Patient privacy from the perspectives of perioperative nurses: a qualitative study

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Abstract
Background and aims: Privacy is one of the most basic rights of patients. Privacy protection in the complex and stressful environment of operating room needs special attention. The aim of the study was to explore patient privacy from the perspectives of perioperative nurses.

Methods: This descriptive qualitative study was conducted in 2016 on fifteen perioperative nurses purposefully selected from a teaching hospital in Gorgan, Iran. Data were collected via in-depth semi-structured interviews and were analyzed via conventional content analysis.

Results: Participants' experiences of patient privacy came into five main categories, namely body covering, effective communication with patient, comfort provision, care provision by same-gender healthcare providers, and ensuring patient safety. These categories were grouped into the main theme of safety-oriented care.

Conclusion: This study provides a better understanding about patient privacy in operating room and shows patient privacy as a basic need of patients. Policies and strategies are needed to improve patient privacy protection in operating room.

Keywords: Patients, Privacy, Ethics, Operating Room Nursing

Introduction
Privacy is a basic need and right of all patients (1). The term privacy derives from the Latin term “privates” that means deprivation (2). Thus, privacy refers to the limitation of others’ access to the body, thoughts, and feelings of an individual (3). Protection of privacy is to respect individuals, their dignity, and their autonomy and is a fundamental value deeply rooted in the tradition and the history of nursing (4,5). Privacy, or being alone, is a right which should be respected by others and not be investigated by them (6). In 1994, the World Health Organization included the concept of privacy in the principles of medical ethics and the statement of patient rights (6). Privacy is also an important concept in the Islamic context of Iran, where Islamic principles determine most rules and regulations (7). The movement toward adapting medical issues with Islamic principles in Iran also carefully considers patient privacy and requires healthcare providers to respect it (2).

Privacy is a broad concept that includes different interpretations of clinical applications and hence, sensitivity to patient privacy and its protection are among the standards of clinical practice. A qualitative study into the perspectives of critical care nurses on privacy reported that privacy consisted of three main themes, namely intimacy, patient support, and not exposing patient’s body. Intimacy and not exposing patient's body depend on nurses' attitudes and use of routine interventions in daily care. Physicians and nurses may not be aware of patient's preferences or fail to understand that their practice may violate patient privacy, resulting in a humiliating experience for the patient (8,9).

Privacy protection can give patients senses of empowerment and positive self-image. It also reduces their stress, improves their trust in healthcare services, enhances their satisfaction with nursing care, shortens the length of hospital stay, and improves care outcomes (2,10).

Privacy protection is more important and more difficult in operating room (OR). OR is a complex environment with modern technologies and is a stressful environment for patients and nurses. The fast pace of care processes, the use of complex technologies, and the unconsciousness of patients are the major barriers to effective nurse-patient communication and privacy protection in OR. Moreover, perioperative nurses’ great involvement in the use of modern technologies, the necessity to have great technical skills, the necessity to save time during surgeries, and the increasing use of robotic surgeries negatively affect...
Patient privacy from the perspectives of perioperative nurses

Methods
This descriptive qualitative study was conducted in 2016 via the conventional content analysis approach. The knowledge developed through this approach is based on participants’ views and actual data (10). Qualitative designs help explore health-related concepts in their immediate cultural context and the real world of human beings.

Participants and setting
Participants were fifteen perioperative nurses purposefully selected from a teaching hospital affiliated to Golestan University of Medical Sciences, Gorgan, Iran. Inclusion criteria were desire to share experiences about the study subject matter, ability to communicate experiences, and more than six months of work experience in OR.

Data collection
Data were collected through in-depth semi-structured interviews held in a comfortable and quiet place in the study setting. Interviews started using broad questions such as “Can you tell me about patient care in OR?”. Then, probing questions were asked to clarify interviewees’ answers and collect more in-depth data. Examples of probing questions were “Can you explain more about this?”, “What do you mean by this?”, and “Can you give an example”. The duration of the interviews was 45 minutes, on average. Data collection was ended when the data were theoretically saturated. All interviews were recorded using an MP3 player and were transcribed verbatim.

Data analysis
The first author analyzed the data using the conventional content analysis approach proposed by Graneheim and Lundman (12). Meaning units were identified and coded and the codes were grouped into subcategories and categories. All meaning units were checked for accuracy and necessary revisions were made.

Trustworthiness
Trustworthiness was checked using the criteria proposed by Lincoln and Guba, namely credibility, dependability, fittingness, and confirmability (13). Accordingly, two experienced qualitative researchers in nursing reviewed and approved the codes and categories of some excerpts of the interviews. Transferability was ensured through providing detailed descriptions of the data and the research process to help readers judge the fittingness of the study findings to their own context. Moreover, dependability was ensured by two reviewers external to the study who reviewed and approved the accuracy of data collection and analysis.

Results
A total of fifteen perioperative nurses from a teaching hospital in Gorgan, Iran, participated in this study. Nine participants were female, twelve participants were married, and their age range was 22–47 years with a mean of 32. During data analysis, 180 primary codes were generated which were reduced to 78 final codes and categorized into five main categories, namely body covering, effective communication with patient, comfort provision, care provision by same-gender healthcare providers, and ensuring patient safety. These five categories were grouped into the main theme of safety-oriented care. Most participants acknowledged that protecting patient privacy when the patient is under anesthesia and has no control over the environment is of particular importance in OR.

Body covering
Participants believed that covering all parts of patient body is necessary throughout patient stay in OR. They attempted to protect patient privacy through measures such as covering the genital areas, avoidance from exposing other parts of the body during surgery, covering patient body during patient transfer to recovery room, covering the patient with cape and hat in OR, keeping OR door closed, preventing patient touch by opposite-gender individuals in OR, and using a same-gender admission staff.

“After the patient enters OR, I usually attempt to close the door before doing admission” (P. 5).

Effective communication with patient
Some participants extended the concept of privacy to effective communication with patients before surgery and answering their questions.

“When patients enter the room, we communicate with them, greet them, and ask them some questions about for example denture in the mouth, previous history of surgery, history of allergy, etc. Moreover, we check whether they have undergone preoperative preparations. These measures help accurately perform our tasks, establish closer communication with patients, and respect their privacy” (P. 2).

We briefly explain to patients about the procedures that are to be performed for them. Some patients ask about the site of surgery for example on the abdomen and we explain to them about the surgery. We respect their privacy and rights in this way” (P. 8).

Comfort provision
Participants noted that they attempted to provide patients with comfort and thereby protect their privacy in OR
through strategies such as prevention of the unplanned attendance of different individuals at patient bedside, reassurance, attention to their comfort, continuous companionship with them throughout OR stay, use of some interventions to reduce their stress while regaining postoperative consciousness, provision of a safe and private environment in surgeries on the breast and genital areas, and reduction of their anxiety. They highlighted that privacy protection is a need and a right of patients.

“When patients enter OR, we tell them not to feel worried, ensure them that we will be with them throughout their OR stay, and mentally support them to protect their privacy” (P. 11).

“Patients have stress and it’s apparent in their appearance and words. An appropriate admission to OR helps reduce their stress” (P.5).

“We emotionally and mentally support patients, respect their privacy, and provide them with a safe environment. Moreover, we don’t abandon patients after surgery” (P. 4).

**Care provision by same-gender healthcare providers**

Participants noted that they attempted to send opposite-gender staff out of OR before patient positioning and surgical prepping and to use same-gender staff in some surgeries in order to protect patient privacy. Of course, they highlighted that they couldn’t observe same-gender care provision in all cases.

“In many cases, we ask colleagues to go out before prepping and allow them to come in after prep and drape” (P. 4).

“We attempt as much as possible to use female staff when the patient is female” (P. 8).

**Ensuring patient safety**

Participants highlighted the great importance of ensuring patient safety in OR through measures such as checking the accurate placement of connections and catheters, checking the appropriate functioning of surgical devices before surgery, appropriate use of surgical devices during surgery, ensuring the sterility of surgical sets, maintaining sterility during surgery, and appropriate patient transfer.

“Although all surgical sets are always checked, I always re-check them for sterility before opening them to minimize the risk of infection” (P.6).

“I always attempt to place the electrocautery plate in an appropriate place in order not to cause burn injury to patients (P. 9).

During patient transfer, we should take care of the catheters and drains in order to prevent injury and bleeding. These measures help ensure patient safety” (P. 11).

Although participants attempted to protect patient privacy throughout patient stay in OR, they reported some barriers to privacy protection such as staff shortage, physical space limitation, inattention to service workers, and large number of students in OR (Table 1).

**Table 1. Perioperative nurses’ perspectives on patient privacy in operating room**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Main categories</th>
<th>Subcategories</th>
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<tr>
<td>Body covering</td>
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<td>Covering unnecessary parts of the body during surgery</td>
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<td></td>
<td></td>
<td>Covering patient body during patient transfer</td>
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<td>Maintaining patient covering at the time of admission to operating room</td>
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<td></td>
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<td>Use of appropriate covering for the admitted patient</td>
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<td></td>
<td></td>
<td>Preventing patient touch by opposite-gender staff</td>
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<td>Effective communication with patient</td>
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<td>Gaining patient confidence</td>
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<td>Listening to the patient</td>
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<td>Understanding the patient’s emotions</td>
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<td>Verbal communication with the patient</td>
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<td>Honest behavior towards the patient</td>
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<td>Safety-oriented care</td>
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<td>Avoiding the presence of other people on patient bedside</td>
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<td>Comfort provision</td>
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<td>Reassuring the patient</td>
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<td>Attention to patient comfort</td>
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<td>Companionship with the patient throughout operating room stay</td>
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<td>Reducing patient anxiety</td>
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<td>Care provision by same-gender healthcare providers</td>
<td></td>
<td>Asking opposite-gender staff to leave operating room before positioning</td>
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<td>Asking opposite-gender staff to leave operating room before prepping</td>
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<td>Use of same-gender staff in some surgeries</td>
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<tr>
<td>Ensuring patient safety</td>
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<td>Ensuring patient safety during patient transfer</td>
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<td>Ensuring the accurate placement of connections and catheters</td>
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<td>Ensuring the safety of the equipment</td>
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<td>Comprehensive precautions</td>
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<td>Proper use of equipment and medications</td>
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This study aimed at exploring patient privacy from the perspectives of perioperative nurses. Participants’ experiences showed that patient privacy protection was equal to safety-based care and had the five main categories of body covering, effective communication with patient, comfort provision, care provision by same-gender healthcare providers, and ensuring patient safety.

Body covering and care provision by same-gender healthcare providers were among the main aspects of patient privacy from the perspectives of perioperative nurses in the present study. Our findings showed that cultural and religious beliefs were influential factors on privacy protection in OR. Muslim women in Iran and other Muslim countries are reluctant to spend time with male strangers and prefer to receive care from female healthcare providers (14,15). Privacy is also an essential component of human dignity and hence, dignity-based care should include patient privacy protection. A study reported that physical and informational privacy was among the main components of dignity in hospital from the perspectives of patients and highlighted that the exposure of female patients’ body in the presence of male individuals caused anxiety for patients (16). Women in another study reported exposing patient body before medical examinations, exposing patient body in the presence of different healthcare providers, and exposing unnecessary parts of the body during physical examination as instances of privacy violation during physical examination (15). Similarly, a study in Iran showed that an instance of privacy violation was care provision by opposite-gender nurses due to the shortage of same-gender nurses and highlighted that adequate number of nurses from both genders are needed, particularly in OR (17). Care provision by same-gender nurses in healthcare settings plays important role in boosting patients’ morale, improving their peace of mind, and reducing their stress (18). Moreover, as veil is an important religious belief of Muslims, exposing patient body in the presence of opposite-gender healthcare providers can cause Muslim patients discomfort and violate their privacy. A study in Turkey reported that perioperative nurses mostly valued physical privacy, while patients mostly valued informational and psychological privacy (19).

Study findings showed that effective communication with patients was another main category of patient privacy from the perspectives of perioperative nurses. Communication with patients is a main role of nurses. Patients who enter OR usually have high levels of stress and hence, effective verbal communication with them can improve their confidence and give them a sense of safety. Comfort provision was another main category of the study. Comfort provision to patients is a main aspect of quality nursing care (20). Certainly, constant companionship of nurses with patients throughout patient stay in OR can reduce their anxiety and give them pleasant feelings of safety, peace, and comfort (21).

We also found ensuring patient safety as a main category of patient privacy from the perspectives of perioperative nurses. Patient safety is one of the main components of quality care so that healthcare organizations are supposed to promote safety culture among their employees in order to improve care quality. Patient safety is to avoid and prevent adverse events or injuries during care delivery and to protect patients against unintentional injuries caused by medical procedures or errors (22). OR environment is a very sensitive environment and hence, any carelessness in perioperative care delivery may lead to irreparable injuries. Therefore, patient privacy may be neglected in life-threatening conditions in order to ensure patient safety (23).

**Limitations**

People in Iran have different religious and cultural beliefs and hence, our findings may not be generalizable to all Iranians. Moreover, this study was conducted in a public teaching hospital and its findings should cautiously be generalized to private hospitals. Studies in private hospitals are needed to provide firmer evidence in this area.

**Conclusion**

Patient privacy from the perspectives of perioperative nurses has different dimensions, namely body covering, effective communication with patient, comfort provision, care provision by same-gender healthcare providers, and ensuring patient safety. The findings of the present study provide a clearer and better understanding about patient privacy in OR and can be used as a basis for further studies in this area.

**Acknowledgement**

We would like to thank the Research and Technology Administration of Golestan University of Medical Sciences, Gorgan, Iran, as well as all participants of the study.

**Conflict of Interests**

One of the authors of the article is the “member faculty” of the Shahrekord University of Medical Sciences. Based on the journal policy, this author was completely excluded from any review.
process and acceptance of this article.

**Ethical Approval**

The Ethics Committee of Golestan University of Medical Sciences, Gorgan, Iran, approved this study (code: IR.GUMS.REC.1395.221). All interviews were privately conducted with appointment and all interview audio files were password protected. Participants could voluntarily leave the study and signed the study informed consent.

**Financial Support**

The Research and Technology Administration of Golestan University of Medical Sciences, Gorgan, Iran, approved and financially supported this study (code: 95.9.2208).

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