Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

Kirsten Specht PhD MPH RN CRNA (Postdoctoral Fellow) a,b,*
Hanne Agerskov PhD MSc (health) RN (Postdoctoral Fellow) c,d
Per Kjaersgaard-Andersen MD (Associate Professor) a,e
Rebecca Jester PhD (Professor) f
Birthe D. Pedersen PhD MScN BA (Philosophy) RN (Associate Professor) c

a Department of Regional Health Research, Faculty of Health Science, University of Southern Denmark, Odense
b Department of Orthopaedic Surgery, Zealand University Hospital, Køge, Denmark
c Department of Clinical Research, Faculty of Health Science, University of Southern Denmark, Odense
d Department of Nephrology, Odense University Hospital, Denmark
e Department of Orthopaedic Surgery, Vejle Hospital, Denmark
f Institute of Health, University of Wolverhampton

* Corresponding author. Address: Department of Orthopaedic Surgery, Zealand University Hospital, Køge, DK-4600 Køge, Denmark. Tel.: +45 2532 1307
E-mail addresses: kirstenspecht@gmail.com (K. Specht), hanne.agerskov@rsyd.dk (H. Agerskov), pka@dadlnet.dk (P. Kjaersgaard-Andersen), R.Jester@wlv.ac.uk (R. Jester), bpedersen@health.sdu.dk (B.D. Pedersen).

Acknowledgements
The authors would like to thank the patients, who participated in the study.

Funding sources and their roles
Foundation: Lundbeck Centre for Fast-track Hip and Knee Arthroplasty Denmark, University of Southern Denmark, The Region of Southern Denmark, and The Danish Rheumatism Association. It is stated, that the sponsors had no involvement in the study.
Abstract

Background. Due to the shortened length of stay in fast-track total hip and knee arthroplasty, patients must at a very early stage following surgery take responsibility for their postoperative care and treatment. It is important to establish if this treatment modality of fast-track is not only cost-effective, but meets patients’ expectations and needs.

Aim. To explore the lived experience of patients in fast-track total hip and knee arthroplasty during the first 12 weeks after discharge.

Methods. A phenomenological-hermeneutic approach was used inspired by Ricoeur’s theory of narrative and interpretation. Data were collected through semi-structured interviews with 8 patients 2 and 12 weeks after discharge.

Findings. Through the structural analysis 3 themes emerged: 1) Dealing with transition between hospital and home, 2) Pain and self-management of medication, 3) Challenges in rehabilitation.

Conclusion. Patients appreciated only 1 or 2 days in hospital. However, they were not sufficiently involved in the discharge planning. There was a feeling of uncertainty and being left on their own after discharge, which could affect their pain management and recovery at home. There is a need to develop in partnership with each individual patient a post discharge plan of care and rehabilitation to meet their individual needs, preferences and mode of motivation.

Keywords. Fast-track, enhanced recovery, patients’ experience, hip arthroplasty, knee arthroplasty, qualitative research, phenomenological-hermeneutics, discharge planning, motivation.
Introduction
This paper follows on from a previous publication by the authors detailing the experiences of fast-track primary unilateral total hip arthroplasty (THA) and total knee arthroplasty (TKA) patients until the point of discharge in Denmark (X1). This paper specifically reports on the qualitative exploration of these same patients’ experiences but from the point of discharge until 12 weeks after discharge.

Background
Primary THA/TKA operations are some of the most commonly performed orthopaedic procedures internationally. A survey of 18 countries including the United States, Canada, United Kingdom, Australia, France and the three Scandinavian countries reported an estimate of 1,324,000 individuals undergoing primary and revision total knee replacement annually (Kurtz et al., 2011). By 2030, the demand for THA/TKA in the US alone is estimated to grow to 572,000/3.48 million procedures (Kurtz et al., 2007). To control the burgeoning cost of THA/TKA there has been a significant reduction in length of stay by use of fast-track or in some countries this is known as enhanced recovery pathways. In addition, there is a body of evidence to support that fast and effective early discharge of these patients not only have high degrees of safety (morbidity/mortality) but also demonstrate patient satisfaction (Husted, 2012; Kehlet, 2013; Kehlet and Wilmore, 2008). It is important to establish if this treatment modality is not only cost-effective, but meets patients’ expectations and needs, and results in increased patient satisfaction.

Fast-track is a multidisciplinary strategy that begins before surgery and continues after discharge and has become a predictable and safe reality (Hozack and Matsen-Ko, 2015). Fast-track aims to supply best evidence practice and seeks to optimize preoperative patient information, multimodal opioid-sparing analgesia, fluid management/nutrition and rehabilitation (Husted et al., 2010; Kehlet and Søballe, 2010). Patients are mobilised ideally within 1-2 hours after surgery and are encouraged to move as much as possible thereafter to prevent complications such as Deep Vein Thrombosis (DVT). To achieve early and
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

sustained mobilisation there is a need for sufficient pain relief, early oral nutrition and anti-emetic prophylaxis.

In 2000 before introducing fast-track, patients were hospitalized 10-11 days (Husted, 2012) and during that time patients were close to health care practitioners during the most challenging postoperative phase.

Fast-track THA/TKA was systematically introduced in Denmark in 2004 (Hjort Jakobsen et al., 2014) resulting in reduced length of stay (LOS) to 4 days in 2009 (Husted et al., 2012). Further, refinement of a number of the subcomponents of fast-track resulted in an increased number of patients being discharged the day after surgery (X2). Due to the shortened LOS, patients must at a very early stage following major surgery utilise preoperative information and take responsibility for their postoperative care and treatment, including pain management, wound care, and rehabilitation at home.

Patient satisfaction is a legitimate goal of health care interventions and dissatisfaction can lead to patient anxiety and distress which impacts on many aspects of their recovery including pain tolerance, concordance with advice and rehabilitation regimens and healing by the immune system (Hardy et al., 1996). Therefore, it was important to explore patients’ perspectives and experiences of the fast-track intervention following their discharge and to ascertain their satisfaction as this would potentially impact on their outcomes. Also if areas of dissatisfaction are identified it can inform service improvement, refinement of the fast-track pathway and updating of patient information.

A fast-track programme following orthopaedic surgery is not found to compromise patient satisfaction or quality of life after elective THA/TKA (Jones et al., 2014) and a qualitative study by Hunt et al. (2009) found that THA patients treated in a fast-track programme were explicitly positive about their early discharge (median 3 days, range 2-7) and at home they found it more comfortable. Furthermore, Hunt et al. (2009) found that patients indicated concerns such as need for more support or guidance than they received. A
questionnaire survey of 445 patients found that approximately 90% of THA/TKA patients were satisfied with the LOS at hospital (X3). Nevertheless, a questionnaire survey (2-3 weeks after discharge) in 86 TKA patients revealed that 81% of the patients had pain, 91% leg oedema and 70% indicated that they did not (or only partly) exercised as recommend (Szöts et al., 2015). The two most important factors to determine patients’ overall satisfaction following TKA are suggested to be; satisfactory pain relief and meeting preoperative expectations (Hamilton et al., 2013)

During hospitalization, THA/TKA patients have a very high satisfaction score in relation to the care and treatment they receive in a fast-track setting (X3). The lowest score in the same study was found during the first weeks at home after discharge (X3). However, there is a lack of knowledge about THA/TKA patients’ experiences of early discharge with only 1 or 2 days of hospitalisation in fast-track. In addition, a greater understanding is needed about how and if patients manage postoperatively at home after a very short hospital stay. The aim of this study was to explore the lived experiences of patients in fast-track primary unilateral THA/TKA during the first 12 weeks after discharge.

**Methods**

The study took a phenomenological-hermeneutic approach inspired by the French philosopher Paul Ricoeur’s theory of narrative and interpretation (X4; Ricoeur, 1976). A qualitative, explorative design was chosen using semi-structured individual interviews.

The study was undertaken in an orthopaedic department in Denmark performing approximately 1000 THA and TKA operations annually. The department had introduced fast-track THA/TKA in 2002 (X2). Data collection took place between August 2013 and March 2014. A convenience sample of eight patients was
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

recruited, the same patients as for the earlier study, please see X1 (blinded for review) for details of sampling procedure. Patient characteristics are listed in Table 1.

<table>
<thead>
<tr>
<th>Surgery</th>
<th>Age Years</th>
<th>LOS* Days</th>
<th>Sex</th>
<th>Cohabitation</th>
<th>Housing</th>
<th>Socio-economic group</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>THA</td>
<td>76</td>
<td>2</td>
<td>Man</td>
<td>Married</td>
<td>House</td>
</tr>
<tr>
<td>P2</td>
<td>THA</td>
<td>62</td>
<td>2</td>
<td>Woman</td>
<td>Married</td>
<td>House</td>
</tr>
<tr>
<td>P3</td>
<td>THA</td>
<td>82</td>
<td>7</td>
<td>Woman</td>
<td>Widowed</td>
<td>Apartment</td>
</tr>
<tr>
<td>P4</td>
<td>THA</td>
<td>74</td>
<td>2</td>
<td>Man</td>
<td>Married</td>
<td>House</td>
</tr>
<tr>
<td>P5</td>
<td>TKA</td>
<td>47</td>
<td>2</td>
<td>Woman</td>
<td>Married</td>
<td>House</td>
</tr>
<tr>
<td>P6</td>
<td>TKA</td>
<td>42</td>
<td>1</td>
<td>Woman</td>
<td>Married</td>
<td>House</td>
</tr>
<tr>
<td>P7</td>
<td>TKA</td>
<td>67</td>
<td>1</td>
<td>Man</td>
<td>Married</td>
<td>House</td>
</tr>
<tr>
<td>P8</td>
<td>TKA</td>
<td>54</td>
<td>1</td>
<td>Man</td>
<td>Married</td>
<td>House</td>
</tr>
</tbody>
</table>

* Length of stay in hospital

**Fast-track in THA/TKA**

The THA/TKA fast-track programme was organized as shown in Figure 1. Fast-track was running in the department for a non-selected group, which meant that all patients (except a very few patients) followed the standardised programme to the extent that every individual could manage. In Fast-track patients were active partners and needed to be well informed about the fast-track programme to ensure they were ready to partly take responsibility for their treatment. One week before admission, patients as well as relatives were invited to a preoperative information meeting to qualify them to cope with the programme during and after their hospital stay. Two nurse specialists were in charge of organising these meetings and they had a presentation about the fast-track pathway and what patients could expect when they were admitted. They also expressed what the department expected from the patients. Furthermore, the nurses informed patients about what they should bring to the hospital, how medication would be administered during their stay in hospital, and what should be prepared in their homes before admission to ensure their home situation was supportive of their recovery on discharge. Patients were told, that they probably would be ready to go home one or two days after surgery – most of them after one day. A surgeon was also involved in the pre-operative session; including a presentation about surgery where also hip and knee prostheses
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

were shown. An anaesthesiologist provided information about anaesthesia and pain management. Finally, a physiotherapist talked about exercises that patients should do before, during and after admission, including an opportunity for patients to practice walking with crutches and learn how to ascend/descend the stairs with crutches. Further detail of the pre-operative preparation and in-patient care can be found in (X1, X2, X3). Patients were normally admitted on the day of surgery and they were mobilised a couple of hours after surgery. After discharge, their rehabilitation at home usually consisted of the patients themselves completing self-managed exercises and a mobility programme or if needed, the physiotherapist referred the patients to community physiotherapy. On discharge all patients had a comprehensive information leaflet detailing the entire fast-track programme including information about risk of complications and helpline numbers for physiotherapists and nurses from the ward. Furthermore, patients were encouraged to call the ward (24 hours) or the physiotherapist (day time) if they had questions or concerns. Follow-up was done by a physiotherapist for THA/TKA at 6 weeks/4 + 12 weeks. Last follow-up was performed by a nurse as a one-year interview in the clinic for TKA and a phone call for THA.

Data collection

Data were generated through semi-structured individual interviews. Two interviews were performed with each patient at approximately 2 and 12 weeks after discharge. All interviews were conducted by the first
author who was a nurse employed in the research unit of the department but had not been involved with the patients’ care. A semi-structured interview guide was used including the same main topics of fast-track as used in the previous phases of the study. However, the interview guide evolved and new topics that presented during their previous interviews, were added. In order to let the patients tell their own story and what was important to them the interview schedule included open-ended questions such as ‘please tell me, how was your experience over the first 12 weeks at home after your hip/knee surgery?’ and ‘please tell me, what was your experience of managing your own pain?’ The intention was to give the patients the opportunity to express their feelings and opinions about what they had experienced (Ricoeur, 1990). The interviews lasted from 17 to 55 minutes, were audio recorded and transcribed verbatim by the first author.

Data processing

Data from the interviews were transferred to NVivo10® to organise the data. The analysis and interpretation were inspired by Ricoeur’s three analytical levels: naïve reading, structural analysis, and critical interpretation and discussion (Ricoeur, 1976) (Figure 2).

During the naïve reading an initial impression of the data was obtained. The texts were read several times to gain an overview of what was being said. In accordance with Ricoeur, the interpreter, who was the first author, listened for dialogue that made an impression, which were written down, their meaning as a whole understood and the first conjunctures made (Ricoeur, 1976).

Structural analysis was completed to further interpret the naïve reading. This gave a deeper understanding of what fast-track THA/THA patients experienced after discharge. In the structural analysis, the units of meaning (what is said) were reflected on and the units of significance (what the text speaks about) were formulated. From the units of significance a number of themes were generated. In Figure 2 the horizontal
arrows illustrate the dialectical process of the structural analysis, which means that the analysis and interpretation process moved back and forth between part and whole, and between understanding and explanation.

In the critical interpretation and discussion, the themes were further interpreted and discussed in relation to other research and relevant theory. In this way, the findings moved from the specific to the general level.

The co-authors read extracts and a number of direct quotes. Subsequently, the analysis and the themes were discussed and evolved until agreement was achieved. The themes were translated from Danish to English and the appropriateness of the translated naming of these themes were checked by a native English speaker, who is one of the co-authors.
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

The analysis and the findings were discussed with fellow researchers from the research team to ensure veracity.

Ethical considerations

Patient consent for participation was gained. The study was approved by the Danish Data Protection Agency (J.nr. 2012-41-0325). The Regional Committee on Health Research Ethics was sought, but they concluded the study did not require approval.

Findings

The initial impressions through the naïve reading of the interviews showed that it was good to come home. Different feelings were expressed in relation to being prepared for discharge and to self-management of medication and rehabilitation during the first 12 weeks after discharge.

Through the structural analysis, the areas from the naïve reading were further analysed and three themes emerged:

1) Dealing with transition between hospital and home
2) Pain and self-management of medication
3) Challenges in rehabilitation.

The three themes and their related sub-themes are presented in greater detail below (Table 2) using illustrative exemplar direct patient quotes. (W) refers to weeks the interviews were performed after surgery and (P) refers to the patient.
Dealing with transition between hospital and home

In relation to fast discharge after surgery and to manage life afterwards at home there was positive experiences, but it also raised some problems in terms of living at home so soon following surgery. Details can be found in Table 2.

Table 2. The structural analysis and how the themes and subthemes emerged. It is illustrated how the direct quotations/units of meaning (what is said) moved to units of significance (what the text speaks about) and to emergence of themes and subthemes.

<table>
<thead>
<tr>
<th>Units of meaning (What is said)</th>
<th>Units of significance (What the text speaks about)</th>
<th>Themes and subthemes (Emergence of key themes and subthemes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;... to come home in your own surroundings is number one&quot; (12W-P3).</td>
<td>There was a strong wish to go home to ones own routine and privacy.</td>
<td>Dealing with transition between hospital and home.</td>
</tr>
<tr>
<td>&quot;... there was a lot of activities that day and I was very tired, but no, I still wanted to go home (the day after surgery)&quot; (12W-P6).</td>
<td>There was a strong wish to go home to ones own routine and privacy.</td>
<td>- Home is where the heart is.</td>
</tr>
<tr>
<td>&quot;It was perfect to come home the day after surgery... why should I take any longer?&quot; (12W-P7).</td>
<td>Staff too busy to involve the patients.</td>
<td>- Shared decision making in discharge planning.</td>
</tr>
<tr>
<td>&quot;In fact I felt so fast that I didn’t even know that suddenly I was discharged...&quot; (2W-P5).</td>
<td>Being involved and feeling in control of the discharge planning process.</td>
<td></td>
</tr>
<tr>
<td>&quot;The discharge, it went fast... it was messy... I was not sure about the pills... but they also were very busy at that time&quot; (12W-P7).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;... and I felt that I was pretty well prepared in relation to how is was going to be at home with pain&quot; (12W-P8).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;It was really good that I had an entire day in hospital, otherwise I don’t think that I could remember all this information&quot; (12W-P3).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>About the medicine I was unsure, because of the morphine I vomited... I had a desire for more help... you end up in different phases, it hurts terribly, then it gets better and then it hurts again... it’s like a roller coaster... perhaps it’s said, but it’s the information I fear over my head&quot; (12W-P9).</td>
<td>- Patients struggled with pain management.</td>
<td>Pain and self-management of medication.</td>
</tr>
<tr>
<td>&quot;... when it hurts, you can hardly manage the pain yourself, trust in a-wise nurse... I had to do exercises... I had a much pain and there wasn’t enough pain killers still... then the general practitioner came and gave me extra morphine... just an injection&quot; (12W-P9).</td>
<td>- Patients struggled with pain management.</td>
<td>Pain is like roller coaster.</td>
</tr>
<tr>
<td>&quot;It’s like a clamp under my knee, which just squeezes the muscles...&quot; (12W-P8).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;... it’s the dead bug, and under my knee, it’s also balloing&quot; (12W-P6).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;... I haven’t had pain in the wound stall&quot; (12W-P5).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;I have used the ice bag a lot, it really works...&quot; (12W-P8).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;I don’t think that I should stop doing exercises, I have to take more pills... I had to learn the hard way, because they had told me to take pills, ah, I would rather not take more than I had to, but it was too stupid. Therefore, now I do it... I thought that I did not belong to them (those who needed more pills) and that I could easily manage without...&quot; (12W-P7) and further after 12 weeks: &quot;... because I really was against it, I discovered it was the way to success... but it’s more important (loud voice) than I thought to take pills and not be afraid to take them&quot; (12W-P7).</td>
<td>- Pain could be experienced as negligible.</td>
<td>Pain could be experienced as negligible.</td>
</tr>
<tr>
<td>&quot;Perhaps I had expected to have more contact with the hospital...&quot; (12W-P6).</td>
<td>There was a reluctance to take analgesia.</td>
<td>Learn it the hard way.</td>
</tr>
<tr>
<td>&quot;... I should have been greet with a small support, but I can manage at home because I have people to talk to&quot; (12W-P6).</td>
<td>After discharge, there was a feeling of being left on their own.</td>
<td>Need for a closer link back to the hospital.</td>
</tr>
<tr>
<td>&quot;... when you are at home it is difficult to motivate yourself all the time and stay on track&quot; (12W-P5).</td>
<td>The rehabilitation programme could be challenging when left on your own.</td>
<td></td>
</tr>
<tr>
<td>&quot;I thought that I could manage myself, it is all about discipline&quot; (12W-P8).</td>
<td>Motivation and discipline—back in the saddle.</td>
<td></td>
</tr>
<tr>
<td>&quot;The most challenging was to get back in the saddle and to do the exercises... I had my daughter to motivate me, it cannot help being nearby—pamper...&quot; (12W-P7).</td>
<td>- The rehabilitation programme could be challenging when left on your own.</td>
<td></td>
</tr>
<tr>
<td>&quot;Quality of life is very different from one human to another, because anyone might think it’s great to walk from the dining table to the bed, so it wasn’t what I was going to achieve... I have to play badminton again&quot; (12W-P7).</td>
<td>- The rehabilitation programme could be challenging when left on your own.</td>
<td></td>
</tr>
<tr>
<td>&quot;Are you doing the exercises correctly? After surgery, then... just manage on your own when afterwards, there is still much you are uncertain about...&quot; (12W-P2).</td>
<td>- The rehabilitation programme could be challenging when left on your own.</td>
<td></td>
</tr>
<tr>
<td>&quot;The physiotherapy has really helped me... the one to one support was good&quot; (12W-P6).</td>
<td>- A feeling of uncertainty and being left alone with the rehabilitation.</td>
<td></td>
</tr>
<tr>
<td>&quot;It is important to work with health professional, then you feel confident... you get a pat on the &quot;back&quot; (12W-P4).</td>
<td>Support from the physiotherapist was helpful.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Confidence and uncertainty during the rehabilitation.</td>
<td></td>
</tr>
</tbody>
</table>
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

*Home is where the heart is*

The short LOS at hospital was experienced positively, the day after surgery could be quite chaotic and perhaps therefore there was a strong wish to go home to one’s own routine and privacy. After 12 weeks the same positive attitude to the short LOS was still there. The quotations in table 2 indicate that home is where the heart is.

*Shared decision making in discharge planning*

The short LOS at hospital was appreciated. Patients’ confidence to cope with going home was linked to being involved and the feeling of control in the discharge planning process. Conversely, if the staff were perceived as too busy to involve patients in the discharge planning and the information regarding pain management at home, this led to feelings of uncertainty and anxiety about going home. The extensive information ensured that patients knew what to expect in terms of pain and need for pain management, but it could also be challenging to remember all information and more time in hospital could be necessary. Information giving needs to be paced and matched to individuals. In discharge planning, shared decision making could contribute to the ability of patients to transact the information given at hospital and be able to utilise it when on their own at home. Shared decision making may not have been adequately implemented since patients found it difficult to handle the information given before discharge.

*Pain and self-management of medication*

In relation to pain and self-management of medication everyday life at home the patients’ experience of pain management varied from negligible pain to severe pain; however, challenges could also occur when the experiences of pain was complex in various ways.
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

**Pain is like a roller coaster**

It could be hard to manage the pain treatment on your own. The huge amount of information could be difficult to deal with after discharge and consequently, the pain management was not always successful. Patients could experience negligible pain. Contrary, patients could also experience severe pain finding it too difficult to cope with the pain themselves and needed help from the general practitioner. After surgery pain was experienced as different types and in different locations, including neurogenic pain, which required a specific way of being treated and the analgesia prescribed might not have been sufficient or suitable. Patients also reported the effectiveness of non-pharmacological pain relief including use of ice packs. In summary, the pain experienced by participants varied from severe to mild or no pain and back again – just like a roller coaster.

**Learn it the hard way**

When patients struggled with their pain management they found it difficult to engage with rehabilitation. Even though patients were aware of the importance of taking additional pain killers, they did not take them, because there was a reluctance to taking them. An expertise about pain management was developed during the first 12 weeks.

**Need for a link back to the hospital**

Although the short LOS was accepted by the patients there was a desire for some sort of follow-up after discharge, there was a feeling of being left on their own. It was also important to have relatives around at home after major surgery. Patients were almost held by the hand before and during admission, compared to after discharge where patients were left to themselves which evoked feelings that it would have been good with a link back to the hospital.
Challenges in rehabilitation

The analysis showed that rehabilitation required both motivation and discipline through the entire pathway.

Motivation and discipline – back in the saddle

Patients struggled to maintain their motivation to do their exercises, especially as more time passed. They felt it important to be self-disciplined. On the one hand patients understood the importance of doing their exercises, but it could be different when you came home and you had to take the responsibility of the recovery yourself. A supportive family member was of importance. Discipline and motivation seemed even more important 12 weeks after discharge. Patients’ individual goals were an important factor in motivation to sustain rehabilitation. Furthermore, patients’ goals can support motivation and discipline in order to get back in the saddle.

Confidence and uncertainty during the rehabilitation

Not being linked with the community physiotherapists could bring a feeling of uncertainty about being left alone to do the rehabilitation. Patients, who were supported by the community physiotherapist found it very helpful at 2 and 12 weeks.

Critical interpretation and discussion

This explorative study investigated the lived experiences of patients in fast-track THA/TKA during the first 12 weeks after discharge. Key findings were that patients appreciated the short LOS of only 1 or 2 days in hospital affirming the findings of Hunt et al. (2009). However, they felt the discharge process was rushed and they were not sufficiently involved in the discharge planning. There was a feeling of uncertainty and being left on your own after discharge, which could affect the pain management and the recovery at home.
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

The aim of “fast-track” is not just to minimize LOS, instead the clinical pathway should optimize patient recovery and experience. Minimizing LOS has many benefits for patients and health care resources, but the findings suggest that patients require a more individual and systematic approach to access information and support regarding their pain management and rehabilitation once at home. These findings are supported by a Norwegian study where patients would have liked the information about pain and exercises on a more individualized basis (Sjøveian and Leegaard, 2017). The first theme ‘Dealing with transition between hospital and home’ revealed that patients wanted and felt ready to go home ‘Home is where the Heart is’ and this supports previous research that patients feel more in control at home, are better rested and relaxed in their own environments (X5). Issues were raised about the discharge planning being rushed and patients not feeling involved in the decision making about them being ready for discharge. Lack of involvement in decision making leads to disempowerment and feelings of being out of control (Hardy et al., 1996; Rotter, 1966).

Difficulty in effective management of pain when at home was raised by the patients, ‘Pain is like a roller coaster’, describing how pain could be intolerable and the feeling of anticipation of more pain coming was stressful and impacted on their ability to engage with rehabilitation. Unmanaged pain has many physical and psychological implications, inhibiting patient’s movement and mobility which are essential components of rehabilitation following THA/TKA. Furthermore, reducing movement is a risk factor for DVT. Learn it the hard way refers to patients’ reluctance to take pain medication, even though they acknowledged they had received information about the importance to taking their pain medication regularly and for break through pain. There are many intrinsic factors that influence patients’ experience of pain, pain tolerance and pain threshold and also their reluctance and fear to take analgesia. Patients frequently worry about addiction and side effects such as nausea, drowsiness and loss of energy (X1). ‘Need for a closer link to the hospital’ related to patients expecting more interaction with staff once they had gone home, to ask questions about their pain and pain medication and other concerns.
Patients experienced challenges with motivation to engage with their rehabilitation at home, particularly to maintain their exercise regimen at 12 weeks post discharge. This supports the previous study by Szöts et al. (2015). There was variability in terms of patients’ intrinsic motivation, with many setting personal goals that required them to engage intensively with their exercises, despite them experiencing pain. These highly motivated patients talked about ‘getting back in the saddle’. Theories of motivation outline how individuals may differ between high levels of intrinsic motivation when their own personal desires and goals are the stimulus (Guthrie and Harvey, 1994; X6). In this case to press on with rehabilitation despite difficulties such as pain or have a tendency toward extrinsic motivation where the stimulus comes from an external source such as a person they consider to be more knowledgeable or having expertise for example a physiotherapist to instruct and guide them to do their rehabilitation. In the absence of a physiotherapist when the patient with extrinsic motivation is at home may lead to feelings of uncertainty and lack of confidence in their own ability to engage in rehabilitation.

Conclusion and recommendations for clinical practice

In this explorative study investigating the lived experiences of patients in fast-track THA/TKA the first 12 weeks after discharge three themes emerged from the structural analysis: 1) Dealing with transition between hospital and home; 2) Pain and self-management of medication; and 3) Challenges in rehabilitation. The findings illustrate that once at home patients had quite unique and varied experiences in terms of feeling in control, able to manage their pain and rehabilitation. This affirms there is a need to develop in partnership with each individual patient a post discharge plan of care and rehabilitation to meet their own individual needs, preferences and mode of motivation (intrinsic versus extrinsic). From the findings of this study there are a number of recommendations detailed below to enhance patient experience and the quality of the fast-track pathway for the patient on return to their home:
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

- Information giving needs to be paced to avoid overload during the pre-operative and in-patient stages. Use of technology such as an app on their mobile phone, tablet etc. could support patients to re-visit information at their own convenience and time of need.

- Patients and their families need reassurance that if support, guidance and assistance is needed after discharge (for example if they are experiencing problems with pain management) that this is provided in a manner to support their own individual needs. Specifically, in discussion with individual patients some may feel a follow up visit to the outpatient clinic or a 24-hour advisory line staffed by the orthopaedic team would be helpful.

- Patients should be involved in every stage of decision making about their discharge and their rehabilitation at home. This could be enhanced by practitioners developing and agreeing an individual rehabilitation plan prior to discharge agreeing short, medium and long term goals and what the patient needs to do on a daily basis to work towards those goals. This rehabilitation plan needs to take into consideration if the patient has a strong intrinsic motivation or has a tendency to prefer extrinsic motivation as this will influence the type and level of support required following discharge. Patients may find it useful to record their progress toward their rehabilitation goals in a daily diary entry, as reading back can provide motivation on how far they have come.

**Conflict of interest**

There is no conflict of interest in the preparation of the manuscript.
Patients’ experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study

REFERENCES


