



**LUNDS UNIVERSITET**  
Medicinska fakulteten

## Operationssjuksköterskans självupplevda kompetens vid positionering av patienter i litotomiläge

En kvantitativ och kvalitativ enkätstudie

## The self-perceived competence of operating room nurses while placing patients in the lithotomy position

A quantitative and qualitative questionnaire study

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## Abstract

**Background:** The lithotomy position is one of the four most common positions during surgical procedures. This position is very vulnerable for the patient and can lead to several different types of complications. To ensure a safe positioning the preoperative assessment and preparations requires an OR nurse's specialist competence. **The aim:** The aim was to examine if OR nurses' years of experience affected their self-perceived competence when positioning the patient in the lithotomy position before surgery. **Method:** A questionnaire study with quantitative and qualitative questions. The number of participants was 84. To analyze how experience affected the answers, a Fisher Exact Test was conducted. **Result:** OR nurses experience mattered when taking the leadership role, feeling competent and possessing the right knowledge to do the positioning. **Conclusion:** This study highlighted the importance of doing a preoperative assessment before the positioning and the difficulties of being a new OR nurse.

## Keywords

Competence, years of experience, lithotomy position, OR nurse and questionnaire

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## **Problem area**

Patients undergoing any type of surgery are exposed to the risk of injuries related to the position required for a surgical procedure (Burlingame, 2017), however safe positioning reduces the risk of injury during and after surgery (Goodman & Spry, 2017). Experience has been shown to improve nurses ability to make quick decisions-making and fewer errors (Benner et. al., 2008). It is the responsibility of the perioperative operating room nurse (OR nurse) to plan nursing interventions and implement them. One nursing intervention can be to adapt the positioning based on the patient's condition, nursing diagnoses, type of surgery and anesthesia (Goodman & Spry, 2017).

An example of a position that requires the OR nurse's nursing interventions is lithotomy position (Fawcett, 2019). Lithotomy position is one of the four most common positions during surgical procedures (Adedeji et al., 2010). This position can be seen as a particularly vulnerable situation for the patient as the genitals are exposed (Martinsen, 2012). Several studies have been conducted regarding complications after surgery in lithotomy position (Bauer et al., 2014; O'Connell, 2006; Yanazume et al., 2006; Sajid et al., 2011). This vulnerable position highlights the care that the OR nurse needs to take in order to respect and consider the patient's body and personal integrity. This further shows that, for the OR nurse, correct positioning is important in order to not only respect and protect the physical body, but also the person's integrity.

Since the OR nurse must have a leading role in the care given, we see the need for OR nurses to self-examine and reflect over their competence when positioning the patient in the earlier mentioned lithotomy position. Furthermore, since experience can influence nurses' abilities, it would be interesting to study if experience affects the way OR nurses self-report their competence.

# Background

## Experience

Experience is a necessity when developing professional judgment and something a OR nurse needs, to be able to handle the complex and high-risk environment of the OR. Experience can be defined as when time has made the OR nurse able to possess the qualities to compare, assess and nuance the situation (Myklestul Dávöy, 2012).

It was shown in Blegen et al. (2001) study that nurses' years of experience had an effect on the quality of care given. The wards with the more experienced nurses (>5 years) reported less medication errors and less patient falls and therefore more experience could be seen as a positive factor on the level of care given

Experienced OR nurses are generally more time-efficient and better at task management than OR nurses with less experience (Koh et al., 2011). However, it can also be argued that expertise does not correlate with experience and that all experienced nurses are not experts, this could be explained by the fact that experience does not necessarily develop the ability for complex reflexive thinking which is a part of being an expert nurse (McHuge & Lake, 2010).

## The OR nurses role and competence

The National Association for surgical medicine (2016) describes that the OR nurse must work person-centered and evidence-based by preparing, planning and implementing nursing interventions based on the patient's unique conditions. Many of these interventions are done before the surgery itself, meaning that part of the nurse's job is to work preventively. To work with prevention means identifying risks in advance by doing a preoperative assessment, for example when positioning the patient and implementing preventive actions (Björvell & Thorell-Ekstrand, 2019).

However, an interview study with newly graduated OR nurses in Sweden showed a discrepancy between theory and the actual reality of an OR nurse's work (Eriksson et al., 2020). Lack of time meant that there was no time to perform nursing interventions and that the OR nurses could not work preventively, even if they wanted to. Though the OR nurses in

the study had the will to protect the patient and provide them with safe care, they still felt that they had to rely on other team members' assessment of the patient because they did not have the time to prepare beforehand (Eriksson et al., 2020).

Trevilato et al. (2022) noted that two fundamental rules of nursing for the OR nurse is (i) to do no harm to the patient and (ii) to plan, prepare and implement safe care. Surgical patients are always seen as vulnerable, where one of the biggest risks is complications after incorrect positioning (Trevilato et al., 2022). OR nurses see that the risk is especially clear in lithotomy position and prone position (Trevilato et al., 2022). A way to reduce the risk of complications is to gain an understanding of the individual patient and thereby implement individualized nursing interventions (Kolvered et al. 2011; Trevilato et al. 2022). Nursing interventions also require that the positioning must be carried out in a dignified way that avoids injuries and are in cooperation with the patient (Kolvered et al., 2011; Trevilato et al., 2022).

Individualized nursing interventions are best developed when the OR nurse has a leading role in the positioning of the patient (Sukhu & Krupski, 2014). This is supported by Trevilato et al. (2022) who, in their study, show that OR nurses specific competence leads to safer positioning. Another found was that the OR nurse strengthens the team and reinforces a strong professionalism in the preparation and positioning stage of the surgery (Trevilato et al., 2022). Furthermore, the OR nurse also adopts a teaching role when it comes to positioning, and thus contributes to increased competence for the rest of the team (Trevilato et al., 2022).

Previous research shows that the OR nurse is a fundamental part of the surgery team and that they, in order to fulfill their duties to the patient, need to be given the time to work preventively.

## Positioning

Before each surgical procedure, the patient is positioned with the main-goal that the surgeon has good access to the surgical area. The patient's position during surgery is based on the type of procedure being undertaken (Beckett, 2010). This means, for example, that the patient may need to lie on their stomach for the surgeon to access the back, or having their legs placed in leg rests (Fawcett, 2019). The variety in positioning is vast and each position has its advantages and risks, meaning, for example, that a prolonged supine position can bring risk of

pressure ulcers (Beckett, 2010). Because the patient is often sedated and the positioning is done after anesthesia, the patient is in a vulnerable and exposed situation and cannot speak for themselves. This means that the patient cannot voice if something hurts, if there is loss of sensation or general discomfort. This, in turn, means that the surgery team can not rely on the patient's feedback in order to determine whether the positioning is done with adequate care. This is especially important considering that incorrect positioning can cause a number of complications (Beckett, 2010; O'Connell, 2006). Beckett (2010) explains how nerve damage, pressure ulcers or compartment syndrome are risks that can arise in the event of incorrect positioning or in the event of an unexpectedly prolonged operation time.

The position in focus is the lithotomy position. The lithotomy position means that the patient lies on his back with both legs elevated in leg supports. The patient's arms lie on armrests with the palms facing up or across the patient's body (O'Connell, 2006; Hansen & Brekken, 2012; Fawcett, 2019). The lithotomy position is mainly used in gynecological, rectal and urological procedures. Several risks are involved within the lithotomy position. First, since nerves can become pinched in the leg supports, the position can cause nerve damage (O'Connell, 2006; Hansen & Brekken, 2012; Fawcett, 2019). Second, if the procedure is prolonged, the positioning can lead to compartment syndrome (Bauer et al., 2014). Third, lithotomy position can also pose a risk for circulation and respiratory compromise since it can increase the pressure against the diaphragm and decrease tidal volume, while gravity from the elevated legs interferes with the blood flow (Fawcett, 2019). It is important that the hips and knees are positioned at a good angle, that the legs are moved slowly and in the same movement and that no skin is in direct contact with the leg support (O'Connell, 2006). The hips should not be flexed more than 90 degrees as this increases the risk of injury (Fawcett, 2019).

Even though there seems to be consensus in the literature regarding how the patient should be positioned in the lithotomy position, a cross-sectional study by Sørensen et al. (2016) showed that 53.4% of 481 OR nurses had experienced difficulties in positioning patients in said position. Most of the OR nurses in the study, with a percentage of 86.3%, reported that the biggest problem with placing a patient in the lithotomy position was that correct aids were often missing. As a result, the leg supports could not be adapted to different individuals, the operating table was often considered too small and the positioning of the patient's arms was perceived as challenging. Similarly, Brooker et al. (2020) reported that it was especially

challenging for OR nurses when the correct aids were not available or when experienced staff were not on duty for consultation. Although OR nurses reported difficulties when using the lithotomy positioning, Brooker et al. (2020) showed that the OR nurses in the study, naturally, took the ultimate responsibility for positioning the patient correctly since they feared that a chaotic atmosphere could arise if no one took the leadership role during the positioning. Furthermore, the OR nurse was considered the most competent to perform the positioning, however, the positioning was often considered a team work. The OR nurses in the study described positioning as the most difficult task in their profession (Brooker et al., 2020).

As shown, positioning patients in lithotomy is difficult and could entail risks for patients if not performed correctly. Positioning is a fundamental part of a surgery procedure, but, since the patient can not advocate for themselves during sedation, the OR nurse must do it for them considering both the risk of injury and dignity. Further, while, in theory, the entire team is responsible for correct positioning, studies show that the OR nurse, in reality, is both given and naturally takes the lead in positioning the patient since it is part of the OR nurse's profession. Studies have shown that experience affects the level of care given which could mean a safer positioning. However, we have not found any studies on how the OR nurses' years of experience affect how they rate their own performance and competence when it comes to positioning the patient in the lithotomy position. We therefore see a chance to add perspective in this area by doing a questionnaire study of OR nurses self-evaluation of positioning the patient.

## **Perspectives and starting points**

Roach (2002) has developed a theory called the six C's of caring: compassion, competence, confidence, conscience, commitment and comportment. Roach sees these concepts as the answer to the question "what is a nurse doing when they are caring?" The C being used as a tool to assess competence of the OR nurse in positioning of the patient in the lithotomy position is *competence*.

Roach defines the concept of *competence* in nursing as a state of having knowledge and experience, being able to make an accurate assessment and being motivated to fulfill the



professional responsibility. To be able to perform the duties that nursing requires in today's healthcare, nurses must have affective, cognitive, technical and administrative skills. Specific competence in each of these areas meets the demands of competence in professional caring (Roach, 2002). She describes how nurses must have the opportunity to practice in their respective professions “in a manner compatible with the dignity and needs of those we serve” (Roach, 2002, p. 55).

## **The aim**

The aim was to examine if OR nurses' years of experience affected their self-perceived competence when positioning the patient in the lithotomy position before surgery.

## **Hypotheses**

- OR nurses' years of experience did not affect the self-perceived ability to take a leadership role when positioning the patient in a lithotomy position.
- OR nurses' years of experience did not affect the self-perceived ability to draw on their skills and experience when unfamiliar during positioning the patient in lithotomy position.
- OR nurses' years of experience did not affect the self-perceived degree of specialist knowledge when positioning the patient in lithotomy position.
- OR nurses' years of experience did not affect their self-perceived opinion of having the right amount of knowledge to practice in this speciality when positioning the patient in the lithotomy position.

## **Methods**

To give OR nurses a chance to self-examine their competence in positioning, we conducted a quantitative and qualitative study using the method of a questionnaire (Polit & Beck, 2020). Despite the fact that a questionnaire study does not measure the actual competence but rather the self-perceived competence, it opens up for self-reflection and is a way to discover

strengths and weaknesses. It can also show where further education may be needed (Gillespie, 2012). A questionnaire with close-ended questions was more time-efficient and it is one of the most common quantitative data collection methods (Polit & Beck, 2020). The last question in the questionnaire was an open-ended question to give the participants a chance to elaborate their thoughts on positioning the patient in the lithotomy position.

## Sample

For the questionnaire to be answered by OR nurses who work with the lithotomy position, the focus was on surgeries within the fields of urology and gynecology. The head of urology and gynecology departments at the three biggest hospitals in Region Skåne was approached and asked to participate. To get a larger sample of OR nurses we reached out to the biggest facebook group of OR nurses in Sweden called “Operationssjuksköterskor” seeking participants that worked with the lithotomy position. This was a convenient type of sampling which led us to use the most appropriate type of participants. Convenience sample is a nonprobability sampling, which means that it is less likely to give representative samples (Polit & Beck, 2020). Purposive sampling was also used, specifically the sample that was obtained through email to the chosen wards in Region Skåne. Purposive sampling is when the researchers’ knowledge about the population is used to make a selection of participants (Polit & Beck, 2020).

The national association of operation room nurses gave in an email the estimated number of a total of 1800 OR nurses in Sweden and 242 OR nurses in Region Skåne. It was however unclear on how many OR nurses work/worked with lithotomy positioning.

We had some internal loss, meaning that some participants chose not to answer a question, often without an explanation.

## Research instrument

In order to explore the OR nurse's sense of competence in positioning, the OR nurses answered a questionnaire with several closed-ended questions and one open-ended question. The questions allowed the OR nurses to grade themselves on a Likert scale. The respondents were asked to state how much they agree or disagree with the statements in the questionnaire

(Polit & Beck, 2020). We choose most of our questions from an already validated instrument: Perceived Perioperative Competence Scale-Revised (PPCS-R). The PPCS-R was answered through a five-point Likert scale that ranged from never to always (Jaensson et al., 2018). The questionnaire was designed in Sunet Survey which is a program used to create questionnaires. This specific program is used by Lunds University and is available to its students, which is why it was chosen.

The validated and translated questionnaire was not part of the published paper from Jaensen et al. (2018), so one of the researchers was contacted through email, which is where we received the questionnaire.

To legitimize the chosen instrument and to assure that the meaning of our questions could be understood by all OR nurses, our questions needed to be validated (Polit & Beck, 2020). PPCS-R is validated in a Swedish context for perioperative nurses (Jaensson et al., 2018)<sup>1</sup>. We did not use all of the 40 questions, but chose the ones which answered our study's aim. The instrument focuses on the competence of nurses, both technical and non-technical skills divided into six different factors: foundational skills and knowledge, leadership, professional development, collaboration, proficiency and empathy (Gillespie et al., 2012; Jaensson et al., 2018). The statements in our questionnaire came from all the different factors, presented below:

- Foundational skills and knowledge: *When I am allocated to an area of the OR that is unfamiliar, I draw on my skills and experience* (Question 8).
- Leadership: *I take a leadership role to ensure the smooth running of the theater* (Question 7).
- Professional development: *I use available resources to maintain current OR practice and I have detailed knowledge of anatomy and physiology* (Question 10 and 13).
- Collaboration: *I feel comfortable in seeking assistance from my colleagues when I am unsure* (Question 9).
- Proficiency: *I apply specialist knowledge in providing care for OR patients and I have the right amount of knowledge to practice in this specialty* (Question 11 and 12).

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<sup>1</sup> Due to confidentiality the Swedish version of the questionnaire was not published. However, our questionnaire with the english version of the questions can be seen in appendix 1.

- Empathy: *I provide appropriate reassurance and explanation for OR patients, I actively listen to the patient and significant others to obtain necessary information and I establish rapport with patients that enhances their ability to express feelings and concerns* (Question 14, 15 and 16).

In our questionnaire we asked the participants to insert the different statements in the situation of positioning the patient in the lithotomy position.

Two of our questions were not part of the chosen validated questionnaire but were our own questions. The questions were: *How often do you do a preoperative assessment of the patient? In what way do you collect information about the patient before surgery?* We chose to have these questions in our questionnaire since a big part of good positioning of the patient is done with person-centered care, and for the connection to the theory of the six C's by Roach (2002) that discuss competence in relation to compassion. These questions were read by one nurse that works with pre- and postoperative care to make sure the questions were properly understood. There was no feedback from the participants that the questions were hard to understand, which makes us believe that they were easily comprehended.

The last question in the questionnaire was an open-ended question: *Please elaborate your thoughts on positioning patients in the lithotomy position (e.g. do you take anything special into account?).* This to give the participants a chance to elaborate their thoughts about the position.

## Data collection

We got approval from the heads of operation to conduct our study at the three biggest hospitals in Region Skåne (Lund, Malmö och Helsingborg). The heads of the chosen wards sent out our questionnaire to the OR nurses that worked with the lithotomy position. And as previously explained we posted the questionnaire to the facebook group "Operationssjuksköterskor". The questionnaire was accessed via a link in the mail and/or facebook post.

The publication period for the questionnaire was open for four weeks, 27th of February until 24th of March. We first had the questionnaire open for three weeks but extended the

opportunity to answer with one more week, since we needed more participants. During this time we posted three reminders in the facebook group and sent one reminder to our intermediators on the different wards. In total we received 84 answered surveys.

## Analysis of data

The qualitative and quantitative data was analyzed separately with different methods.

### Quantitative analysis

For the questionnaire we used descriptive statistics to analyze and describe the collected data. This method was a way to make the data more comprehensible (Polit, 2010). One of the first steps when analyzing quantitative data is to select statistical software, for example SPSS or SAS (Polit & Beck, 2020). We decided to use SPSS since it is used by the university.

Frequency distribution was used to organize our ordinal, scale and nominal data. It is a systematic arrangement that can show for example the highest and lowest value and how often the different values were chosen (Polit & Beck, 2020). The participants' age and how many years of work experience as an OR nurse is an example of our scale data. The nominal variables were the participants gender and which region they worked in. The nominal attributes were not valued against each other and did not mean that the one or the other was seen as “more than” (Polit & Beck, 2020). The only difference while coding was that female were coded with a (1) and male with a (2).

The question five and statements 7-16 were answered in a range from never to always. This ordinal scale gave the participants a ranking attribute. This scale was a measure for the participants to self-examine from (1) never, (2) sometimes, (3) often, (4) very often and (5) always. The numbers told us that (5) *always* was greater than answering (3) *often* at a statement like; *I take a leadership role to ensure the smooth running of the theater*. But what the scale did not tell us was the actual difference between (5) always and (3) often, since we didn't know the distance between these attributes (Polit & Beck, 2020).

To work with these attributes and test null-hypotheses in SPSS we did a non-parametric test, Fisher Exact Test. Fisher Exact Test was chosen because of the small sample size of

participants with a cell count that was sometimes less than five and because we could not assume that the population was normally distributed (Polit & Beck, 2020). We received help from a statistician working for Region Skåne in choosing an appropriate test to use for our type of data. When doing the Fisher exact test we looked at the p-value. A  $p < .05$  means that there was less than a 5% chance that the observed outcome was due to chance (Winters et al., 2010). Meaning that if our null hypothesis (see hypotheses), that experience did not matter on the self-reported answers on our questions, gave  $p < .05$  there was a statistical significance that experience did affect the answer. And vice versa if  $p > .05$ . On the statements that gave  $p < .05$  we did further Fisher Exact tests to see between which experience groups there was a difference.

We first divided the years of experience into five groups: 0-2 years, 3-10 years, 11-20 years, 21-30 years and >31 years. The division was based on an already published article by Wittenberg et al. (2018). However when we looked at our data we saw that there was an uneven distribution between the groups so therefore we changed it to four groups: 0-3 years, 4-10 years, 11-20 years and >20 years. For our analysis in SPSS we coded the four groups to (1) if you had 0-3 years of experience, a (2) if you had 4-10 years of experience and so on.

Question six in our questionnaire; *how do you gather information about the patient before surgery?*, had multiple choice answers as e.g. talking to the patient and/or through the patient's medical record. Therefore each answer was its own variable in SPSS and the coding (1) meant that the participant had not chosen the specific answer and (2) meant that it was chosen. The available options for the OR nurses on how they collected their information were: *the patient's medical record, by talking with the patient, through the operating surgery planning program, talking with the operating team, I don't collect information about the patient and other.*

### Qualitative analysis

The open-ended question in the questionnaire was analyzed with an inductive approach that was data-driven in looking for patterns and differences (Graneheim et al., 2017). Further, a manifest analysis was used which means the actual words of the participants were modestly interpreted by us (Polit & Beck, 2020). Manifest analysis stays close to the data. However

even in a manifest analysis there would be some degree of interpretation (Graneheim & Lundman, 2004).

The interpreted answers from the qualitative question were divided into categories to easier get an overview of the compiled answers (Polit & Beck, 2020). The formed categories shared the same characteristics and were interpreted with a low abstraction level and low interpretation degree to stay close to the actual text (Graneheim et al., 2017). We started with a document each with the answers to the open-ended question, where we separately colored the words and sentences that answered the studys' aim. We then discussed until an agreement on categories was developed. One of us had divided the answers in more categories than the other but by discussing and looking over the text multiple times we were unanimous on five categories. The questionnaire was distributed to the participants in swedish, which afterwards meant that the answers had to be translated by us to english.

After the categories were divided we compared the OR nurse's years of experience with the answers to see if there was a difference in between the answers from a less experienced OR nurse contra an experienced OR nurse

## Ethical considerations

Act (2003:460) on ethical review of research involving humans aims to "protect the individual person and respect for human dignity in research" (1st paragraph). This includes research that deals with sensitive personal data or that can affect a person negatively physically or psychologically (Act 2003:460 on ethical review of research involving humans).

To be able to follow the presented act above, the project plan and study was approved after some readjustment to be conducted by Vårdvetenskapliga etiknämnden (VEN).

One basic principle for ethics in research involving human subjects is:

- Informed consent. The consent should be voluntary and needs to be documented. The consent can only happen if the participant has received information about the plan for the study, aim of the study, if there are any risks and consequences, methods used and

who the researcher is. They also need to be informed that the participation is voluntary and they can withdraw at any time (Etikprövningsmyndigheten, u.å).

We sought informed consent from all of our study participants. When collecting data through self-administered questionnaires, Polit and Beck (2022) explains that consent can be implied when returning the completed questionnaire. Implied consent was used for this study. On the first page of the questionnaire we explained that the consent was seen as given when the participant started answering the survey. The first page also contained information about the study and its aim as well as contact information to us and our supervisor.

The questionnaire was answered anonymously and each finished questionnaire was given a random number so we couldn't identify who had given which answers. We also gave information that all the collected data were to be destroyed after we passed the examination.

## **Results**

The total number of participants that answered our questionnaire was 84. The age range of our participants were between 28 years and 64 years old. The median age was 42 years. The one with the least amount of experience had worked six months as an OR nurse and the one with the most experience had worked 39 years. The median for how many years the participants had worked as an OR nurse was nine years. There was an internal fallout of one (1) person on both age and experience. Because this was a numeric scale with data that was not normally distributed we used median instead of mean (Polit & Beck, 2020).

The vast majority was female with 90,3% (N=76) and only 9,7% (N=8) were male. No one chose the third option (other) when asked what gender they identified with. The regions with the biggest answering scale were Skåne (N=26), Stockholm (N=13) and Västra Götalands region (N=10).



## Findings from the quantitative data

### Preoperative assessment

The two most chosen answers that most participants chose when asked if they did a preoperative assessment were *always* (32,1%) and *very often* (34,5%) (Table 1). This means that the majority of the participants (66,6%) *always* or *very often* did a preoperative assessment of the patient before surgery (Table 1).

**Table 1.** How the different years of experience groups answered the question “Do you make a preoperative assessment of the patient before the surgery?”

Groups	Never	Sometimes	Often	Very often	Always	Total
0-3 years	1	2	4	9	4	20
4-10 years	0	2	4	10	8	24
11-20 years	0	2	8	4	7	21
>20 years	0	4	1	6	7	18
Total	1	10	17	29	26	83

When we looked at the null hypothesis, that experience did not affect when choosing how often you did a preoperative assessment ( $p = .301$ ). Indicating that the experience did not have an influence on how often the OR nurses did a preoperative assessment.

In our follow up question (*how do you collect information about the patient?*) one or multiple choices could be selected. The two most common answers with a percentage of 91,7% (N=77) were *via the surgery planning program* and *through the patient's medical record* with 88,1% (N=74). Furthermore, 53,6% (N=45) of the OR nurses chose the option *talk to the patient* to gather preoperative information.

### Leadership role

When answering the question about taking the leadership role, 23,8% of the participants stated that they always took the lead and 45,2% *very often* took the lead when positioning the patient in a lithotomy position (Table 2). In this statement more scattered answers were seen within the different experience groups (Table 2).

**Table 2.** How the different years of experience groups answered the question “I take a leadership role to ensure the smooth running of the theater“

Groups	Never	Sometimes	Often	Very often	Always	Total
0-3 years	0	5	6	8	1	20
4-10 years	0	1	6	13	4	24
11-20 years	0	2	3	9	7	21
>20 years	0	3	0	8	7	18
Total	0	11	15	38	19	83

When comparing years of experience, the analysis showed a difference between groups ( $p=.037$ ), which indicates that experience has an influence on the leadership role that the OR nurse takes when positioning the patient in the lithotomy position. Further tests showed that the significant difference was between the groups 0-3 years of experience and >20 years of experience ( $p=.009$ ) and between 4-10 years of experience and >20 years of experience ( $p=.032$ ).

### Unfamiliar area

OR nurses answered that they *always* (25%) and *very often* (45,2%) rely on their skills and experience when they are put in an area that is unfamiliar to them when positioning the patient in a lithotomy position (Table 3). A quarter (25%) of OR nurses chose that they *often* could rely on their skills and experiences (Table 3). One participant did not answer the statement which gave a missing percentage of 1,2%.

**Table 3.** How the different years of experience groups answered the question “When I am allocated to an area of the OR that is unfamiliar, I draw on my skills and experience “

Groups	Never	Sometimes	Often	Very often	Always	Total
0-3 years	0	3	9	6	2	20
4-10 years	0	0	5	15	4	24
11-20 years	0	0	2	13	5	20
>20 years	0	0	4	4	10	18
Total	0	3	20	38	21	82

For this statement the null hypothesis was rejected ( $p =.001$ ). The OR nurses experience did affect when feeling unfamiliar in the OR during positioning. When looking at the table above it seemed as if the nurses with the least experience were more unlikely to draw on their skills and experience if unfamiliar with positioning the patient in lithotomy position (Table 3). The differences were confirmed when doing the Fisher's exact test on the experience groups. The

group with least experience 0-3 years contra the experience groups with 11-20 years and <20 years gave a statistical difference ( $p = .008$ ;  $p = .011$ ) and therefore strengthened the reason why the null hypothesis were rejected. The groups with 4-11 years and <20 years also gave a statistical difference ( $p = .016$ ). Lastly there was a discrepancy in the answers between the experience groups with 11-20 and >20 years of experience ( $p = .033$ ).

### Specialist knowledge

Most of the OR nurses answered that they *always* (59,5%) or *very often* (27,4%) applied their specialist knowledge and care for patients when positioning patients in a lithotomy position (Table 4). There was a combined group of 13,1% who *sometimes* or *often* applied their knowledge (Table 4).

**Table 4.** How the different years of experience groups answered the question “I apply specialist knowledge in providing care for OR patients”

Groups	Never	Sometimes	Often	Very often	Always	Total
0-3 years	0	1	3	8	8	20
4-10 years	0	2	4	10	8	24
11-20 years	0	0	1	4	16	21
>20 years	0	0	0	1	17	18
Total	0	3	8	23	49	83

There was a significant difference which indicated that experience did matter when the OR nurse applied their specialist knowledge in their care for the OR patient ( $p = .002$ ). The biggest differences in the participants' answers was found between groups 0-3 years and >20 years ( $p = .002$ ) and between the experience groups with 4-10 years and >20 years ( $p = .001$ ). A difference was also seen between experience groups 4-10 years and 11-20 years ( $p = .024$ ).

### Right amount of knowledge

Predominantly OR nurses felt they *always*, with a percentage of 57,1%, had the right amount of knowledge to position the patient in the lithotomy position (Table 5). Some OR nurses thought they *very often* (29,8%) and 10,7% thought they *often* had the right amount of knowledge (Table 5). Two people did not answer this question which gave a missing percentage of 2,4%.

**Table 5.** How the different years of experience groups answered the question “I have the right amount of

knowledge to practice in this specialty”

Groups	Never	Sometimes	Often	Very often	Always	Total
0-3 years	0	0	6	8	6	20
4-10 years	0	0	2	11	11	24
11-20 years	0	0	1	3	15	19
>20 years	0	0	0	3	15	18
Total	0	0	9	25	47	81

This statement had a ( $p=.02$ ) and the null hypothesis was therefore rejected. This meant that experience had an effect on OR nurses opinion on their right amount of knowledge to practice in the specialty when positioning the patient in lithotomy position. In the deeper analysis the participants with 0-3 years and those with >20 years gave the biggest difference ( $p =.002$ ). Also, 0-3 years vs 11-20 years gave a difference ( $p =.010$ ). Lastly, between 4-11 years and >20 years a difference was seen ( $p =.031$ ).

#### *The relationship between patient and the OR nurse*

The last three statements in our questionnaire came from the empathy factor within the PPCS-R questionnaire: *I provide appropriate reassurance and explanation for OR patients, I actively listen to the patient and significant others to obtain necessary information and I establish rapport with patients that enhances their ability to express feelings and concerns.* All three statements had a p-value  $>.05$  which indicated that the null hypothesis could not be rejected.

However, the answers to the statement *I provide appropriate reassurance and explanation for OR patients* showed that only 31% (N=26) of the OR nurses answered that they *always* did. The OR nurses also answered that they *very often* (38,1%, N=32) and *often* (20,2%, N=17) provided the appropriate reassurance and explanation for the OR patients when positioning in the lithotomy position. A smaller group did answer that they *sometimes* 9,5% (N= 8) provided the patient with reassurance and explanation. One missing answer gave 1,2% of internal loss.

Nearly half of the participants (44%, N=37) answered that they *always* actively listened to the patient and significant others to obtain necessary information when positioning in the lithotomy position. Additionally, 29,8% (N=25) answered that they *very often* listened, 10,7% (N=9) *often* listened and 15,5% (N=13) *sometimes* listened to the patient and significant others. No one chose *never*.

Only 16,7% (N=14) of the OR nurses answered that they *always* established rapport with patients that enhanced their ability to express feelings and concerns. With a modest percentage of 36,9% (N=31) of the participants answered that they *very often* established rapport. OR nurses also answered that they *often* (20,2%, N=17) and *sometimes* (23,8%, N=20) did give the patient an opportunity to express feelings. One participant answered that they never established rapport and one did not answer this question giving a 1,2% loss.

### Findings from the qualitative data

Total participants that answered the open-ended question was 46: *Please elaborate your thoughts on positioning the patient in the lithotomy position.*

Five categories were found when interpreting the answers: *Mobility and physical limitation, awareness and competence, empathic approach, patient participation* and *the role of the OR nurse*. The experience of the participants answering the qualitative question ranged from under 1 year to >20 years, with a quite even distribution within the different experience groups.

**Table 6. Explanation of the process from quote to category**

Example of quote:	Condensed meaning:	Category:
<p><i>"Taking into consideration the patient's background history and any injuries/operations that may affect the ability to position the patient optimally."</i></p> <p><i>"Taking in to account if they have problem with hips or knees"</i></p>	<p>Consideration of the patient's medical history for optimal positioning</p>	<p>Mobility and physical limitation</p>
<p><i>"You are aware that it is a position with a higher risk of complications, so I feel that everyone in the team is keen to position the patient correctly in this position."</i></p> <p><i>"I am very careful to ensure that the patient has no pressure on tissue (relieve if necessary), no overstretched muscles, does not "hang in the lower legs" and create stasis with the risk of compartment syndrome, and that the patient does not freeze."</i></p>	<p>Showing the OR nurses specialist knowledge; being aware of risks and complications</p>	<p>Awareness and competence</p>

<p><i>“Being calm and safe is important. To make the patient feel that we in the OR understand that she is in a vulnerable situation and that we will do everything to make it feel as safe as possible.”</i></p> <p><i>“Above all, not expose the patient more than necessary. It is a vulnerable position. Sometimes it is not necessary to remove the underwear before putting the patient to sleep if it is perceived as bothersome, and if it works to do it after putting the patient to sleep.”</i></p>	<p>Acknowledging the vulnerability in the lithotomy position and protecting the patients’ integrity</p>	<p>Empathic approach</p>
<p><i>“If the patient has problems, we put the legs up before anesthesia so the patient can say whether it feels good and how much we can move/change angles of the legs.”</i></p> <p><i>“The patient can put their legs up in the leg supports before anesthesia to make sure it feels good.”</i></p>	<p>Involving the patient in the positioning so they can express their thoughts and feelings</p>	<p>Patient participation</p>
<p><i>“When I am dressed in sterile clothing it can be hard to participate in the positioning.”</i></p> <p><i>“I show clearly that everyone in the team needs to help.”</i></p> <p><i>“.... it is almost always the nurse assistant that positions and asks the patient questions, I help if it is a new or unsure nurse’s assistant.”</i></p>	<p>Participating or not participating in the positioning as a OR nurse</p>	<p>The role of the OR nurse</p>

*Mobility and physical limitations*

Mobility and physical limitations was something that the OR nurses often checked, especially regarding the patients hips, knees and back. Most of the OR nurses that answered the open-ended question wrote that they made sure to find out if the patient had physical limitations or mobility issues that could affect the way the positioning could be done. One nurse wrote that she checked for scars on hips and knees that could indicate previous surgery in those areas.

There was an even amount of answers in this category between the experience groups.

### Awareness and competence

That the lithotomy position demands competence and awareness of the risk for complications was expressed in how careful the OR nurses were in their preventively work. Especially, so that there would not be any pressure on the skin tissue, and that the legs were lowered after a certain amount of time (often after 2 hours) to prevent damage. Extra thought also went into the positioning if the patient had any risk factors such as being underweight or obese as well as if there were any physical limitations.

Some OR nurses expressed a difficulty and concern for the frail patient when positioning in the lithotomy position. In those cases most of the OR nurses did not try out the position before the patient was under anesthetics, especially if there was any risk for respiratory problems. One OR nurse did answer that patients could sometimes lay in a lithotomy position for several hours, but in those cases the OR nurse was very meticulous in their postoperative rapport to the ICU. The ICU then observed if there were any complications related to the extended time in the position.

One OR nurse mentioned the importance of the knowledge of handling the operation table for a safe positioning of the patient. Another one expressed difficulties of handling the operation table and aids when switching between many different types of surgeries, e.g. urology or gynecology. The same nurse said that she was helped by the ward's manuals and instructions about different positioning.

The participants with 11-20 years and >20 years of experience were the ones that had the most quotes under the competence category.

### Empathic approach

The majority of the OR nurses were aware of the fact that the lithotomy position was a vulnerable position for the patient to be in. Several wrote that they took great care in avoiding exposing the patient, and made sure to cover up the patient with a blanket. They wrote that there was a balance between establishing contact with the patient and being in the way and

just adding to the number of people in the room. One of the male participants wrote that he thought about how he moved and talked when positioning the patient. Especially if the patient was a female since he knew it could be intimidating with a male OR nurse when being in lithotomy position. It was clear from the data that the OR nurses worked with an empathic approach and had the patient's integrity in mind.

Another part of the empathic approach was to identify the mental space the patient was in when being prepared in the operating room. If the patient was very nervous, sad or worried the OR nurse wrote that they took a step back, maybe even left the room, so that the patient was not overwhelmed.

The participants in the experience group with the least years of experience (0-3 years) did answer more often that they reflected over the empathic approach towards the patient.

#### *Patient participation*

To make sure that the patient was comfortable during the surgery, OR nurses often let the patient try the stirrups before anesthesia. Doing it this way made it possible for the patient to express how they felt and to be part of their own care. The patient participation was expressed as important to ensure that the patient was not hurt during anesthesia. The patient participation was especially important if the patient had any physical limitations such as hip or knee pain. However, one nurse did write that this was only possible if the surgery was elective and not an emergency surgery since there is not enough time to establish contact with the patient before an emergency surgery.

The participants with the least years of experience (0-3 years) did answer more frequently that they thought the patient participation was important.

#### *The role of the OR nurse*

Some OR nurses explained that at their place of work, the OR nurse did not take part in positioning the patient. It was either a nurse's assistant or the anesthesia team that talked to the patient about physical limitations and tested the stirrups. Some said they participated verbally but were sterilely dressed so they could not physically lead and/or help. One nurse



wrote that she made sure that the whole team participated and that she took a leading role in the team-effort.

The participants with 11-20 years of experience seemed to write the most about the role of the OR nurse when doing the lithotomy positioning, while the ones with >20 years did not mention this in their answers.

## **Discussion**

### Methodological discussion

When deciding on a study's trustworthiness, looking at the validity, reliability and generalisability is important (Graneheim & Lundman, 2004).

*Validity* is used to investigate if the instrument used measures what it is supposed to measure (Polit & Beck, 2020). Using an already validated questionnaire is seen as a strength. It saves time and effort and also makes it possible to compare results with other studies who have used the same instrument. However, when an instrument is used outside of the context it was developed it can lose its validity (Boynton & Greenlagh, 2004). The questionnaire was not developed to measure the competence during positioning but to measure the OR nurses competence overall (Jaensen et al., 2018). We tried to compensate for this by choosing ten questions from PPCS-R which we thought could fit for positioning patients in a lithotomy position based on this study's background and aim. To avoid any confusion the statement; *“This statement should be inserted in the situation of positioning the patient in the lithotomy position“* was written after every statement in the questionnaire so the participant always got a reminder that the statement was specifically for positioning patients in lithotomy position. The answers from the open-ended question made it clear that the OR nurses had remembered to put the statements in the light of the lithotomy position. Which makes us think that this study has validity.

The questionnaire used in this study was originally translated to Swedish by using a forward-translation method, however there was not much written about the translation process of the questionnaire. Two items in the PPCS-R were changed due to context but as a reader you are not given the examples of those two items (Jaensson et al, 2018). This makes it hard to follow the translation and confirm what has been done. This is supported by Maneesriwongul and Dixon (2004) that confirms that more detailed information about the translation processes should be provided in reports. However, the authors of the original Swedish version of PPCS-R concluded a good construct validity and that it was relevant among Swedish OR nurses (Jaensson et al, 2018). An example of how the translation could have affected the result was the decision to eliminate question nine from the analysis since we had multiple internal losses and there were several participants who wrote that it was hard to understand the meaning. When we re-read the question it became clear that there was a high risk of misunderstanding and therefore we came to the conclusion that the answers may not be correctly given. In future studies using this questionnaire (the Swedish version), a new translation of that specific question may benefit the result.

Another weakness was that the open-ended question in our questionnaire were answered in Swedish which then had to be translated to English. Therefore some of the meaning in the quotes could be lost in translation (Chen et al., 2010). The translation was done by us, who have knowledge of both Swedish and English but are not truly bilingual and it would have been a strength to use a professional translator. However, we both have a Bachelor degree in nursing which is important due to the context of the qualitative answers. And we feel secure in the translation made from Swedish to English. To be bilingual in the language being translated and to have an adequate education for the topic that's being translated is supported by Chen et al. (2010) as an important part of the translating process. Luckily, the statements used in the questionnaire were validated both in English and Swedish. The English version was used in this paper and the Swedish version in the questionnaire to the participants. This eliminated the risk of errors in translation of the statements.

The convenience sample is the weakest kind of sample, but is also one of the most used sample methods in nursing studies (Polit & Beck, 2020). When looking at the validity, convenience and purposive sample has the same strength and weakness. They have a strong internal validity in the group the sample was drawn from but can rarely be generalized to a

bigger population which gives them a weak external validity. A convenience and purposive sample can be a strength when there were sociocultural factors that could influence the outcome (Andrade, 2021). This study used sociocultural factors such as experience and age, which motivates the use of these sorts of samplings. Especially since experience was one of the main focuses of the study.

*Reliability* is when a test gives the same results when doing multiple measurements under the same conditions (Polit & Beck, 2020). The questionnaire was validated and therefore has a strong validity and reliability from the beginning and has been seen to measure the same thing several times (Jaense et al., 2018).

To be able to *generalisability*, a broader group of participants is more likely to bring more justice to the population (Polit & Beck, 2020). Despite several reminders and lengthening the time of the possibility to answer the questionnaire we still received quite a small size of participants, threatening the generalisability of this study. When doing a questionnaire study the least number of participants according to some researchers is 100 people (Rattray & Jones., 2005). However, a smaller result can still be analyzed and show patterns. We made sure when doing our analysis to use a test made for smaller sample sizes to receive correct data; Fisher's exact Test (Winters et al., 2010).

Furthermore, there was a risk that it was already interested OR nurses that answered the questionnaire. That means there may not be opinions that represent the big group of OR nurses across Sweden. Despite the fact that we received the total number of OR nurses in Sweden being 1800, it was unclear how many were working or had worked with positioning in the lithotomy position. This made it hard to determine how big the external statistical loss actually was.

We hope and think that this study can be seen as a first step in examining the competence of OR nurses in positioning the patient before surgery. Hence, it would be an advantage to do an observation study to get a more complete picture of OR nurses competence in different situations, such as positioning the patient in lithotomy position. Observations are beneficial when you want to gather information with a range of, e.g. (1) behavior and activities or (2) verbal communication (Polit & Beck, 2020).

## Result discussion

The aim of this study was to examine if OR nurses' years of experience affected their self-perceived competence when positioning patients in the lithotomy position before surgery.

### Competence and experience

We had several questions that could be seen in the light of competence that showed a difference in answers depending on how much experience the participant had. The differences in the answers from the participants is interesting since Roach (2002) describes in her theory that competence is both having the knowledge and the technical skill, but is equally important to show affective and cognitive skills which we interpret as non-technical skills such as leadership. Roach (2002) also defined competence as having experience which further strengthened our interest in looking at experience as an independent variable with the answers being the dependent variable.

First, the participants with the least experience (0-3 years) had more scattered answers over the Likert scale when taking the leadership role in the situation of positioning the patient in the lithotomy position. The ones with the most experience (>20 years) had a clear majority that answered that they *always* or *very often* took the leadership role (Table 2). This vast difference could indicate that OR nurses with experience felt more secure to take the lead. The result from the qualitative question also shows the scatteredness in the answer, especially with the answer that it is not necessarily the OR nurse that takes the lead on positioning the patient. Some OR nurses were not even part of the positioning at all and some just took a small role while one stated how she was the one to lead the positioning, however there was not a clear pattern in the answers of leadership when looking at years of experience.

In a study done by Sirevåg et al. (2021) they showed that leadership was considered one of the most important non-technical skills for OR nurses. Leadership was represented by eg. using authority to promote patient safety, taking responsibility to teach other colleagues and students and by planning single procedures (Sirevåg et al., 2021). In the study they discussed how novice OR nurses took fewer autonomous decisions and the fact that their participants felt secure in taking leadership probably was due to the mean of 24 years of experience

(Sirevåg et al., 2021). This aligns with our result with participants with less experience being more insecure in taking the leadership role.

Second, experience mattered in being able to draw on skills and experience if in an unfamiliar area when doing the positioning. This shows the same pattern as the previous question. The one with the least experience differed more on the scale, for example nine people answering *often* and only two answered *always*. The majority of the participants with the most experience answered *always* (Table 3). It seems as with more experience the OR nurses feel more comfortable and confident in taking the leadership role, as well as drawing on their skills and experience when positioning the patient in the lithotomy position.

Third, we could see statistical differences when comparing the experience groups with the statement if OR nurses did apply their specialist knowledge in their care of the OR patient. OR nurses with the most experience were predominantly consistent in their answers and therefore showed that they were more confident in relying on their knowledge. The groups with less experience (0-3 and 4-11 years) were more scattered in their answers (Table 4). Beyond the technical knowledge, a specialist knowledge for nursing care is the importance of identifying eventual special needs for the patient (von Vogelsang et al., 2019). This type of competence was seen from the qualitative data where the OR nurses gave answers that showed awareness of the difficulties of positioning patients in lithotomy position. The ones with >20 years of experience had written the most in what became the competence category. Further strengthening that the ones with greater experience felt more competent. Roach (2002) also defines that a part of being competent, or having competence, comes with experience, experience to know the process and having the ability to adapt. Having the right amount of knowledge when doing the lithotomy position, with yet again the biggest difference being between the less experienced group (0-3 years) and the group with the most experience (>20 years) (Table 5). This further strengthens that experience affects the self-perceived competence of OR nurses when positioning the patient in lithotomy position. This aligns with the study made by Gillespie et al. (2011) that showed how OR nurses with more experience rates themselves higher on self-perceived competence, as well as with Blomberg et al. (2019) study, where OR nurses with >20 years of experience rated higher on direct clinical practices and professional development.

### Preoperative assessment

Looking back at Roach theory of the six of C's it is interesting to see how Roach describes the relationship between compassion and competence. That competence without compassion can lead to a brutal and impersonal care where compassion without competence can lead to harmful and meaningless care (Roach, 2002). We decided that the preoperative assessment can be seen as an example of that relationship since Roach (2002) describes how assessment and implementation of a nursing plan is part of having competence. Preoperative assessment is about seeing the human behind the surgery (compassion), and doing it with the purpose of providing safe care (competence): what previous experience the person have, how his/her mind and body work or what is possible and what is not possible eg. when it comes to positioning.

When looking at the answers regarding preoperative assessment we could see that the majority (66,1%) of the participants answered that they always or very often did a preoperative assessment of the patient before surgery which could show an understanding of the importance of person-centered care. The null hypothesis was not rejected, which could be interpreted to mean that the assessment was consistent and prioritized no matter the years of experience as an OR nurse.

Almost all of the participants in our study gathered information through the patient's medical records or the surgery planning program. Only 53,7% choose to talk to the patient as a way to help do the assessment. This was also shown in Sandelin et al. (2012) where the OR nurses' main source of information was the patient's health record and surgery planning system. Only a few met the patient beforehand and had to seek for further information from other team members and/or call the surgeon since the documentation often was inadequate (Sandelin et al., 2012). In our study the vast majority of the participants gave multiple answers to the question how they collected information about the patient before surgery indicating that just one source did not give enough information.

Doing an assessment of the patient gives the OR nurse a chance to prepare for the surgery and ensure patient safety throughout the procedure. This is done through, among other things, choice of surgery instruments and planning the positioning based on the patient's condition (Sandelin et al., 2012). The result from our study showed that the chance to collect

information from the patient him/herself to ensure a safe positioning was quite rarely done. In another study Dias et al. (2022) found that a 10-minute preoperative dialogue with a person-centered focus with an OR nurse reduced the patient's preoperative anxiety.

In the open-ended question, OR nurses wrote that they took a backseat role or even stepped out of the room if the patient was anxious to minimize the number of people in the OR. This means that those OR nurses lost the time to talk to the patient and lost the opportunity for patient-participation in positioning in the lithotomy position.

So not only does a preoperative talk give the OR nurse a chance to gain information that ensures, among other things, a safe positioning but it also calms the patient. It also has the effect of strengthening the person-centered preoperative assessment and the role of OR nurses. Therefore we think that OR nurses should be encouraged and given the time to meet and talk with the patient before surgery, especially when working with procedures that demand the lithotomy position since it is a complicated position to perform.

#### *The relationship between the patient and the OR nurse*

Being competent means that nurses can understand what the patient and/or family needs emotionally and physically. This part of competence should be done with compassion when meeting the patient (Roach 2002).

The OR nurse often had the first meeting with the patient in the operating room, where the aim was to create a relaxed, friendly and quiet atmosphere (von Vogelsang et al., 2019). For the brief and short meeting with the patient the OR nurse must rely on the information from the patient's medical record and also in short time establish a connection with the patient to assess the patient's needs and desires (von Vogelsang et al., 2019). Our qualitative result showed that OR nurses possess non-technical skills in their approach towards the patient when positioning. They took great care in protecting the patient's body and integrity by acknowledging the vulnerability of the lithotomy position. What was seen in the quantitative data was that the OR nurse had the self-perceived competence no matter the years of experience to create this contact with the patient ( $p = >.05$ ). However, only 31% of the OR nurses stated that they always provide reassurance and explanation to the patient, with less than half of the participants choosing that they always (44%) actively listens to the patient.

What's worth discussing is that even though there was no statistical difference when comparing experience with the statement, a quite low number of the participants actually *always* provide the patient with reassurance and actively listen to the patient. Something that can be said to be a main part of nursing care (International Council of Nurses, 2021). A study made by Blomberg et al. (2019) showed that nurses with an academic education rated themselves higher than the ones without on the ethical part in perioperative nursing. This could be the answer as to why the ones with the least years of experience reflected more on the empathic approach of the lithotomy position. The new OR nurses in Sweden all have at least a 1-year master, which is not always the case for the one with >20 years of experience (Blomberg et al., 2019). Our study did not provide the answers as to why the OR nurses did not always provide reassurance and listened to the patient. In the future, an interview study can give an insight into the thinking of the OR nurses when positioning the patient (Polit & Beck, 2020).

The competence of the OR nurse in the operating room is indispensable (von Vogelsang et al., 2019). However, when being new as an OR nurse they appear to have less self-perceived competence and less experience to draw from. They should therefore be given the time and mentorship to develop their competence and role in the OR especially when positioning in lithotomy.

## **Conclusion and clinical implication**

This study can hopefully shed light on the difficulties new OR nurses face in feeling competent in the positioning of the patient before surgery, specifically the lithotomy position. It can also encourage the OR nurses to establish a relationship with the patient and to do a preoperative talk as a part of the preoperative assessment. This study indicates the importance of the OR nurse taking the leadership role to ensure safe positioning.

Self-perceived competence as an OR nurse when positioning a patient in the lithotomy position seems to come with greater experience. Not just for the feeling of having enough knowledge, but to also apply that knowledge and take a leadership role. OR nurses acknowledge the difficulties in this specific position and the vulnerability the patient faces



during the preparation before surgery. However, they do not always find space to reassure the patient or give the patient a chance to express their concern.

Future studies should do a broader questionnaire study and an observation study to compare the self-perceived competence with the observed competence when positioning the patient in lithotomy position.

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# MEDICINSKA FAKULTETEN

## Operationssjuksköterskans delaktighet vid positionering

### *En enkätstudie*

Vi heter Elin och Amanda och går operationssjuksköterskeprogrammet på Lunds Universitet. Vi håller på med datainsamling inför vår magisteruppsats och du tillfrågas om deltagande i ovanstående enkätstudie.

Vi önskar att du som har erfarenhet av att positionera patienter i litotomiläge (när patienten ligger med benen i benstöd), svarar på en enkät om 16 påståenden som berör din självupplevda kompetens och roll i positioneringen.

Positionering är en av operationssjuksköterskans ansvarsområde och god positionering ger kirurg åtkomst till operationsområdet och minskar risken för postoperativa komplikationer för patienten i form av till exempel trycksår, nervskador och kompartmentsyndrom. Vi vill därför undersöka operationssjuksköterskans kompetens och delaktighet vid positionering av patienter i litotomiläge.

När du fyller i enkäten tar vi det som ditt godkännande att delta i studien. Deltagandet är helt frivilligt och du kan avbryta när som helst utan att du behöver ange varför. Du besvarar frågorna fullständigt anonymt.

Om du accepterar att delta ber vi dig att besvara frågorna i formuläret så fullständigt som möjligt. Vi beräknar att det tar ca 10 minuter att besvara.

Frågeformuläret kommer att behandlas konfidentiellt, det vill säga att ingen obehörig får tillgång till det.

Insamlat material kommer raderas efter godkänd examination. Dessförinnan kommer enkätsvar förvaras lösenordsskyddat. Enkäterna kommer inte innehålla några känsliga personuppgifter.

Studien ingår som ett examensarbete i operationssjuksköterskeprogrammet 2022/2023 .

Tack på förhand!  
Elin och Amanda

Vid eventuella frågor, kontakta gärna oss

Amanda Ryberg-Welander <i>Leg. Sjuksköterska</i> e-post: am0478ry-s@student.lu.se	Elin Partoft <i>Leg. Sjuksköterska</i> e-post: el1757pa-s@student.lu.se	Handledare Daniel Benoit <i>Universitetslektor vid</i> <i>Idrottsvetenskap</i> e-post: daniel.benoit@med.lu.se
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**Q1** 1. Din ålder:

**Q2** 2. Jag identifierar mig som:

Kvinna

Man

Annat

**Q3** 3. Hur lång är din erfarenhet som operationssjuksköterska (år)?  
(Med erfarenhet menar vi antal år du har jobbat som operationssjuksköterska)

**Q19** 4. I vilken region/kommun arbetar du? (även du som arbetar privat eller är anställd på annat vis, får gärna svara var i landet du arbetar)

**Q4** 5. Gör du en preoperativ bedömning av patienten innan operationstillfället? (Med preoperativ bedömning menar vi att du har samlat in information om patienten innan det kirurgiska ingreppet)

Aldrig

Ibland

Ofta

Mycket ofta

Alltid

**Q6** 6. Under min preoperativa bedömning samlade jag in information via (mer än ett svar kan kryssas in)

Samtal med patienten

Via patientens journal

Operationsplaneringsprogram (t.ex. Orbit)

Samtal med operationsteamet (t.ex. anestesipersonal, operatör eller undersköterska)

Jag samlar inte in information om patienten innan operation

Annat (beskriv gärna nedan)



Q7

Nedan följer 10 påståenden med en femgradig svarsskala. Det sista påståendet är en öppen fråga med möjlighet att utveckla dina tankar. Påståendena ska sättas in i situationen att positionera patienten i litotomiläge.

Q8

7. I take a leadership role to ensure the smooth running of the theater  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q9

8. When I am allocated to an area of the OR that is unfamiliar, I draw on my skills and experience  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q10

9. I feel comfortable in seeking assistance from my colleagues when I am unsure  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q15

10. I use available resources to maintain current OR practise  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q11

11. I apply specialist knowledge in providing care for the OR patients  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q12

12. I have the right amount of knowledge to practice in this specialty  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q14

13. I have detailed knowledge of anatomy and physiology  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q16

14. I provide appropriate reassurance and explanation for OR patients  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q13

15. I actively listen to the patient and significant others to obtain necessary information  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q17

16. I establish rapport with patients that enhances their ability to express feelings and concerns  
(Påståendet ska sättas in i situationen att positionera patienten i litotomiläge)

- Aldrig
- Ibland
- Ofta
- Mycket ofta
- Alltid

Q18

17. Utveckla gärna dina tankar om att positionera patienter i litotomiläge (t.ex tar du hänsyn till något speciellt?)

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Telefon: 046-222 00 00 vx. Telefax 046-222 18 08

Förfrågan om tillstånd att genomföra studien *Operationssjuksköterskans delaktighet vid positionering*

Positionering av patienten inför kirurgiska ingrepp är en av operationssjuksköterskans huvudansvar. Studier visar att operationssjuksköterskor tycker det är svårt och saknar korrekta hjälpmedel samtidigt som de förväntas att ta en ledande roll i positioneringen. Litotomiläge är positionen som vi vill undersöka eftersom studier visar att operationssjuksköterskor tycker litotomiläge är en svår positionering. Däremot har vi inte hittat studier där operationssjuksköterskans har fått självskatta sin egna förmåga till god positionering vid litotomiläge.

Studien kommer att genomföras med enkäter. Inklusionskriterierna för deltagare i studien är operationssjuksköterskor som förbereder patienter inför ett kirurgiskt ingrepp som kräver positionering i litotomiläge. Därav skulle vi vara tacksamma för att få godkännande att dela ut enkäter på gynekologiska eller urologiska operationsavdelningar som utför positioneringen.

Information och samtyckesblankett kommer finnas som försättsblad till enkäten och godkännandet bekräftas när deltagarna fyller i enkäten.

Vi önskar få kontakt med enhetschef eller liknande som kan planera in och godkänna ett datum när vi kommer ut till avdelningen.

Insamlat material kommer förstöras efter godkänd examination. Dessförinnan kommer enkätsvar förvaras inlåst. Enkäterna kommer vara numrerade och inte innehålla några personuppgifter.

Ansökan kommer att skickas till Vårdvetenskapliga etiknämnden (VEN) för rådgivande yttrande innan den planerade studien genomförs.

Studien ingår som ett examensarbete i operationssjuksköterskeprogrammet.

Om Du har några frågor eller vill veta mer, kontakta gärna oss eller vår handledare.

## Appendix 3 (3)

### Brev till mellanhand

#### *Operationssjuksköterskans delaktighet vid positionering*

Vi heter Elin och Amanda och går operationssjuksköterskeprogrammet på Lunds Universitet. Vi håller på med datainsamling inför vår magisteruppsats. Vi skulle uppskatta om du ville vara behjälplig med vår enkätstudie.

Positionering av patienten inför kirurgiska ingrepp är en av operationssjuksköterskans huvudansvar, men studier har visat att operationssjuksköterskor tycker det är svårt och saknar korrekta hjälpmedel samtidigt som de förväntas att ta en ledande roll i positioneringen.

Vi vill be operationssjuksköterskan skatta sig själv utifrån påståenden när det kommer till positionering via ett frågeformulär. Formuläret beräknas ta ca 10 min att besvara.

Inklusionskriterier för deltagare i studien är operationssjuksköterskor som arbetar med kirurgiska ingrepp som kräver positionering i litotomiläge.

Vi vore tacksamma om Du kunde hjälpa oss att skicka enkäten till dina medarbetare. Försättsblad till enkäten kommer innehålla information om studien och ett godkännande ger deltagaren när hen fyller i enkäten.

Deltagandet är helt frivilligt och kan avbrytas när som helst utan att man behöver ange varför. Frågeformuläret kommer att behandlas konfidentiellt, d.v.s. så att inte någon obehörig får tillgång till det. Enkäten besvaras anonymt.