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# **Nurses' experiences of hospitalised patients' sleep in Sweden: a qualitative study**

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## **Abstract**

**Aims and objectives:** The aim was to describe nurses' experiences of patients' sleep at an emergency hospital and their perceptions of sleep-promoting interventions.

**Background:** Promotion of patients' sleep during hospital care is an important intervention for the nursing profession. In order to promote sleep and to initiate sleep-promoting interventions, nurses need basic knowledge about sleep and its physiology. Therefore, it is of importance to explore and expand knowledge about how nurses experience patients' sleep and how they perceive working with it while providing care at an emergency hospital.

**Design:** A qualitative descriptive design was used.

**Methods:** Data were collected from four focus groups and seven individual interviews. A total of twenty-two registered nurses participated. Data were analysed using a qualitative content analysis.

**Results:** Nurses expressed a desire and an ambition to work in ways that promote patients' sleep during hospitalization. Nurses reported that health care services and emergency hospitals were not organised according to patients' perspective and needs. Furthermore that they did not have opportunities to work effectively to promote sleep according to patients' wishes. Several nurses stated that they did not have sufficient knowledge about sleep and that they did the best they could under prevailing circumstances. Nurses emphasized the importance of sleep for patients and that it was an area that should be given far greater priority.

**Conclusions:** The results indicate that nurses currently have insufficient knowledge about sleep and sleep-promoting interventions. These aspects of nursing is based on personal experience and common sense rather than being evidence-based. Furthermore, sleep as a nursing topic needs to be developed and given more focus in order for nurses to be able to deliver high quality care at emergency hospitals.

**Relevance to clinical practice:** Nurses require more knowledge and education in order to gain deeper understanding of sleep and to deliver evidence-based, high quality care.

**Keywords:** sleep, patients, nurses' experiences, knowledge, emergency hospital, focus groups, individual interviews

## **Introduction**

Promoting good sleep for patients during hospital care is an important component in professional nursing (Radtke et al. 2014; Pellatt 2007). Nurses have an insight about the negative effects of insomnia for hospitalized patients, and they can relate sleep quality to improved psychological and physical outcomes (Radtke et al. 2014). Nurses are in a unique position through their closeness to patients. From this close position, patient's health and wellbeing can be promoted by actively working to improve patients' sleep quality (Radtke et al. 2014). Otherwise, Ye and Keane (2013) reported in a focus group study a growing concern about sleep during hospital stay because the subject is not prioritized. Nevertheless, many patients experience sleep disturbance and a reduced quality of sleep during hospitalization (Gellerstedt et al. 2014; Reid 2001). Gay (2010) describes that patients do not get a restful sleep during hospital care and that patients' sleep quality is not measured and evaluated.

## **Background**

Sleep is a basic need for human beings and can be defined as a "reversible behavioural state of perceptual disengagement from, and unresponsiveness to, the environment" (Carskadon & Dement 2011). The importance of sleep for maintenance of good health and recovery from illness and or injury cannot be challenged (Alkadhi et al. 2013; Cohen et al. 2009; Friese 2008, Banks et al. 2007). In connection with disease and / or bodily injury, the body has an increased need for sleep. Sleep deprivation is associated with several diseases and increased mortality (Bollinger et al. 2010; Blask 2009).

Several studies have shown that sleep disturbances are very common among inpatients and that the patients have a reduced quality of sleep during hospital care (Pilkington 2013; Gellerstedt et al. 2014; Yilmas et al. 2012; Missildine et al. 2010). Disturbed sleep for inpatients can affect their ability to concentrate, cause difficulties in managing anxiety, contribute to changes in mood and ability to handle pain and stress (Pilkington 2013; John et al. 2007). Patients' sleep is not only disturbed by physical factors, e.g. pain, but also by psychological aspects such as worry and anxiety. Furthermore, patients' sleep is affected by nurses' attitudes and the health care environment, such as bedside manner (Gellerstedt et al. 2014, Kamdar et al. 2012; Lei et al. 2009).

In order to initiate sleep-promoting interventions, nurses need basic knowledge about sleep physiology (Radtke et al. 2014; Nesbitt & Goode 2014). A lack of knowledge may lead to a failure to identify symptoms related to sleep deprivation (Radtke et al. 2014; Nesbitt & Goode 2014; Alkadhi et al. 2013; Pilkington 2013). Therefore, it is of importance to explore and describe nurses' experiences regarding patients' sleep as well as how they perceive their work in facilitating patients' sleep during hospital care.

### **Aim**

The aim was to describe nurses' experiences of patients' sleep at an emergency hospital and their perceptions of sleep-promoting interventions.

### **Methods**

A qualitative descriptive methodology was used. Qualitative descriptive methodology can provide straight descriptions of phenomena and give answers to questions as to whom, what and where (Sandelowski 2000). The design was a qualitative descriptive study with a combination of individual and focus group (FG) interviews. This combination regarding data collection has been described by Lambert and Loiselle (2008). Sandelowski (2000) and Lambert and Loiselle (2008) suggest that structured open-ended individual and/or FG interviews could be used as a method for data collection in qualitative descriptive research. A FG aims to achieve a widespread range of experiences about phenomena and can generate meaningful opinions. A FG is a semi-structured discussion with a group of people and aims to explore a specific set of issues. Focus groups are not only used to gain new knowledge but also to seek beliefs and opinions in a collective context (Tong et al. 2007; Kruger 1998). Individual interviews focus upon another person's experiences and perspective (Patton 2002).

### **Design/ Settings and participants**

A total of 22 nurses were included in the study, two of them males. Fifteen nurses (n= 15) participated in the total of four FG interviews and another seven nurses (n=7) participated in individual interviews. The participants were enrolled into the study by convenience sampling (Patton 2002) from four emergency hospitals in Stockholm (Emergency hospital is defined as a hospital with an emergency room open 24 hours a day, access to performing surgery around the clock, as well as access to the radiology department and an intensive care unit; Government Offices of Sweden, SOU 2002:31). Nurses with various work schedules were

included to cover the entire twenty-four hour period of care. In order to cover different views, nurses from nine different specialties (surgical, medical, neurological, cardiology, hepatology, orthopaedic surgery, respiratory medicine, infection and urology) were included. Inclusion criteria for the nurses were: at least one year's work experience at an emergency hospital and understanding of the Swedish language.

### **Data collection**

Data collection began in October 2012 and was completed in March 2014. Each nurse in the study participated either in a FG or in an individual interview. The nurses that were interested in participating in the study but were unable to attend the FGs were offered an individual interview. All interviews were conducted at premises near their workplace. All participants received written and oral information and signed an informed consent form.

A pre-designed topic guide was used during FGs and the individual interviews. The topic guide was developed by the research group with inspiration from Kruger (1994) and verified by a team of experts prior to data collection as a form of validation (Table I). Each FG and interview began with an introduction outlining confidentiality principles and the nature of the interview. The questions in the subject guide were prepared in all the interviews, but the questions were asked in varied order and with flexibility based on how the interviews developed. All participants were encouraged to contribute and sufficient time was allowed for participants to express themselves. With consent from all participants, all FGs and individual interviews were audio-recorded for transcription and analysis. The first authors were moderators at all FGs and conducted the seven individual interviews. During each performed FG, a co-author attended as an observer. The lengths of the interviews were: for the FGs 56 minutes (median) (range 52-83 minutes) and for the individual interviews 40 minutes (median) (range 31-52 minutes).

### **Ethical considerations**

This study was approved by a Regional Ethical Review Board in Sweden (Dnr: 2012/846-31/2). All the participants gave their informed consent in accordance with the Declaration of Helsinki (World Medical Association Declaration of Helsinki, 2008), assuring confidentiality and voluntary participation. Operation managers at four emergency hospitals in Stockholm were informed and asked for permission to carry out the study.

### **Data analysis**

Recorded interviews were transcribed verbatim. The transcribed text was checked in order to ensure that no words were omitted. The first author performed all transcriptions. Collected data were analysed by qualitative content analysis with a latent approach. The authors derived a scientific theoretical framework regarding the analysis from Krippendorff (2013).

Krippendorff (2013) describes content analysis as a research technique and a scientific tool that allows valid and repeatable conclusions based on a text's content. The steps regarding the analysis phase were inspired by Graneheim and Lundman (2004). First, the text was read through several times in order to capture its full meaning. The text was then read in order to identify meaning units that captured and answered the purpose of the study. Meaning units were sorted and marked with codes and all codes were sorted and abstracted according to seven formulated subthemes. Out of the latter, three themes were formulated. During the analysis process, each step was reached through repetitive verifications of critical analysis and interpretation. The analysis process was performed using reflexivity, an approach that illustrates the concept of validity in qualitative research (Polit & Beck 2011). Polit and Beck (2011) describe a flexible and open process during the analysis phase in order to explore the phenomenon in depth. The authors' preconceptions regarding the subject varied in the group. Through awareness of the variation of preconceptions in the author group, the coding processes were conducted co-operatively with a desire that the coding should be close to the text (Graneheim & Lundman, 2004). The transferability and conformability of the findings were facilitated by clear descriptions of the context, participants, sampling and the analysis process (Table II, III)

## **Results**

The demography of the informants was collected: working shifts, years of work experience, gender and speciality. The participants' duration of work experience were: in the individual interviews 4 years (median, range 1.5 – 35 years) and in the FGs 7 years (median, range 1.5– 35 years). Sixteen participants worked night or three shifts and six participants worked day and night shifts. The results comprised three themes describing nurses' experiences about patients' sleep and their perceptions of sleep-promoting interventions at emergency hospitals. Quotes from FGs and individual interviews are presented underneath each theme and sub-theme in order to shed light on the reported experiences.

## **Being trapped between ambition and given frames to practice nursing**

Nurses in the study expressed a desire and ambition to work in ways that promote patients' sleep during hospitalization. They described feelings of frustration regarding the rigidity of the health care environment, working methods and procedures. The majority of nurses in the study reported that they felt that health care and emergency hospitals were not organised according to a patient's perspective. They sensed that they lacked the opportunities to work effectively in promoting sleep based on patients' wishes.

### **Questioning the organization and procedures**

The nurses expressed feelings of being trapped between their ambitions and desire to do good in an organization where care was not always based on the patient's perspective. This impression led to great frustration and a questioning of whether or not given frames for nursing were practicable. The majority of the participants expressed a sense of hopelessness and a feeling of powerlessness due to lack of sufficient support and interest regarding sleep promotion from the organization and its management.

*“One can only pity them, listen and offer more sleeping pills or say that you just have to try to put up with it and sleep during the day ... remember that it is just these nights and then you can go home ... but isn't pleasant, it does not feel pleasant, it's a tremendous shortcoming that we cannot offer more, because sleep is so important for recovery and cure” (Focus group 3)*

Nurses in the study expressed concern about the management of patients' sleep. They perceived that it was not a priority. Being unable to offer the patients better solutions elicited great frustration.

*“I experience that it is not a prioritized area. We know they (the patients) are here for three to five days, then they go home and we treat it a little bit like - sleep poorly for three to five days and then you can sleep when you are discharged and come home. This is what we offer the patients, kind of... We can't do anything about it, we know that it is not good but there is nothing we can do about it. This is the way sleep problems are treated in health care”. (Focus group 3)*

### **Not having time for nursing and sleep promotion**

The nurses reported having ambitions and a plan for sleep-promoting interventions but felt that these were unattainable due to lack of time and non-functional routines. All nurses in this study disclosed that lack of time often led to less good solutions. They reported choosing

pharmacological solutions rather than trying out other interventions regarding patients' sleep. This generated disappointment about not having enough time for nursing.

*"There are things that you would like to do for the patient regarding their sleep but you do not have the time so you go and fetch a sleeping pill for them..."* (Focus group 2)

The majority expressed dissatisfaction and frustration based on their perception that the organization expected them to perform tasks such as cleaning during the night when all that they wanted to do was to use all the time for nursing. They felt that the patients' sleep and interventions to enhance sleep should be totally in focus during the night instead of tasks such as cleaning. In their opinion this was the reason for sleep not being a prioritized area.

*"There are so many things that you are expected to fix during the night that are not related to nursing care, cleaning and other things, it feels dreary. I mean, I am here for the patients and to nurse, not to clean..."* (Focus group 4)

### **Having strategies and approaches to manage a shift**

The nurses said that they often had a strategy for the night and actively worked to develop an approach to promote good sleep for patients. The majority gave examples of strategies which they felt promoted sleep for patients. Actively working to help patients to feel safe, well cared for and to respond without being stressed were given as examples. They often perceived that patients had an increased need of feeling in control during their hospital care. From the nurses' point of view it was important to support and help patients to cope with the situation. One approach mentioned by many of the nurses was that the staff should show that they were able to handle the situation, to convey calm and not to let their own stress affect how they treated the patients.

*"Some (patients) are very worried about sleeping when they are seriously ill, I think it's about not being in control of the situation and I would certainly feel the same. Then it is important to show them that I am watching over them not only with my eyes, but also with all the knowledge I have".* (Individual interview no 2)

The nurses took the view that they had an important role to impart information and this was highlighted as a strategy for performing a good job during the night and thus promote patients' sleep. The nurses emphasised the importance of patients being well informed about what was planned. For example, what would be happening during the shift?

*“I think they need a sense of security, I think they need information, as much as we possibly can give, about examinations and more. To know what is planned, what will happen, I think that is important for patients to be able to sleep. I think you are able to relax more if you know what will happen so it does not come as a surprise ... but then, I also believe that many think it is important to be able to have things a little bit like when they are at home, especially older patients. They want to have their own toothbrush, toothpaste, to have the routines that they are used to, if possible”* (Individual interview no 5)

From the nurses' experiences of successfully promoting sleep, one strategy that reappeared during the interviews was that of active listening. The nurses were of the opinion that sleep-promoting interventions should be based on a person-centred approach. To meet patients and respond by actively listening and trying to meet their individual needs were given as examples. The nurses were agreed that when they took the time to really listen, they experienced that the patients became more relaxed and that this could have a positive impact on patients' sleep.

### **Framing sleep according to non evidence-based practice, experience and knowledge**

Most of the nurses in the study told us that they had not received any form of education about sleep on their nursing course or at their workplaces. Furthermore, the nurses reported that the knowledge that they had was about sleep physiology but nothing about evidence-based sleep interventions. Some said that they felt that they were challenging their own level of knowledge from shift to shift. They continued to use interventions that they felt worked well from their own personal experiences. In cases when they felt uncertain and hesitated about how they should deal with patients' sleeping difficulties, they turned to colleagues for guidance and advice.

### **Basing nursing on non evidence-based based practice in a borderland between common sense and knowing**

Several nurses stated that they lacked knowledge about sleep and that they did the best they could under the circumstances but did not consider it to be enough. They expressed an interest in learning more about sleep and were willing to develop their expertise in this field. Several nurses reported using sleep-promoting strategies that they had tested themselves and that the interventions were based on their own experience and perceptions of sleep.

*“It’s partly about turning to yourself. Using your own experience, it goes without saying, common sense. I think we had something about sleep during training but not as I remember. We have a memo on the ward regarding night work but it is not about interventions and things like that. I think that knowledge is about being observant and perceptive with regard to things you hear and see. My experience is my knowledge ...”* (Individual interview nr 6)

One nurse said that she was unsure about whether or not the interventions she used were evidence-based. She questioned her modern nursing training and said:

*“I don’t think I have knowledge about sleep, but I do know a little of course. It is all about listening to what the patient says. You build up your knowledge through experience from work shift to work shift. I can’t remember having learned anything about sleep during nursing training; everything was just focused on the day shifts at hospital. It sounds pretty funny now when I say it because I’m still fairly new to the profession, despite six years and having undergone a modern education but I still know nothing about this ...”* (Individual interview no 2)

The nurses reported having knowledge about some evidence-based interventions. They had not, however, integrated these into their work. They used common sense and their actions were based on their own experiences.

*“I go to the patients when they are going to sleep and I always turn their pillows. I position the pillows under their neck to give proper support. I tell the patient to lift up their head slightly so that I can turn and fluff up the pillow. Most of them say, ‘Oh that’s nice it feels cool.. You do what you would like others to do for you, it usually works; we are not entirely different...”* (FG 1)

### **Observing, assessing and making priorities from a nursing perspective**

It emerged that there are difficulties in making observations of patients’ sleep and assessments of patients’ sleep quality. Among the nurses who carried out subjective assessments of sleep, none mentioned the use of assessment tools. The nurses described observations such as heart rate, respiration and occurrence of movement in order to assess whether or not the patient was asleep but there was a great uncertainty in these observations. The nurses said that their observations and the patients’ experiences often differed.

*“Often one hears it in the breathing, it is calm and relaxed. Sometimes you need to stand with a watch and count the breaths, and get close and check that they have a breathing pattern. If you stand next to the bed, and they breathe as I said and they are not moving, then I assume that they are sleeping”* (Individual interview 7)

Furthermore, nurses described how they tried to plan their work in order to allow patients to sleep for longer continuous periods. They said that length of work experience made them more secure and made it more likely that they would use their own judgment. For example, some controls of vital parameters were not prioritized if they felt that the patient’s condition was stable.

*“You get a prescription, I think that I’ve worked here long enough now that I can make that assessment, if it is a case of the legs being swollen, then it can wait until the morning. It has to wait so the patient can get some sleep”.* (Focus group 2)

## **Being aware of the importance of sleep and consequences of sleep deprivation**

Nurses in the study expressed the importance of sleep for patients and that it is an area that should be given more priority. Nurses stated clearly that they had a responsibility in this area, partly because they considered themselves to be close to the patients. They felt that sleep was indeed a nursing topic. They gave several examples of how they noticed that a patient received enough or not enough sleep.

### **Being aware of and addressing the impact of lack of sleep**

Most nurses conveyed that they were often able to connect the occurrence of changes in mood, increased pain and immobilization to sleep deprivation. Some nurses referred to situations where the patient did not have the strength to actively participate in physiotherapy after surgery. They believed that in many cases this was due to lack of sleep. Furthermore, the majority felt that many patients found it difficult to absorb information when they were tired during the day due to lack of sleep. One nurse said:

*“You notice it because they sleep a lot during the day, you may have to wake them up several times during the day, now you have to get up, and it’s time for food .... You can also see that they are not really...completely with it ... and when you ask them how things are, they say that they have slept badly, that they are totally not with it. Another thing is that they will be in a*

*bad mood when they have slept badly. It is noticeable towards the evening; they are irritated and annoyed by minor things”* (individual interview 5)

### **Having a picture of the importance of sleep**

The nurses in the study stated that they had observed the beneficial effects of patients receiving the sleep they needed. The majority expressed the importance of sleep and it was something that patients often pointed out, both in cases of insufficient sleep and when they felt that their sleep was good.

*“One notices that when a patient has slept well during the night and has not been worried, it is easier for them to do things during the day, they take part in a different way. They have more energy; they can go for a long walk in the corridor. Another thing is that they are more positive about change.”* (Individual interview no 3)

They also stated how important it was that the nurse perceived sleep as an important part of nursing. They argued that nurses should work with patients’ sleep to a greater extent. They all agreed that sleep is a basic need and that it really should be given higher priority.

*“One must find the strength to mobilize and recover when you're sick, when you are in hospital, you have to recover. I think sleep is really important”* (Individual interview no 1)

### **Discussion**

Nurses in this study were aware that sleep is a basic need for patients who are hospitalized at emergency hospital. In the interviews, the nurses argued that patients’ sleep is an important part of the profession of nursing and that they believed that they had a responsibility both to promote sleep and respond to sleep problems. Our results indicate that nurses are highly motivated to work actively with patients’ sleep. Nurses in this study expressed how they tried to act responsibly regarding patient’s sleep but that they felt that health care and hospital organizations neither held the same views nor gave it the same priority. This leads to frustration among nurses but may also lead to a lowering of their level of ambition regarding patients’ sleep. Of course, and as usual, it is the patients who suffer the consequences.

Studies state that patients’ sleep is affected by several factors, both psychological and physical environmental factors (Gellerstedt et al. 2014; Pilkington 2013; Yilmas et al. 2012). Earlier studies have mostly focused on patients’ sleep in intensive care units and in nursing homes. These findings are not transferable to the context of the present study, emergency

hospital. There are a very large number of patients cared for annually in emergency hospitals and it is therefore important to explore and describe this area. It is well known that poor quality of sleep has consequences for the patient and can affect the entire episode of care (Pilkington 2013). We maintain that knowledge alone is not enough; action is also required. An important question is how to implement our knowledge and make a change that can affect patients' sleep in a positive direction.

Radtke et al. (2014) describes that nurses are well aware that patients' sleep quality affects both physical and psychological outcomes. This awareness was confirmed in this study by the nurses' stories regarding their enthusiasm and ambition for the area of sleep. The nurses in our study were aware of the importance of promoting sleep. Being aware of and recognizing it engenders hope that a change can be realized and implemented. One successful development could be to do as the nurses in this study asked, i.e. provide more knowledge about sleep. This would require a commitment from hospital management at emergency hospitals but would also require beginning to prioritize nocturnal nursing.

Nurses in the present study reported difficulties in observing patients' sleep and assessing their sleep quality; a difficulty also found in Radtke et al. (2014). They reported that it was sometimes difficult to determine whether or not a patient was sleeping. The results indicate that nurses lacked knowledge about sleep assessment tools. This uncertainty and lack of knowledge was also found in a study by Beecroft et al. (2008). Another obstacle may be that the assessment tools currently available are not implemented in the context, i.e. emergency hospitals. Difficulties in observing and assessing the quality of sleep were also reported in the present study. This may explain why nurses and patients sometimes differ in their assessments of patients' sleep quality. Furthermore, observations regarding patients' sleep are subjective and assessment tools are not widely used. Nordstrom and Frisk (2003) showed that patients' and nurses' estimations of sleep using Richard Campbell's sleep questionnaire (RCSQ) did not differ. There may be several reasons as to why so few nurses use assessment tools but one is undoubtedly a lack of knowledge. However, we all are aware that approximately half of the time patients spend at hospital the patient is asleep. Most nurses in the study emphasized that the focus during training had been on nursing care when the patients are awake and almost nothing about nocturnal nursing. One part of this could be explained by the fact that very little space in nursing literature is focusing on patients sleep and nocturnal nursing. Also, a majority of nurses in this study reported that sleep physiology and evidence-based sleep interventions were not addressed during their training. This can of course explain the

relatively limited use of assessment tools to evaluate patients' sleep quality but it is not a comprehensive explanation.

McIntosh and MacMillan (2009) were studying nursing students training about sleep and the results showed that they lacked basic knowledge of sleep physiology; knowledge that is necessary in identifying lack of sleep and taking adequate action. It seems as if nothing has changed since then as the nurses in the present study communicated the same sort of experiences. This study shows that nurses chose and performed nursing interventions mainly based on their own experience, common sense and/or by asking colleagues for advice. In the McIntosh and MacMillan's (2009) study, none of the nursing students thought that the topic of sleep was well covered during their training; they learned through clinical practice and their own sleep experiences. These results are confirmed in our study. Even more astonishing is that the experiences reported in this study do not come from nursing students, but from clinically active nurses with work experience.

The results suggest that both the organization and nurses have a responsibility and an obligation to gain more knowledge about sleep, evidence-based sleep-promoting interventions and validated assessment tools. Proposed actions could help to improve patients' sleep and make it clear that sleep is a nursing topic.

### **Limitations**

It is possible that the size of hospital affects the nurses' experiences. There is also a possibility that the participants in the FGs did not disclose all their experiences, although the ones they spoke of were confirmed and did not differ from those discussed in the individual interviews.

### **Conclusion**

The results indicate that nurses currently have insufficient knowledge about sleep and sleep-promoting interventions. These aspects of nursing is based on personal experience and common sense rather than being evidence-based. Furthermore, sleep as a nursing topic needs to be developed and given more focus in order for nurses to be able to deliver high quality care at emergency hospitals.

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

- Nurses experience that health care organizations are not prioritizing patients' sleep at

emergency hospitals.

- Nurses require more education in order to reach a deeper understanding and knowledge about sleep, enabling them to deliver high qualitative and evidence-based nursing.

### **Relevance to clinical practice**

Nurses have an ambition and desire to work more actively with patients' sleep.

More knowledge about sleep would empower them to take action.

Further and proactive education regarding patients' sleep seems to be essential.

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### **Author contributions**

Study design: LG, JM, MK and MRK. Data collection: LG, JM, MK and MRK. Data analysis: LG, JM, MK and MRK. Manuscript: LG, JM, MK and MRK.

### **Conflict of interest**

None to declare

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(Table I, Topic guide)

Topic guide
What is important for you when you are going to sleep? (Opening Q)
What do you think of when you hear the word - sleep? (Opening Q)
What do you think is important for the patient when sleeping at the hospital? (Transition question)
How do you consider patients sleep during hospital care? (Transition question)
Does sleep have an importance for patients? (Key question)
How do you know that a patient is sleeping? (Key question)
Do you perceive that you as a nurse are affecting patients' sleep and how? (Key question)
The knowledge you have about sleep, where have you acquired it? (Key question)
Can you summarize what we talked about in a few words? (Summary question)

(Table II Overview subthemes and themes)

Subthemes	Themes
Questioning the organization and procedures. Not having time for nursing and sleep promotion. Having strategies and approaches to manage a shift.  Basing nursing on non evidence-based practice in a borderland between common sense and knowing. Observing, assessing and making priorities from a nursing perspective.  Being aware of and addressing the impact of the current lack of sleep. Having a picture of the importance of sleep.	Being trapped between ambition and given frames to practice nursing    Framing sleep on non evidence-based practice, experience and knowledge   Being aware of the importance of sleep and consequences of sleep deprivation

(Table III: example of the analysis process)

Meaning units	Code	Subtheme	Theme
<p>“I experience that it (sleep) is not a prioritized subject. We know they (the patients) are here for three to five days, then they go home and we treat it a little bit like - sleep poorly for three to five days and then you can sleep when you are discharged and come home. This is what we offer the patients, kind of.... We can't do anything about it, we know that it is not good but there is nothing we can do about it. This is the way sleep problems are treated in health care” (FG 3)</p>	To feel frustrated	Questioning the organization and procedures	Being trapped between ambition and given frames to practice nursing
<p>” There are things that you would like to do for the patients regarding their sleep but you do not have the time and then you go and fetch a sleeping pill” (FG 2)</p>	Lack of time	Not having time for nursing	Being trapped between ambition and given frames to practice nursing
<p>“It's partly about turning to yourself. Using your own experience, it goes without saying, common sense. I think we had something about sleep during training but not as I remember. We have a memo on the ward regarding night work but it is not about interventions and things like that. I think that knowledge is about being observant and perceptive of things you hear and see. My experience is my knowledge” (Individual interview 6)</p>	Own experience	Basing nursing on non-evidence practice in a borderland between common sense and knowing	Framing sleep on non evidence-based practice, experience and knowledge
<p>“You get a prescription, I think that I've worked here long enough that I can make that assessment, if it is the legs that are swollen, and then it can wait until the morning. It has to wait so the patient can get some sleep” (FG 2)</p>	Making priorities	Observing, assessing and making priorities from a nursing perspective	Framing sleep on non evidence-based practice, experience and knowledge