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Patient readiness for discharge after total hip replacement: an integrative review

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Abstract

Purpose – The purpose of this paper is to reduce or eliminate pain while enabling full advantage and function of daily living activities after hospital discharge. Readiness for discharge depends largely on prior healthcare team preparations for both patients and their families.

Design/methodology/approach – This integrative review was conducted using the Whittemore and Knafl method, and synthesized published research concerning patients' readiness for discharge, particularly those who had undergone total hip replacement (THR) surgery.

Findings – Results were categorized into five main themes as physiological experiences, psychological experiences, coping ability, needs from the healthcare team, and family support influential to the readiness of THR patients for discharge.

Originality/value – The preparation for discharge of THR patients should be fully engaged and addressed. Moreover, healthcare professionals should provide care for patients at both the pre- and post-operation phases as well as during the transitional phase from hospital to home.

Keywords Patient experience, Integrative review, Total hip replacement, Discharge readiness

Paper type General review

Introduction

One of the most severe injuries, particularly for older people, is a hip fracture caused by a fall[1, 2] which will almost certainly require surgical treatment followed by continuous physical support. The most common treatment for a hip fracture is total hip replacement (THR) surgery, which involves replacing the upper femur and the acetabulum in the pelvic bone with artificial parts called prostheses[3]. The goals of this surgery are to decrease pain and allow full advantage of the function of activities for daily living[4]. Possible complications after surgery may include hip dislocation, severe pain, and infection, as well as swelling and bleeding[5]. Furthermore, post-operative problems can lead to morbidity and mortality. Healthcare professionals must consider the evaluation criteria, including patient capability to return home.

The key success factors of willingness for discharge include stability in the patients' cognitive, emotional, and psychological skills and restrictions. Further, the family and community must be able to afford to care for the patient[6]. An understanding of the factors related to readiness for discharge will allow health professionals to prepare fully before willingly allowing patients to return home.

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This review focused on the problem identification stage for patients who underwent primary THR and were subsequently prepared for discharge from hospital. Qualitative empirical evidence was reviewed to create an understanding of patients' views and experiences of readiness for discharge after THR. The aim of this integrative review was to synthesize published research concerning patients' readiness for discharge, particularly those who underwent primary THR.

Methods

The integrative review adopted a five-stage approach which included problem identification, literature search, data evaluation, data analysis, and presentation, as considered by Whittemore and Knafl[7].

Search methods

The literature review utilized electronic data published online in English from 2000 to 2017 in the following databases as at April 20, 2017: CINAHL Push with full text, ScienceDirect, and Springer Link Journal. Keywords used for the search included "total hip replacement," "patient experience," "discharge," and "recovery". Databases were limited as the filter allowed only full-text academic journals.

The inclusion criteria included: original research reports, qualitative studies, patients who underwent primary THR, the status of primary THR in the preparation phase for discharge from hospital to home, and written in English.

Search outcome

Preliminary search results identified 405 potential articles. Following the inclusion and exclusion criteria, these were reduced by 384 to 21. Finally, four qualitative studies were selected which were related to the specific study topic (Figure 1). Quality appraisal of the studies was adapted from the method of Whittemore and Knafl[7], and the articles were evaluated for methodological rigor and data relevance on a three-point scale of each criterion (overall 6). All four qualitative articles gained at least two points for each criterion, and an overall appraisal score of four or over was accepted, with all articles meeting the quality criteria.

Data analysis

Data were analyzed using ATLAS.ti 8 Software (License No. 8DDAD-F0AD4-7508Z-IMJM-00CFK) to extract the main findings. The information was coded into systematic identification from the descriptions, while conclusions of the similarities and differences were grouped into themes.

Results

Review characteristics

Four studies were evaluated as relevant (Table I). Two were from Australia, while one each was from New Zealand and the UK. All studies were conducted using qualitative research to explore patients' experiences with readiness for discharge after undergoing THR. Focus was concentrated on patients who had a THR, with the majority being older adults.

The literature review identified five main themes including physiological experiences, psychological experiences, coping ability, needs from the healthcare team, and family support. These themes are detailed in Table II.

Theme 1: physiological experiences

Recovering mobility. Many patients said they felt comfortable during their recovery phase with equipment available to assist and support their progress. Although they

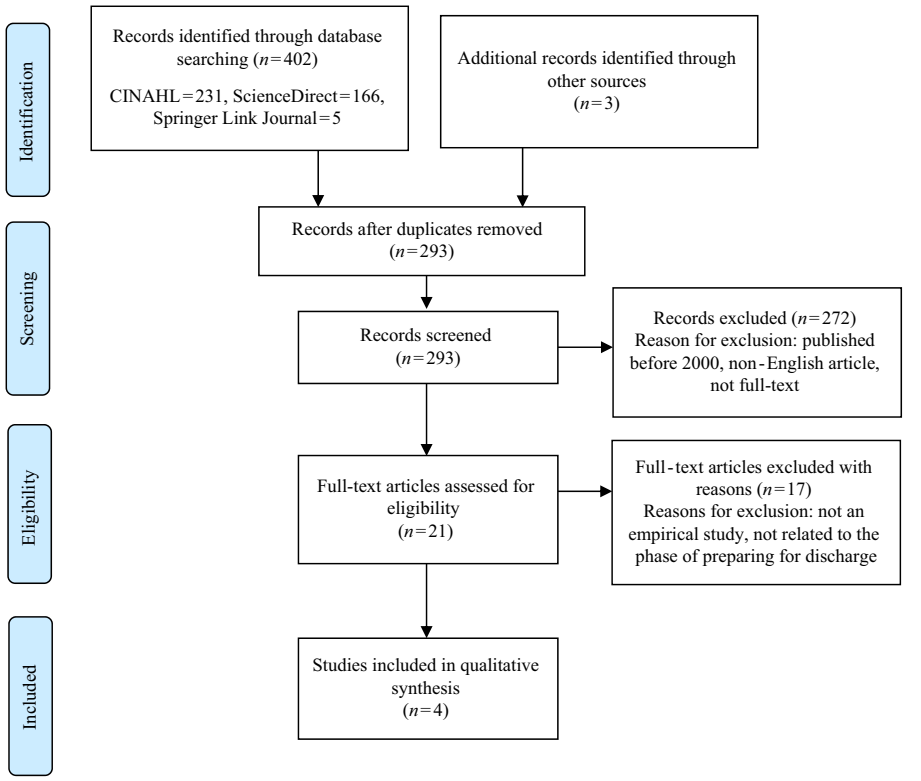

Figure 1.
Prisma flow diagram

clearly understood their mobility levels, some patients needed extra guidance concerning physical movements during the recovery period. The length of time during the hospital recovery phase made some patients feel fatigued and powerless to concentrate[11].

Physical safety. All patients felt comfortable about the physical safety aspects which they regarded as most important. Physical safety focuses on competency to carry out the functional activities crucial in preparing patients for discharge. Examples of functional activities include going down stairs, walking up stairs, and getting into as well as out of bed. Patients felt safe about the aspects of physical and psychological safety. They wanted reassurance that the healthcare team would be available during the follow-up period[8]. Some patients believed that a longer stay in hospital was essential so that medical procedures could be safely supported[10]. Some were unconcerned about the blandness of activities after THR, such as crossing the legs or bending forward from the waist more than 90°[11].

Theme 2: psychological experiences

Frustration. The psychological aspects of safety made particularly significant impressions on the patients[8]. Physical and mobility limitations led to isolation from common activities and the possibility of being a burden on their families[9]. All patients experienced a feeling of hopelessness about returning home and being dependent on support from their families. They felt powerless to manage their own lives. If something went wrong, there would be

Author/year/country	Sample/characteristics	Concepts examined	Method	Key findings
Heine, Koch, and Goldie (2004) Australia[8]	Five recipients of primary THRs (2 women, 3 men); aged 43-79 years, all married and living with a partner	Factors affecting readiness for discharge Experience related to readiness for discharge	Grounded theory In-depth unstructured interviews	Three categories for discharge readiness: (1) feeling safe; (2) confidence; (3) family and friends The idea of self-confidence and family and friends were linked to patients' feelings of safety
Ready, Horner, and Duggan (2015) Australia[9]	10 recipients of primary THRs (6 women, 4 men); over 65 years, living alone = 6, living with a partner = 4, migrant = 5	Post-discharge living experiences (best and worst when back at home)	Qualitative study Face-to-face interviews	Four main points were identified: (1) insufficient personalized assessment of appropriate adaptive assistance and individual needs; (2) frustration, physical and movement limitations; (3) coping with physical and movement limitations; (4) restricted social contact
Hunt *et al.* (2009) UK[10]	35 primary THRs; Liverpool = 11 women and 9 men of white European descent, aged from 48 to 88 Belfast = 7 women and 8 men of white European descent, aged from 57 to 82	Patients' experiences with enhanced discharge after THR Acceptability of financially forced shortening of post-operative stay	Qualitative study Interviews with patients regarding two distinct procedures and hospitals; traditional unit in Liverpool and short period of stay in Belfast	Patient complained about care, including feeling "overlooked" and "in the dark" (uninformed and nervous) In Liverpool, many patients were indifferent about the length of stay An economic burden for shortened stay and rapid discharge
Fielden, Scott, and Horne (2003) New Zealand[11]	33 primary THRs (19 patients in early discharge group and 14 patients in late discharge group)	Patients' expectations and satisfaction with hospital discharge preparation	Qualitative study In-depth interviews	Three categories representing common experiences in both groups: (1) readying self; (2) recovering mobility; (3) transition to wellness

Table I.
Patients' experiences regarding discharge readiness after THR

nobody to help them. These reactions from patients reflected their emotions about living alone at home. Additionally, patients experienced complications such as pain, wound infection, dislocation, and falls[8]. They often felt unwell or wanted further clinical care when they were discharged[10].

Moreover, patients felt overlooked or neglected by the healthcare team who took care of them. A lot of information regarding surgery and the perioperative phase was not provided by healthcare professionals, and patients felt "in the dark"[10].

Theme 3: coping ability

The physiological and psychological aspects of the readiness for discharge were discussed in themes 1 and 2. These issues are important and require effective management. Mobility restrictions require adaptation to new skills for movement or transfer[9], and the coping ability of each patient to adjust to situations and deal with problems after they are discharged is different[10].

Theme	Subthemes and example phrases
Physiological experiences	Recovering mobility "I was thinking of restrictions on how to move my legs, cross my legs, and that sort of thing. For bending down, there were instructions in the early stages to not pick anything up off the floor. After a while, I found that I could bend. I was doing knee flexes, bending down and picking things up that way"[11] Physical safety "I was talking to him (the surgeon) about stiffness in the hip itself. I'm not able to do things quite as well as I would like, but he says it takes time"[11] "A lot of what we're talking about is security, isn't it? It's about feeling secure"[8] "I can't manipulate my leg at the moment"[10]
Psychological experiences	Frustration "Not being able to get out, frustrated by not being able to drive, having to rely on others who lead busy lives. I'm very independent and don't like relying on others"[9] "I'm worried […] I think about what will happen if I fall over and put my hip out. I'm afraid that I will do something wrong and jeopardize that"[8] "I suppose the nurses have their own lives to lead, when they go I think they're neglecting me, you know. I wish they'd come and do something"[10]
Coping ability	"That's another thing I had to learn how to do, to get down on the ground"[9] "The first couple of days, uh, I mainly sat down, mostly exercising. It's in the book (the hip replacement information booklet provided). I wasn't bored. I read quite a lot"[9] "You might feel ok about yourself, but you might not be up to walking around and getting in cars. That's something you've got to deal with when you get out of here"[10]
Needs from the healthcare team	Personal assessment "I get the impression that everybody's treated as though they're on a level playing field after they've had an operation, but I may be wrong"[11] "It seems a generalization that this is what you do: sleep with a pillow, don't cross your legs, give it six weeks, use your crutches. That's it in a nutshell. It's not individualized"[11] Information need "I found it difficult getting into a car, even though I'd read about how to do it"[11] "I had no idea how long I was going to stay in for because I'd never had this experience and I didn't know anybody that had"[10] Multidisciplinary team "The physiotherapist knew what she was doing. She knew more about my leg than I did"[8] "I just kept questioning people and listening, listening to different people's opinions of things; listening more particularly to the more senior members of the staff"[8]
Family support	"[…] none of them are making me feel like I'm a burden, but they've all got their own lives. My daughter is giving up work for two weeks […] so obviously they don't see me as a burden, but I suppose it just worries you a bit you know […] I don't want to be a nuisance"[8]

Table II.
Themes identified as patients' experiences for discharge readiness after THR

Theme 4: needs from the healthcare team

Personal assessment. Some patients thought that their individual needs related to discharge planning were not recognized and communicated displeasure with post-operative requirements and routine. Patients identified different information gaps concerning the operation and recovery phases[11]. Insufficient personalized assessment led to unsuitable provision of equipment or treatment for patients. For example, walking aids such as a walker, crutches, or a cane and equipment in the bathroom such as a shower chair were sometimes not provided[9].

Information need. Receiving information about preoperative care was helpful to prepare patients for the operation[8]. An information pack, written as a material guideline, was given to patients around one to three weeks before the scheduled surgery[11]. All patients received

information about their hospitalization, recovery, and discharge plans. A variety of resources were prepared for patients, both professional and nonprofessional. Nonprofessional resources included relatives, friends, spouses, and neighbors. Successful and rapid recovery information was gathered for communication. Other available resources included online information from internet websites and television programs related to the topic. However, information from professionals and non-professionals differed concerning patients' individual needs[11].

Consistency of information was an essential element which influenced the level of patient knowledge regarding discharge. Many patients mentioned receiving contradictory information regarding their discharge plans in addition to varying information concerning care for THR surgery[8, 10]. While patients were fully informed concerning the hospitalization phase, they were poorly informed about the recovery phase concerning mobility at home, such as driving a car, being a passenger, or transferring into transportation[11].

Multidisciplinary team. All patients willingly expressed support for the healthcare teams, including the medical staff, occupational therapists, and physiotherapists, in preparing for discharge. Traditionally, patients expected the physician to make the judgment for discharge and did not recognize the counseling aspects of the doctor's decision. They clearly understood the role of occupational therapy and physiotherapy[11]. Patients stated that having consistent staff and knowing each member of the healthcare team was particularly important. The level of staff competence was represented by the degree of trust given by the patients. Therefore, experienced staff members were more helpful in enhancing patients' confidence levels[8].

Theme 5: family support

Family members played an important role in supporting patients after discharge. Patients expected that their family members could help them manage an activity on their own when they felt helpless or did something wrong[8]. Furthermore, patients needed information about how to take care of themselves and offer guidance for their family members[10].

Discussion

This integrative review concerned experiences of patients' readiness for discharge after undergoing primary THR. All the qualitative studies afforded an in-depth understanding into participants' experiences concerning their willingness for discharge from hospital. This review offers patients an outlet of authority and expression as well as giving healthcare teams a better understanding of their patients' mindsets and an opportunity to enhance the discharge procedure.

Patients' experiences not only involved satisfaction and contentment with their physical safety but also their psychological safety. Post-operatively, patients expected to recover mobility and the capacity for independent living. They needed guidelines for their recovery related to physical functions which they deemed to be helpful. Such guidelines could remind them of their anticipated progression and warn them of potential complications, and to exercise caution after THR[11]. They required adaptation to the techniques used to deal with mobility restrictions[9]. Patients coped well with the physiological and psychological changes after surgery but needed a wealth of information related to the process of hospitalization as well as the recovery phase after discharge. Patients also required personal assessments because there were different knowledge gaps for care during each period[11].

Cooperation of the multidisciplinary teams involved in each patient's discharge plan is essential[11]. Staff members with more experience tended to be more helpful in enhancing patients' confidence levels[8]. The perception of readiness for discharge among patients and

healthcare professionals may vary, so both nurses and healthcare teams should provide the best information[12].

Support related to patient status of living with their family may create a higher perception of readiness for discharge compared to living alone. According to Brent and Coffey[12], living with the support of family members gained the highest score for coping prowess. The relationship between confidence and family support was closely related to patients' feelings of both physical and psychological safety[8].

Limitations

This integrative review assessed only four distinct qualitative studies which limited the generalizations relevant to readiness for discharge by post-THR patients. Quantitative research related to the study topic was neglected, which may result in methodological limitations. Quantitative studies should be included in future research to offer new dimensions to THR post-operative requirements.

Conclusions

This study presented an integrative review of qualitative research concerning the discharge readiness of patients who underwent primary THR. Results indicated a lower perception of preparedness and willingness for discharge by patients than by healthcare professionals. Five major themes were identified including physiological experiences, psychological experiences, coping ability, needs from the healthcare team, and family support. These themes influenced the readiness for discharge of THR patients, and this issue should be given significant future consideration. Findings recommended that healthcare professionals provide effective and individualized care for patients, both during hospitalization for THR surgery and throughout the recovery phase. Nurses should involve patients' families during the discharge preparation process, with assistance from a multidisciplinary team to enhance patients' readiness for discharge.

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