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Nursing in fast-track total hip and knee arthroplasty: A retrospective study

Kirsten Specht MPH, RN, CRNA (PhD student) [a,b,*], Per Kjaersgaard-Andersen MD (Associate Professor) [b,c], Henrik Kehlet PhD, MD (Professor) [d,e], Birthe D. Pedersen PhD, MScN, BA (Philosophy), RN (Associate Professor) [a]

[a] *Research Unit of Nursing, Institute of Clinical Research, Faculty of Health Science, University of Southern Denmark, Odense, Denmark*
[b] *Department of Orthopaedic Surgery, Vejle Hospital, Vejle, Denmark*
[c] *Institute of Regional Health Research, University of Southern Denmark, Odense, Denmark*
[d] *Section for Surgical Pathophysiology, Rigshospitalet, Copenhagen, Denmark*
[e] *The Lundbeck Centre for Fast-track Hip and Knee Arthroplasty, Copenhagen, Denmark*

KEYWORDS
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Task shifting

Abstract ***Aim:*** To describe the increased activity in total hip arthroplasty (THA) and total knee arthroplasty (TKA) from 2002 to 2012 in a single orthopaedic department, the organisation of fast-track and its consequences for nursing care.

Methods: Retrospective, descriptive design. Data collection; from the hospital administrative database, local descriptions of fast-track, personal contact and discussion with staff.

Results: The number of operations increased threefold from 351 operations in 2002 to 1024 operations in 2012. In 2012, THA/TKA patients had a postoperative mean LOS of 2.6/2.8 days. Nurses had gained tasks from surgeons and physiotherapists and thus gained more responsibility, for example, for pain management and mobilisation. Staffing levels in the ward in 2002 and 2012 were almost unchanged; 16.0 and 15.8 respectively. Nurses were undertaking more complicated tasks.

Conclusion: Nursing care must still focus on the individual patient. Nurses need to have enough education to manage the complex tasks and increased responsibility. To prevent undesirable outcomes in the future, there is a need to pay attention to the nursing quality in balance with the nursing budget. It may, therefore, be considered a worthwhile investment to employ expert/highly qualified professional nurses in fast-track THA and TKA units.

* Corresponding author. Department of Orthopaedic Surgery, Vejle Hospital, Kabbeltoft 25, DK-7100 Vejle, Denmark. Tel.: +45 79405757; fax: +45 79406868.
E-mail address: kirstenspecht@gmail.com; kirsten.specht@rsyd.dk (K. Specht).

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Editor's comment

The notion of 'fast-track' surgery for orthopaedic patients is far from new and is now linked to what we know as 'enhanced' recovery. However, what most research and journal papers relating to these subjects do not do is consider the impact on the organisation where care takes place. More importantly, whilst enhanced care programmes often unquestionably benefit patients it is unusual, if not unique, for a study to consider what impact this has on the pressures on the team who provide this care. The capacity of nurses to continue to take on new roles and additional responsibilities is not boundless and this paper begins to illustrate some of the issues that are raised when continuing to develop care delivery in ways that impact significantly on the nursing resource.

JS-T

Introduction

This paper considers the major changes in nursing care after fast-track was implemented for total hip arthroplasty (THA) and total knee arthroplasty (TKA) in a Danish orthopaedic department. The organisation of fast-track in THA and TKA varies significantly between departments in different countries (Hjort Jakobsen et al., 2014; Kehlet, 2013). It consists of a standardised programme with improved multimodal strategies including opioid sparing pain management (Husted, 2012a; Kehlet, 2013; Specht et al., 2011), early and increased mobilisation and improved information and nutrition (Kehlet and Dahl, 2003). With a focus on dialogue and education, patients are motivated to play an active role in their own treatment, care and rehabilitation. Fast-track approaches in total joint replacement have developed considerably during the past 10 years and it has had an influence on nurses' roles and responsibilities. In Denmark length of stay (LOS) has decreased from about 10 to 11 days in 2000 to 4 days in 2009 (Husted et al., 2012b). For THA this trend has continued as one Danish clinic reported a median LOS of 1 day in 2011 (Mikkelsen et al., 2014) and several multicentre studies reported a median stay of 2 days (Jorgensen and Kehlet, 2013). In Denmark patients are discharged to their own home. It is very unusual for patients to go to a family member's home after discharge and the country does not use rehabilitation centres for THA and TKA patients.

The advantages of fast-track are well documented from both socio-economic perspectives (Andersen et al., 2009; Hunt et al., 2009; Larsen et al., 2009) and from the perspective of improved outcome for patients (Dowsey et al., 1999; Kehlet, 2013; Kehlet and Wilmore, 2008) including reduced incidence of complications (Husted et al., 2010b, 2010c; Savaridas et al., 2013). Furthermore, the readmission rate is reported not to be higher in a fast-track setting compared with a conventional setting (Husted et al., 2010b).

Hospitals are a target when stakeholders want to save money. Health system reforms have reduced inpatient beds and the fast-track concept, with its shortening of LOS down to about 2 days, is considered to be of benefit when the health system is trying to do more with less. A consequence of shortening LOS in hospital is that nursing care will be considerably intensified. This might raise concerns about the quality and safety of care. Recently, a study about nurse staffing and education and hospital mortality in nine European countries concluded that nurse staffing cuts to save money adversely affects patient outcomes (Aiken et al., 2014).

Scheel et al. (2008) described the conflict between the 'system world', controlled in a political context with a focus on reduction of cost burden, and on the other hand the 'life world', which is focused on the patient and nursing care. A dominance of the system world may result in nursing care being ignored and forgotten. Political dominance has resulted in consequences in relation to nursing care and Scheel et al. (2008) points out an urgent need for investigation in this area (Scheel et al., 2008).

Although the notion of fast-track is not new, the organisational consequences for nursing care of fast-track in THA and TKA have not been described. This study, therefore, aimed to describe, in a retrospective manner, the increased activity in THA and TKA from 2002 to 2012 in an orthopaedic department, the organisation of fast-track and its consequences for nursing care. Even though the study was an informal local inquiry in a specific department, it has relevance to other departments elsewhere in Denmark and in other countries.