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Patient experience in fast-track hip and knee arthroplasty – a qualitative study

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Conflict of interest

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Abstract

Aim. To explore the lived experience of patients in fast-track primary unilateral total hip and knee arthroplasty from the first visit at the outpatient clinic until discharge.

Background. Fast-track has resulted in increased effectiveness, including faster recovery and shorter length of stay to about 2 days after hip and knee arthroplasty. However, the patient perspective in fast-track with a median length of stay of < 3 days has been less investigated.

Design. A qualitative design.

Methods. A phenomenological-hermeneutic approach was used, inspired by Paul Ricoeur's theory of narrative and interpretation. Eight patients were included. Semi-structured interviews and participant observation were performed.

Results. Three themes emerged: dealing with pain; feelings of confidence or uncertainty – the meaning of information; and readiness for discharge. Generally, the patients were resistant to taking analgesics and found it difficult to find out when to take supplementary analgesics; therefore, nursing staff needed enough expertise to take responsibility. Factors that increased patients' confidence: information about fast-track, meeting staff before admission, and involving relatives. In contrast, incorrect or conflicting information and a lack of respect for privacy led to uncertainty. In preparing for early discharge, sufficient pain management, feeling well-rested and optimal use of time during hospitalization were important.

Conclusion. The study shows the importance of dealing with pain and getting the right information and support in order to have confidence in the fast-track programme, to be ready for discharge and to manage post-operatively at home.

Relevance to clinical practice. In fast-track focusing on early discharge, there is an increased need for evidence-based nursing practice, including a qualified judgement of what is best for the patient in certain situations. The knowledge should be gleaned from: research; the patients' expertise, understanding and situation; and nurses' knowledge, skills and experience.

Keywords. Patients' experience, hip/knee replacement, qualitative study, phenomenological hermeneutics, nurse's responsibilities.

What does this paper contribute to the wider global clinical community?

- Knowledge about patients' experiences in a total hip and knee arthroplasty fast-track programme and the significant issue for them to feel confident in relation to early discharge.
- The paper contributes to reflections on nursing practice in a fast-track programme in relation to interactional nursing practice theory.

Introduction

This paper deals with the lived experience of patients undergoing fast-track primary unilateral total hip arthroplasty (THA) and total knee arthroplasty (TKA). The study is a part of a larger study, which contains further aspects of the fast-track programme. In Denmark, approximately

18,000 patients underwent THA and TKA in 2012 (Danish Hip Arthroplasty Register 2013, Danish Knee Arthroplasty Register 2013).

Today, patient-centred care is a requirement of the healthcare system and the "patient's voice" plays an increasingly important role. Fast-track was developed to prevent complications and to support speedy recovery after surgery (Kehlet & Wilmore 2008). Fast-track has resulted in increased effectiveness and a median length of stay (LOS) of 2 days after THA/TKA, along with improved utilization of funding (Specht *et al.* 2015). However, there might be a risk that patients find it difficult to cope with the substantial amount of information they receive during their short hospital stay.

Background

Fast-track within THA/TKA is a well-established, multidisciplinary strategy that has gained widespread acceptance and is now considered as standard care (Kehlet 2013). In Denmark, fast-track in THA/TKA has been systematically introduced since 2004 (Hjort Jakobsen *et al.* 2014) and, over the last decade optimized in all its sub-components (Specht *et al*. 2015).

A review within orthopaedic surgery found that fast-track does not compromise patient satisfaction (Jones *et al.* 2014). To our knowledge, only one study has investigated patient experience of accelerated discharge after THA (Hunt *et al.* 2009). In Hunt's (2009) study, seven of 15 patients treated in a fast-track programme were explicitly positive about the early discharge (median 3 days, range 2-7) and they found it more comfortable in their own homes. However, 12 patients expressed concerns and nine disclosed concerns not explicitly related to short LOS, but in relation to the need for more support and guidance or continued illness after discharge (Hunt *et al.* 2009).

THA/TKA patients in a fast-track programme showed an overall satisfaction score: 9.4 and 9.3 respectively, on a numerical rating scale (0-10) (Husted *et al.* 2008). Another study found that THA/TKA patients with a short LOS were equally as, or more, satisfied than were patients with a longer LOS (Husted *et al.* 2010a).

The patient perspective in fast-track primary unilateral THA/TKA with a LOS of < 3 days has not been investigated. The aim of this study was to explore the lived experience of patients in fast-track primary unilateral THA/TKA from the first visit at the outpatient clinic until discharge.

Materials and Methods

The study was undertaken in a Danish orthopaedic department where fast-track was introduced in 2002 (Specht *et al*. 2015). This study was a qualitative, explorative study using participant observation and interviews. It took a phenomenological-hermeneutic approach inspired by the French philosopher Paul Ricoeur's theory of narrative and interpretation (Lindseth & Norberg 2004, Pedersen 1999, Ricoeur 1976). Eight patients who underwent THA or TKA from August 2013-March 2014 were invited to participate in this study and all agreed. Apart from stratification in relation to surgery and sex, the patients were randomly included in the study. Based on a list of dates when doctors were due to examine patients to assess whether they needed surgery, the first author picked a set of random dates. The first patient scheduled for surgery was asked to participate in the study. Inclusion criteria: primary THA/TKA. Exclusion criteria: < 18 years, dementia, unable to read/speak Danish, bilateral surgery, previous THA/TKA of the opposite hip/knee, psychological diagnosis, and a disease with a marked influence on the patient's experience of the clinical pathway.

Mean age: 63 (range 42-82). Further patient characteristics are listed in Table 1.

Table 1.

Figure 1.

Fast-track programme

The fast-track programme in the department was organised as outlined in Figure 1. After the examination in the outpatient clinic THA/TKA patients had all testes performed on the same day. Furthermore, there was an interview with a nurse and an anaesthesiologist. One week before admission patients and relatives were invited to participate in a preoperative information meeting conducted by a surgeon, an anaesthesiologist, a physiotherapist and a nurse. Patients were admitted on the day of surgery and were discharged 1-3 days after surgery. Basically patients were instructed to complete a self-training programme after discharge unless the physiotherapist assessed that the patient needed to be referred to physiotherapy in the community. Removal of stables was done in the ward or by their general practitioner. Follow-up was conducted by a physiotherapist for THA/TKA at 6 weeks/4 + 12 weeks. Last follow-up was a 1 year interview by a nurse (Figure 1).

Data collection

Participant observation was done at the outpatient clinic, during: the pre-admission information meeting; on the day of surgery from admission until the patient had returned to the ward after surgery; the day after surgery in the morning; physiotherapy and discharge (Figure 1). During participant observation, field notes were made that focused on the fast-track clinical pathway in

accordance with Spradley's nine dimensions (Spradley 1980). The researcher was mainly passive during the observation, but was active by informal conversations.

The interviews were held before discharge (Figure 1) in an undisturbed room at the hospital. One interview was performed as a telephone interview because the patient was already discharged. The interviews followed a semi-structured guide containing key topics from the fast-track programme, such as experiences from the outpatient clinic, pre-admission information meeting, admission, information, pain management and rehabilitation. Open questions were used, such as: "How did you experience getting a new hip/knee at this department?" Due to the explorative design, the patients had the opportunity to bring up the issues that were most important to them, including events perceived as good/bad and they could freely express their attitudes and tell their own story (Pedersen 1999, Ricoeur 1984, 1985). The interviews lasted mean 30 minutes (range 16-51), were audio-recorded and transcribed verbatim.

Data processing

Data from the field notes and the interviews were transferred to the database programme NVivo10® in order to systematise data. The analysis inspired by Paul Ricoeur consisted of three analytical levels: naïve reading, structural analysis, and critical interpretation and discussion (Ricoeur 1976).

In the naïve reading, the text was read several times from a phenomenological perspective. The interpreter attempted to be open-minded and allowed the text to speak to her; the meaning as a whole was understood and the first conjunctures were made (Lindseth & Norberg 2004, Pedersen 1999).

In the structural analysis, the units of meaning were described (what was said). The units of meaning were reflected on in relation to the naïve reading and units of significance (what the text

was talking about) were formulated. From this, the themes emerged and were formulated (Figure 2) (Lindseth & Norberg 2004, Pedersen 1999). The essential meaning of the patients' lived experience was identified in these themes. The intention was to be as objective as possible during the structural analysis (Lindseth & Norberg 2004, Pedersen 1999). The analysis was a dialectical process that moved back and forth between understanding and explanation, as illustrated by the arrows in Figure 2 (Pedersen 1999, Ricoeur 1976).

Figure 2.

In the critical interpretation and discussion, the themes led to further interpretation and discussion in relation to relevant theory and research and moved from the specific to the general. In order to ensure validity, the findings were discussed with fellow researchers.

Ethical considerations

Patients received oral and written information before informed consent was obtained. They were informed that data would be anonymised and that it was voluntary to participate. The participant observation and the interviews were performed by the first author, who had worked as a nurse in the research unit of the department but who has never been a care provider on the ward.
The Danish Data Protection Agency approved the study (J.nr. 2012-41-0325). In accordance with Danish law, the Regional Ethical Committee considered that formal approval was not required.

Results

Through the naïve reading of the transcribed interviews and the field notes, and the structural

analysis, three themes emerged: dealing with pain; feelings of confidence or uncertainty – the meaning of information; and readiness for discharge. In this section, the three themes will be interpreted. (I) refers to the interviews and (F) refers to the field notes from the participant observation.

Dealing with pain

In fast-track THA/TKA, it is often necessary in pain management to administer morphine. There were both positive and negative effects of the treatment: "…I am so against the awful morphine, because it makes me feel really weird. I'd like to avoid it. It's a terrible thing" (F P1). "Then there was the fact that I felt sick all of a sudden..." (I P2). "...It's the painkillers you become so tired from... a total lack of energy, so it's not easy to do anything" (F P3). The side effects of morphine were experienced as unpleasant, such as drowsiness, nausea and loss of energy. These quotations represent a dilemma between enduring the pain from the surgery or enduring the side effects of the analgesics.

Taking painkillers can lead to a fear of addiction: "I'd like to check the dosage with my husband. I'm afraid of taking too much medicine when I get home" (F P6). The quotation expresses a fear of becoming addicted to the medication. The statement indicates that it might be good to have someone to depend on, because pain management by the patient at home brings with it a degree of responsibility.

Other reasons not to take the medicine were mentioned: "So, I think the fewest pills is best, because I'm happiest with that..." (I P8). "...I'm the type who really has to be in a lot of pain before I'll take something (laughs), so I probably stretch it out too long... although I would say to

myself that now you should take it – before...” (I P5). “Well, again it’s my own fault. I could just have taken some of the morphine” (I P1). There can be reluctance to taking analgesics and a need to be in pain before taking pills. A statement such as “it's my own fault” could indicate, on the one hand, a desire to take responsibility for pain management, and, on the other hand, a feeling that it is not quite successful. Furthermore, patients stated: “...when do you begin to feel pain? I ask myself ‘Do I get in pain?’" (I P5). “It's a bit hard for me to judge, because it’s hard to know whether you should be absolutely 100% pain-free, or if it’s ok to feel a little pain” (I P2). The quotations reveal an uncertainty about the degree of pain that would warrant a request for extra painkillers, and that the attention paid by staff to providing painkillers in time has a beneficial effect. In one situation, where a patient arrived back from the radiology unit saying he was in pain, the health assistant gave him additional analgesics. The patient said: “I probably would not have got them if she had not encouraged me” (F P8). Others expressed: “...whenever I’m not sure, they give me one. They must have found the right medication, because I have no pain now” (I P7). These statements indicate the importance of nursing skills and that it is crucial that nursing staff take responsibility to help with good pain management.

Insufficient pain management can cause difficulty in physiotherapy treatment. In one situation, a physiotherapist observed a patient getting up from a chair. The patient walked out into the hallway and exclaimed: “It hurts, it’s stinging”. The physiotherapist asked if the patient remembered to get extra painkillers whenever she was in severe pain. The patient replied, “Well, I took it last night – before... well, I had been given the tablets too late”, and the physiotherapist replied, “I don’t think we should train any more right now, because you are not quite 100%. I’ll go and talk to the nurse about you getting extra painkillers” (F P3). Another expressed: “Just sometimes... it felt so tight, surely almost like it must feel when someone has an artificial leg…

and pain, yes, where I couldn't walk and was not fit to train, because I think I had too much pain" (I P2). This shows that attention to timely and adequate pain management is crucial to optimal rehabilitation training.

Feelings of confidence or uncertainty – the meaning of information

Fast-track THA/TKA patients are given a leaflet and oral information, both individually and at a joint meeting. The information engendered both feelings of being reassured and confident and also feelings of uncertainty: "...it is only then it dawns on me how big an operation it really is... the more detail I find out... the less afraid I am" (I P7). Others expressed: "When the doctors gave information I became more confident, just to put faces to some of the staff..." (I P5). "A lot of the things we're told about are also in the leaflet. It's good that there's an opportunity to ask questions, so you get everything" (F P8). "I think, perhaps, it was a bit long-winded... I mean, there was a bit of repetition of what I had already read" (I P2). It seemed that the meeting, where information was given and where there was an opportunity to put names to faces, helped to increase patients' sense of confidence. The quotations reveal how this knowledge, even if it overlapped with the leaflet, helped to reduce uncertainty and fear of the unknown.

Fellow patients were found to have an impact on feelings of security. The benefit of talking with someone who is in the same situation as oneself is clear: "I said at the meeting that I was uncomfortable about it [anaesthesia]. Afterwards, one of the others came to me and said that I needn't worry, because they had been through it... So, I was very reassured on going home..." (I P5). It was important to have relatives present: "It was a good thing to have my wife with me, because there is a lot to keep track of... you can be uncertain" (I P4). "It was an entire round the world trip... I was glad that I had my daughter with me, because... I found it very difficult to take

it all in" (I P3). A "round the world trip" could represent that a lot of information is given, and everything that is going to happen, it can be confusing and hard to manage on one's own. Discussing the situation with another person gives peace of mind.

Although the information given was received positively, it also had an impact on patients as uncertainty and insecurity. Some of the information was given by the nurse, who went around during the meeting and gave specific information to individual patients. This was experienced as follows: "I think the first time the nurse ran round and chatted to people, I spent a long time sitting and waiting" (F P8). Another patient also said: "...it could be, maybe a bit annoying – while I'm sitting there, they go round, sort of having, I feel, private chats, and we just sit there and can hear. I think that was maybe just a little bit daft, to hear what someone needed, to sleep well and the whys and wherefores" (I P2). This patient was having a conversation with a nurse about urination. The information meeting had just ended and there were three doors open in the room. Most people had left, but some patients and relatives were still there and the patient's husband was standing behind the patient. The patient mentioned this at the interview: "...you could definitely say - in my opinion - that was a bit stupid" (I P2). When the discussion was about private and personal matters, there was a desire that others would not overhear the private conversation with the nurse. When the private arena is not respected, this can lead to feelings of insecurity. Patients preferred more one-to-one, private communication: "...I think maybe that there should be a bit more for the individual... as it was perhaps a bit general for me" (I P2).

The conversation with individual patients was timed to take place in the outpatient clinic directly after the patient had been to the preliminary consultation with the doctor, where the decision to operate was made. It could be difficult for patients to take in what was talked about in the

conversation: “I think there was a lot of information. I did listen but it was quite mechanical. I think I can find all the information in the leaflet. It’s all about the most important thing in the world – oneself. Your head is full with the thought that you have to have an operation. I’m afraid, even if it’s only a small operation” (I P8). Another patient said: ”Oh, that [nurse conversation] has gone right out of my head” (I P6). The quotations point to the difficulty for patients in taking in information right after the decision has been made to operate. The patient could be preoccupied by a host of issues at that time, e.g., practical matters that would have to be dealt with at home or anxiety about the operation and whether one will survive it. The information is not considered to be important at the time, and patients know they can read the same things in the leaflet when the need arises. What was discussed did not seem to stick in the patients’ mind. This illustrates how important it is to be aware of the right time to deliver the information; an awareness that is based on the individual patient’s situation and capacity to assimilate the message.

The study revealed that a sense of uncertainty can arise if the information is incorrect or ambiguous: “...and so he said [laboratory technician] I should tell the nurse that I needed drops... she [doctor] said that, no, I shouldn’t... but then I was, like, a bit unsure...” (I P4). “At that point I was getting desperate, because I had to say to her (anaesthesia nurse), so (laughing), should I not be asleep (during the operation)... they said to me that I would be asleep, but I wasn’t, and I think that’s a mistake, I think that was wrong” (I P7). These quotations demonstrate that patients could feel a lack of confidence on receiving information that was either conflicting or incorrect, and this could affect their trust in the staff.

Readiness for discharge

Some fast-track THA/TKA patients are ready to be discharged within 1-2 days. Although they would like to go home and recuperate, challenges can arise surrounding the concentrated clinical pathway. It was important to be well-rested: "When I woke up, I thought, now I'm ready and started by hopping out of bed and trying to walk around, until the nurse said no – that I should wait till the physiotherapist had said ok... things don't go that quickly. I'd actually thought they would..." (I P7). This shows that a good night's sleep with rest and relaxation is important so that the patient has enough energy to begin rehabilitation – a training that demands the active participation. One patient expressed: "It's a big undertaking, to work through a lot of small exercises; it demands a degree of self discipline" (I P5). Even though there is great motivation to start rehabilitation, conditions as unrest and disturbance can have an impact: "...On the first night after I'd had the operation, I actually didn't sleep at all, because there was a lady who was up every single hour, and my bed was also opposite the toilet" (I P2).

In another situation, a patient took a bath at 5 a.m., because she could not sleep and thought that she smelled of urine and vomit: "So, I'm not sleeping, because I feel sick and I think to myself I might as well get up... but I hadn't given a thought to the fact that so much would happen during the day. It was a bit silly of me. I could just have thought about it. And I'm so tired that I start to sob (laughing)... I'm tired and feel unwell... I need to get home to my own bed" (I P6).

Furthermore, patients' midday rest could be interrupted. "Anyway, a bit too much has been happening, like sometimes between 12.00 and 14.00 someone who has just been operated arrives on the ward. Then suddenly someone else calls for the nurse, and suddenly she [physiotherapist] is standing by my bed, just when I'm getting my best sleep. It wasn't exactly the best" (I P2).

Good sleep and rest were necessary in order to have enough energy to take part in rehabilitation, but disturbances, both during the night and the midday rest made it hard for patients to be rested

enough to take part in training along with the day's other activities, which would help the patient become ready to be discharged.

Also of significance is the optimal use of time during the short hospitalisation. "I had a bad experience with the dressing... they shouldn't say in the morning, before I've had breakfast, we'll come in an hour or two. So, they come at that time (11:35) and change it. The physiotherapist had come (twice that morning) and it isn't (changed)... someone isn't on top of things here" (I P7). The discharge can be postponed, because a patient has to wait to have his dressing changed and the physiotherapist doesn't want to train with the patient until the dressing is changed. A more co-ordinated use of available time would contribute to the patient's readiness for discharge.

Critical interpretation and discussion

In this explorative study investigating the lived experience of patients in fast-track primary unilateral THA/TKA from the first visit at the outpatient clinic until discharge, three themes emerged from the structural analysis and the interpretation: dealing with pain; feelings of confidence or uncertainty – the meaning of information; and readiness for discharge.

Studies have shown that, in elective orthopaedic surgery, fast-track does not have a negative effect on patient satisfaction (Jones *et al.* 2014). A questionnaire survey found satisfied patients after fast-track THA/TKA (Husted *et al.* 2010a). We found issues related to pain management, rehabilitation, information, patients' sense of security about the process and worries. Similarly, another study showed that, following fast-track THA, although patients did not question the duration of stay, their doubts and worries could be veiled by their acceptance of early discharge (Hunt *et al.* 2009). However, the closed questions in the questionnaire survey (Husted *et al.* 2010a) provided no answers about the kinds of issues that were linked to the feeling of doubt and

worries. Our qualitative and explorative study, therefore, supplements the questionnaire study and contributes with descriptions of the issues.

The intention of fast-track is that the patient is actively involved and quickly ready to look after him/herself at home. We will draw on Scheel's Interactional nursing – a practice-theory (Scheel *et al.* 2008) to highlight how patients achieve this action competence. It integrates three basic modes of action: a cognitive-instrumental approach that involves targeted actions; an aesthetic-expressive mode, where understanding oneself and others and their situation, and reflection on social conditions are central; and a moral-practical mode of action, that is linked to communication and co-operation with other people from an ethical perspective of fair and responsible action (Scheel *et al.* 2008). Although all three modes of action are inherent in every nursing situation, it takes a qualified judgement to ascertain which mode of action is prominent in specific situations. Therefore, the qualified judgement has an overall impact on the interactional nursing practice and it is significant in relation to the care and treatment of patients in the fast-track process.

The study showed that, besides their fear that they would become addicts, the patients were resistant to taking morphine and other analgesics. They felt they had to be in pain before they would take the medicine. There was also an uncertainty around how bad they should feel before the medication was required. These factors meant that patients were not on top of their pain management, despite repeatedly delivered information that pain should be nipped in the bud. This could contribute to the fact that severe pain was experienced after the operation. In a THA study, patients were expected to self-medicate their pain relief, and it was similarly shown that patients were in pain (Joelsson *et al.* 2010). Insufficient pain management can be the result of a

reluctance on the part of patients to take pain-killers when they are given the responsibility for self-medication. In relation to interactional nursing practice, this highlights how important it is that the nurse and patient work closely together to solve the problem, because the patient lacks the knowledge and skills to self-medicate analgesics. This mode of action relates to the cognitive-instrumental mode of action (Scheel *et al.* 2008). The patient is dependent on the professional judgement (Scheel *et al.* 2008) of the staff. Pain management should be based on a multimodal, opioid-sparing pain treatment (Husted 2012, Husted *et al.* 2010b). Pain is one of the main clinical reasons for prolonged hospitalisation and is also a limiting factor in physical activity and early postoperative mobilisation (Husted *et al.* 2011). Effective pain management in fast-track is crucial to speedy rehabilitation, so that pain does not become a barrier to mobilisation and physiotherapy training. During hospitalization, it is therefore essential that pain management is considered as a form of education, so that it can be managed at home. Other studies reported that patient information regarding pain management after THA and TKA was not adequate (Chan *et al.* 2013, Ramlall *et al.* 2010). Apart from delaying discharge, insufficient pain management at the hospital can also be a contributory factor in patients' lack of success in pain management at home. Furthermore, it can result in poor rehabilitation, which can worsen the patient's general situation after the operation.

Information about the actual surgical procedure provided reassurance. In the same way, patients' sense of security was enhanced by seeing staff at the pre-admission information meeting. We found that relatives were of value to patients in relation to the magnitude of the information received. This is in line with another study, which showed that relatives could aid older patients during a fast-track process by offering cognitive support (Berthelsen *et al.* 2014).

Information is linked to the feeling of confidence and is an essential element in fast-track, and consideration should therefore be given to providing the right information at the right time and in the right place. Our study showed that information given immediately after the decision to operate had been taken did not stick. This suggests that it is significant to give consideration to listening and grasping the patient's signals and thereby base action on the patient's situation. These areas are related to the aesthetic-expressive and moral-practical modes of action, and to the fact that professional judgement is an important element in nursing in a fast-track programme. Some of the information was given in a group, in order to improve efficiency. This had both positive and negative consequences, including one patient's positive experience that it gave reassurance in relation to anaesthesia. If privacy is not respected, it can lead to a situation where the patient does not have the necessary confidence to tell staff about his/her issues, which is of the utmost importance for the patient's operation and experience. It was preferable that information be given on a more individual basis, in order to base the interaction on the individual's situation and understanding. To support this, a study within colon surgery found a need for health professionals to pay more attention to the individual patient's lifeworld (Norlyk & Harder 2011). Similarly, another study showed the importance of considering individual needs in the way information is conveyed to patients with abdominal hysterectomy and furthermore, supplementary staff education may be required (Wagner *et al.* 2005). In relation to interactional nursing practice, the moral-practical mode of action is of additional significance in relation to fast-track, in that relevant ethical norms are taken into account along with the opportunities and restrictions presented by the situation.

We found that conflicting information created a lack of security, because it led to frustration about knowing the right thing to do. Other reasons for a lack of confidence included the situation where there was agreement at the preliminary consultation to use one type of anaesthetic, but

where, at the operation, another type was administered. The consequence can be that the patient has a general lack of trust in the staff.

Patients' wishes to go home to their own environment as soon as possible after the operation indicate that they were willing to undertake training by themselves at home. This is in line with the conclusions in another study that showed that traditional assumptions about the need for longer rehabilitation do not present a barrier to early discharge after THA (Hunt *et al.* 2009).

Swift discharge after 1-2 days demands that the whole organisation and planning functions optimally in terms of use of time – for example, the availability of physiotherapists in the early morning would mean patients would have to wait less to see them. Precious time can be wasted while a patient waits for a dressing change and is therefore not ready to take part in training and be ready for discharge. Furthermore, it can seem both unhygienic and unethical to have to wait so long to have a blood-soaked dressing changed.
Disturbances at night and during midday naps led to tiredness that made it difficult to cope with the day's programme, including training, which is important in readiness for discharge. It is important that quietness is ensured on the ward for the midday rest, and those activities such as x-rays, visits by relatives, rehabilitation training, etc. are not planned for this period.

One limitation of the study might be that the study took place in only one hospital, and the pain management issues, for example, could be due to the pre-admission teaching, which might be different from that run at other centres. Only one patient lived alone; this could have influenced the results in relation to readiness for discharge. Furthermore, in the participant observation, the patients were followed only during the limited period of their admissions.

Conclusion

The study shows the importance of dealing with pain after surgery and getting the right information in order to have confidence in the fast-track programme, to be ready for discharge and to manage post-operatively at home.

During hospitalization, patients need support from nursing staff to get the right pain relief at the right time. Generally, the patients in the study did not want to take painkillers and they found it difficult to know when to take supplementary medication. Insufficient pain management influenced the important rehabilitation that is crucial in the preparation for discharge.

Information about the fast-track programme reassured patients, as did meeting the staff before admission and involving relatives. Wrong or conflicting information, as well as a lack of respect for privacy and private matters led to uncertainty. Being rested and having a well-planned schedule during hospitalization was important in order to be well prepared for early discharge.

Relevance to clinical practice

Improved education about pain management at the pre-admission patient information meeting needs to be re-enforced throughout hospitalisation. The findings also suggest that relatives should be encouraged to attend the pre-admission activities so that they can offer their support to the patients.

In a THA/TKA fast-track programme, where the patient is admitted for a short time, there is a need to practise evidence-based nursing, to ensure that the patient will be able to cope at home as well as possible. In evidence-based nursing, the nurse is conscious of the need, and qualified, to judge what will be best for the patient in the situation. The qualified judgement should be based

on the patient's expertise, understanding and personal situation, together with the nurse's knowledge, ability and experience and the results of research.

Contributions

Data collection: KS. Interpretation of data and drafting the article: KS, BDP. Conception and study design, revising the manuscript critically for important intellectual content and final approval of the version to be published: All.

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Table

Table 1. Characteristics of the eight patients with total hip arthroplasty (THA) or total knee arthroplasty (TKA) included in the study with both individual interviews and participant observation

	Surgery	Age Years	LOS* Days	Sex	Cohabitation	Housing	Socio-economic group
P1	THA	76	2	Man	Married	House	Retired
P2	THA	62	2	Woman	Married	House	Retired
P3	THA	82	7	Woman	Widowed	Apartment	Retired
P4	THA	74	2	Man	Married	House	Retired
P5	TKA	47	2	Woman	Married	House	Unemployed
P6	TKA	42	1	Woman	Married	House	Early retired
P7	TKA	67	1	Man	Married	House	Retired
P8	TKA	54	1	Man	Married	House	Employed

* Length of stay in hospital

Figures

Figure 1. Flow of patients' pathway in a fast-track THA/TKA programme and scheduled timing of the study in relation to the fast-track programme

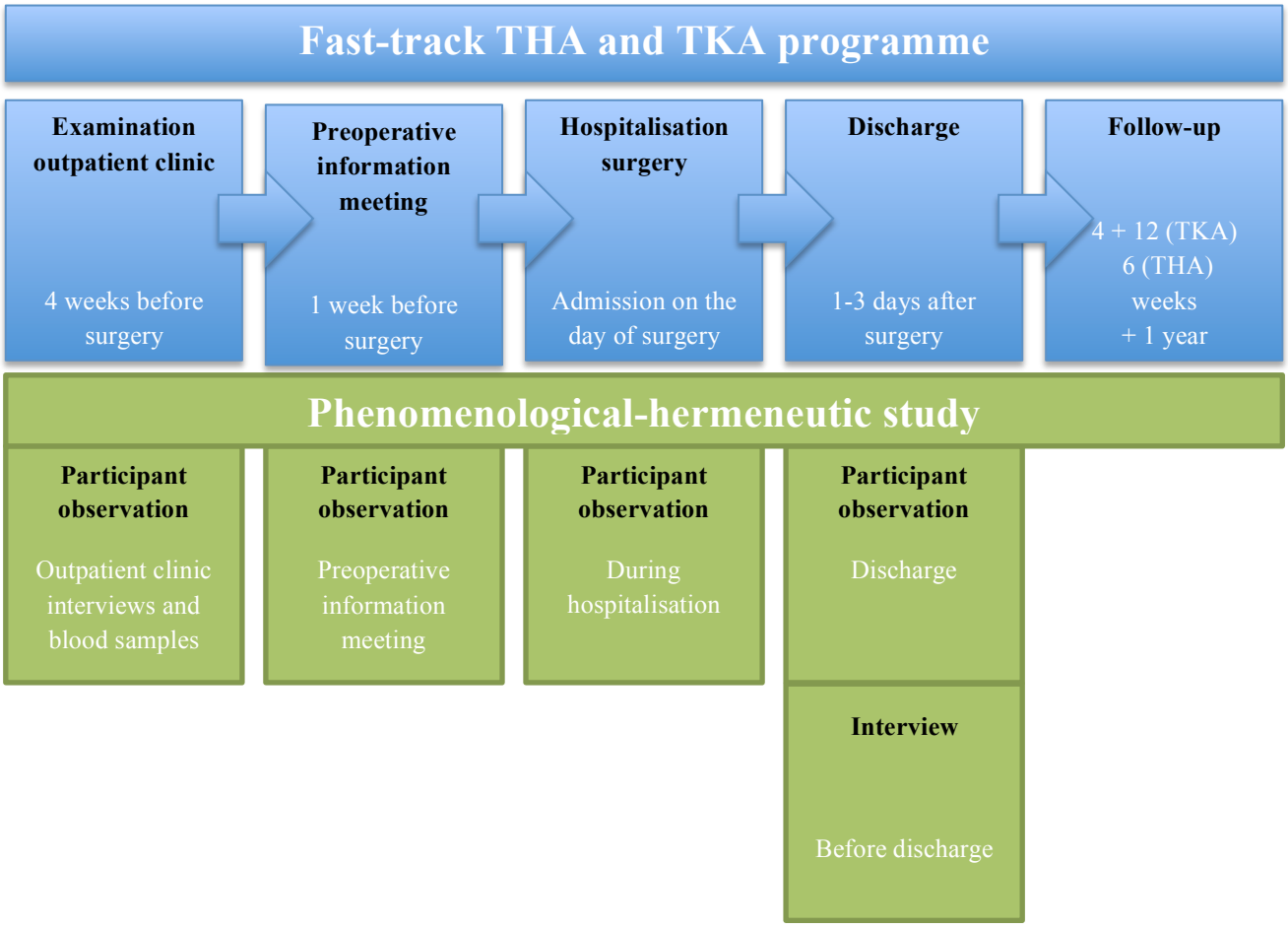

Figure 2. Illustration of structural analysis

Units of meaning What was said	**Units of significance** What the text was talking about	**Themes** Emergence of key themes
"... and pain, yes, where I couldn't walk and was not fit to train, because I think I had too much pain."	Meaning of painless during the training	Dealing with pain