physical exercises (17.4%).

With respect to interpersonal care nurses identified the following areas as those where the nursing contribution was greatest in the mobilising of patients' following hip surgery: acknowledgement of

the physical, psychological, emotional and spiritual needs of patients (56.5%), keeping a patient informed of the daily care plan (43.5%). Of the combined physical and interpersonal elements nurses identified the following as contributing greatest: nurses' competence (73.9%) monitoring of patients (73.9%), continuity of patient care (43.5%). However, an environment conducive to rest (39.1%), involving the patient in goal setting (31.8%), positive interactions with professionals (30.4%) and creation of informal networks (17.4%) were reported as contributing least.

Discussion

Contemporary models of rehabilitation emphasise the contribution of physical, social and psychological well-being as well as the interaction of the patient with the environment. Irish nurses' views on the mobilising of THR patients were found to reject mechanistic models in favour of contemporary approaches to rehabilitation. The nurses' perception may have been influenced by the fact that the majority of patients commence full weight bearing on the operated leg by the second post-operative day (Lucas, 2004). Therefore, in the absence of collaborative problems improvement in the individual's ambulatory, recreational and occupational function can be anticipated from an early stage (Orbell et al., 1998). Young et al. (1999) contended that the concept of rehabilitation must reflect not just the function of a body part alone but of the whole person, set in the context of their personal circumstances. Furthermore, Young et al. (1999) pointed out that an important distinction between rehabilitation and other health interventions is that patients are not passive recipients. Reducing the gap between the person's disability and capability through rehabilitation requires varying degrees of energy and is determined by the patient's tolerance.

Rehabilitation of orthopaedic patients takes place from the first point of contact (Davis, 2000). In the absence of pre-admission clinics in the hospital for this study, admission for surgery is the first opportunity that nurses have to assess the patient's needs and potential post-operative problems. Lucas (2004) considered that nurses are well placed to undertake patient assessment so that any unrealistic expectations held by patients may be avoided. A conclusion that can be drawn from the findings is that Irish nurses respect the health potential of individual patients who undergo joint replacement surgery irrespective of the patients' age. Such a philosophy is complimentary to that of the RCN (2000) with regard to

rehabilitating older people. Nurses, however, recognise that the rehabilitation of mobility is a complex process that is dependent upon the physical, psychological and social functioning of the individual patient relative to their set of circumstances.

Nurses perceived that their greatest contribution to mobilising older patients following total hip replacement was in the provision of physical and interpersonal care. Waters and Luker (1996), however, found that nurses were not perceived by themselves or by other professionals as making a major contribution to the rehabilitation process of hospitalised elderly people. Long et al. (2002) identified assessment, co-ordination and communication, technical and physical care, therapy integration and therapy carry-on, emotional support and involving the family as core nursing roles in rehabilitation. The findings in this study make explicit the potential contribution that nursing makes to the rehabilitation of patients mobility following hip replacement surgery by attempting to disentangle the complex components of this process. The findings are generalisable only to the settings with similar characteristics. In order, therefore, to further clarify the nurse's role in rehabilitation further study from the perspective of patients and their families is recommended.

Montin et al. (2002) found that patients reported of post-operative pain following hip replacement surgery more intense than expected, yet they were happy with pain management. While pain made mobility difficult, patients considered it important to do the exercises in accordance with the physiotherapy regime. Adequate pain control following joint replacement surgery is considered crucial for early mobility and for the prevention of complications (Nussenzeig, 1999). The majority of nurses (69.6%) perceived that they played a major role in the management of post-operative pain. Sixty-five percent of nurses agreed that they rely on patients to let them know of the need for analgesia. Furthermore, 35% of nurses perceive that nurses are sometimes inattentive to patients' need for analgesia. The assessment and management of pain was categorised by Santy (2001) as the second most important area in comfort enhancement for orthopaedic nurses.

The majority of nurses (69.6%) in this study perceived that the patients' willingness to engage in physical activity is dependent on their pain tolerance. Nurses also differentiated between comfort and pain relief. Ninety-one percent of nurses perceived that comfort is more than the outcomes gained from the administration of analgesics. Santy (2001) described the 'comfort enhancer' role as a core category in orthopaedic nursing. Comfort

enhancement involves activities such as meeting patients' physiological needs, positioning, skilful handling of patients in bed as well as the assessment and management of pain. Tutton and Seers (2003) contended, however, that comfort is a part of caring rather than an outcome of caring actions.

Mobilising patients following hip replacement surgery is a positive and forward-looking process for patients. The unique intimacy of the nurse-patient relationship provides an opportunity for nurses to act as enablers to patients with regard to mobility. Evidence from the qualitative extracts suggests that nurses perceive that they provide encouragement, praise or motivation to patients in relation to mobility. Young et al. (1999) suggested that the encouraging/facilitating role differs from the caring/doing role and is therefore complimentary to rehabilitation. Furthermore, Santy (2001) considered that in this respect nurses adopt the role of 'guide' thereby playing a vital role in reducing the gap that exists between patients' mobility needs and their capabilities.

The findings from this study suggest that a patient's pain during the post-operative period may be poorly assessed and managed. This may reflect inadequacies in the nurse's level of knowledge in relation to the prescribed pharmacological agents. A possible consequence of this is that patients continue to experience unnecessary levels of pain post-operatively. Consequently, progression with ambulation and discharge could be delayed. Therefore, post-operative pain management remains a major challenge in the care of patients following total hip replacement surgery. The absence of an acute pain service, patient controlled analgesia and the services of a pain nurse specialist may also contribute to inadequacies with post-operative pain management.

The risk of pressure ulceration remains high for patients undergoing hip replacement surgery (Maylor, 2001). Frequent repositioning and relief of pressure is advocated as the best prevention strategy. Nurses perceived that they make a large contribution with regard to patient mobility. A conclusion can be made that the nurses in the study not only understood the risks but also were committed to the prevention of pressure ulcer formation. Deep venous thrombosis and dislocation of the prosthetic hip component were areas where the nursing contribution was reported equally high at 47.8%. Such complications can have serious consequences for the restoration of a patient's mobility. Prevention requires not only vigilant nursing care but also competence and skills with the movement and handling of patients throughout the peri-operative and post-operative periods.

Characteristics of the rehabilitative milieu are said to positively influence the recovery and rehabilitative process. Pryor (2000) suggested that if attention is focused on preserving the 'wholeness' of the person whose body is impaired or disabled rehabilitation will be facilitated. In qualitative responses nurses referred to providing 'holistic care as contributing to the patients' psychological well-being. Keeping a patient informed of the daily care plan (43.5%) and positive interactions with professionals (30.4%) are areas where the nursing contribution was also significant. Pryor and Smith (2002) contended that to contribute effectively to the facilitation of rehabilitation, nurses must possess a repertoire of interpersonal skills and techniques. Furthermore, the choice of specific skills and techniques must be based on an assessment of the patient in their context as their condition progresses.

Nurses perceived that competent nursing and patient monitoring contributes most to mobilising. Competence is demonstrated by the ability to practice safely and effectively, utilizing evidence, thinking critically and performing as part of the multidisciplinary team (An Bord Altranais, 2000). Montin et al. (2002) found that patients following total hip replacement consider that competent nurses can not only anticipate but also understand the patient's needs. Competence, however, is not static but developmental and has many attributes. Developing competence in orthopaedic nursing requires practice based on adequate knowledge and understanding of the core practical and technical elements of care. Communication, interpersonal, organisation and managerial skills are also essential. The ability to think critically, utilise evidence and adopt a problem solving approach as well as perform effectively as part of the multidisciplinary team are attributes important in rehabilitative nursing. Furthermore, maintaining competence requires nurses to engage regularly in continuing professional development to remain informed of developments in practice.

With regard to nurses monitoring patients Kralik et al. (1997) reported that patients were comforted by the notion that they were closely monitored by the nurse. Montin et al. (2002) reported that patients recovering from total hip replacement surgery felt safe when nurses visited them frequently. Aiken et al. (2003, p. 1617) suggested that nurses are "the surveillance system for the early detection of complications" while Pryor and Smith (2002) considered observation, assessment and interpretation as a core activity for rehabilitative care. The rehabilitative approach is considered one of seven domains of rehabilitation nursing

practice and represents the 'how' of practice (Pryor and Smith, 2002). By adopting a rehabilitative approach nurses focus on the person's abilities rather than their disabilities. Activities such as observation, assessment and interpretation determine the plan of care for patients following total hip replacement surgery. This facilitates goal setting and discharge planning with the patient.

Over 50% of nurses perceived that continuity of care also contributes to mobilising patients. Montin et al. (2002) found that patients consider continuity of care important also. Pryor and Smith (2002) considered that nurses assume the role of co-ordinator of patient care at both individual and ward levels with 24 h responsibility for patient safety and well-being. Advocacy is considered an essential element of this role and represents another domain of rehabilitative nursing practice. Forty-three percent of nurses perceived that the nurse's friendliness contributed to the patient's mobilising following total hip replacement. Kralik et al. (1997) described that a nurse's ability to be friendly and warm is a characteristic of engagement. Hartrick (1997) considered the relationship between the patient and nurse to be the foundation of nursing practice. Furthermore, the nurse's relational capacity is determined by their interpersonal skills. Patients following total hip replacement considered that an 'engaged' nurse made the patient feel comfortable in unfamiliar, clinical surroundings. Hartrick (1997) identified initiative, authenticity and responsiveness, mutuality and synchrony as capacities that foster a caring relationship. Constraints on nursing personnel resources result in the delivery of more mechanistic models of care. Persistence with conventional approaches to patient care is compounded by limited opportunities for continuing education as well as the absence of education programmes for nurses dedicated to the management of musculoskeletal conditions.

The creation of a friendly atmosphere helped patients to relax and promoted interaction with others. Santy (2001) considered that orthopaedic nurses harmonize the ward environment by creating agreement or concord between the hospital environment and the community for the good of the patient. Waters and Luker (1986) attributed responsibility to nurses for the prevailing atmosphere and environment of the ward.

Conclusion

Current demographic trends represent an increase in the older population in Ireland. Increased longevity influences expectations regarding the

quality of life. The increasing numbers of the older adults undergoing joint replacement surgery is testimony to the prevalence of degenerative joint conditions among this population. However, a period of adaptation follows surgery and is when the patient's physical, psychological and social functioning is restored. The adoption of an enabling person-centered approach to rehabilitation is consistent with the philosophy of care of older adults.

Pain is reported by patients as one of the predominant physical experiences associated with the post-operative period following total hip replacement. Effective post-operative pain management is crucial for early mobilization and for the prevention of complications such as pneumonia and thromboembolic disease. The contribution of the nursing role in pain management may be an important factor in enhancing the physical outcomes for patients post THR. While nurses perceive that pain management is fundamental to the patient's comfort, nevertheless they view other aspects of the patients comfort to be equally important. Contemporary approaches in health care emphasize the preservation of the wholeness of the person. Characteristics of the rehabilitative milieu can influence the psychological well-being of patients such as ward philosophy, model of care delivery, atmosphere, communication and the attitudes of professionals. Patients also consider nurse's authentic demeanour, relational capacity and communication regarding their plan of care as important.

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