Original Article

Identifying the dimensions of patient privacy in intensive care units: a qualitative content analysis study

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Abstract

In intensive care units (ICUs), patient privacy is of particular importance due to the structure of the ward environment and the critical situation of the patients. The aim of this study was to identify the dimensions of patient privacy in ICUs.

For this purpose, a descriptive-qualitative-exploratory study was performed. The data collection methods included observations and interviews, which were handwritten and analyzed using qualitative content analysis with a conventional approach. A total of 27 participants were selected based on purposeful sampling and with maximum diversity of health-care providers and recipients. The study environment was the ICUs of two selected hospitals affiliated to the medical sciences universities of Isfahan and Tehran, Iran.

The data were analyzed into 4 classes and 12 subclasses. The classes included physical, informational, psychosocial, and spiritual-religious privacy.

Findings of the present study identified hidden layers of patient privacy as a multidimensional concept that is influenced by various factors. In order to provide holistic care, preparing the grounds for patient privacy and familiarizing the staff with its various dimensions seem necessary.

Keywords: *Patient rights; Privacy; Intensive care units; Iran.*

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Introduction

One of the basic human rights is respect for one's privacy (1). Privacy is a critical issue in the field of ethics and medical sciences (2, 3) and is very important in health-care centers (2, 4). The World Health Organization (WHO) has included this concept in the Statement of Patients' Rights as part of the principles of medical ethics (5). Patient privacy has been emphasized as one of the main codes and basic principles of care standards of international organizations and associations (6).

In Iran, 1 of the 5 most important clauses of the Patients' Rights Charter is dedicated to patient privacy. Accordingly, the provision of health services to patients should be based on respect for their privacy and the principle of confidentiality (7). In recent years, numerous studies have been conducted in the field of patient privacy, and often, the level of patients' satisfaction with the health team's respect for their privacy has been reported as moderate or poor (8 - 10). Additionally, in studies conducted with the aim of comparing the perceptions of patients and members of different groups of medical sciences about the level of patient privacy, significant differences have often been reported. Despite the importance given to patient privacy by health system employees, including nurses, the level of compliance from patients' point of view and their satisfaction is very low (11 - 13). The results of studies performed in Iran on patients' views about privacy during care are indicative of the undesirable privacy level (9, 11, 14).

Privacy has an indefinite and relative meaning for which several definitions have been proposed. This is due to the fact that the norms and cultural and religious values of each society and the specific positions of individuals within them are effective in defining and determining its scope (15, 16). Privacy is of special importance in Iran, where the official religion is Islam (12), and has been mentioned many times in the Holy Quran (Surah Noor, verses 27, 28, 30, and 31).

In order to provide appropriate health services and culturally suitable care, a qualitative study of the concept of privacy from the perspective of beneficiaries (providers and recipients of health services) is particularly important (11). In health-care centers, intensive care units (ICUs) are considered as dynamic, complex and stressful care environments necessitating numerous ethical decisions. In these wards, professional staff with specific skills and expertise work together as a

team to provide the best health services to critically ill patients (17). Some factors affecting patient privacy in ICUs include complexities of patients' clinical status, the ward's physical structure, attitudes, beliefs and behaviors of health team members (18, 19), and even organizational factors such as the culture governing the relationships, interpersonal and interprofessional relationships, and management (20).

In Iran, most of the previous studies have addressed the level of patient privacy in general wards, although a few studies have investigated the conceptualization of patient privacy, especially in ICUs and with the participation of all stakeholders (8 - 10). Qualitative studies seek to examine and deeply understand the studied phenomenon and identify it clearly and comprehensively by using different methods of data collection (21). Therefore, the most reliable way to determine how to protect patient privacy is to directly examine events, experiences, values and norms (22). Purposeful observation of the clinical field and reviewing the experiences of health-care providers and recipients can be effective in evaluating, maintaining and promoting patient privacy (23). Since the concept of privacy is influenced by culture, religion and individual preferences (2), the researcher has directly identified and analyzed the participants' beliefs and values by being in the field, observing events and interviewing all groups of stakeholders. This qualitative study was conducted to identify the dimensions of patient privacy in ICUs.

Methods

This manuscript presents some of the findings of a PhD dissertation. In the larger original study, the WHO Clinical Guidelines (24) were used to design and develop interprofessional patient territoriality clinical guidelines for ICUs. The present study was performed in 2021 in the form of a descriptive-qualitative-exploratory study, using the content analysis method with a conventional approach. The study environment consisted of ICUs, coronary care units (CCUs), and dialysis wards of two selected hospitals affiliated to Isfahan University of Medical Sciences and Tehran University of Medical Sciences, Iran.

Data Collection

The data collection method included observations and semi-structured, in-depth interviews. During the 5 months of continuous presence in the study environment on different days and shifts and using various observation methods, the researcher recorded all her findings in the form of a field diary and its summary on paper, and later on the same

day prepared them for analysis by filling in the details. In-depth, semi-structured interviews were applied to assess patient privacy requirements. The study population included recipients and providers of health services in ICUs of two selected hospitals affiliated to the medical sciences universities of Isfahan and Tehran, Iran.

In order to select a small sample with maximum diversity of key informants, the purposive sampling method was adopted and sampling continued until data saturation. The health-care recipients included all patients hospitalized in ICUs of two selected hospitals affiliated to the medical sciences universities of Isfahan and Tehran, or patients with a history of hospitalization in ICUs of those hospitals and their families. Patients who had been unconscious during hospitalization in intensive care units were often unable to fully recall the experiences and explain the details, and were reluctant to participate in the study and collaborate. In the case of patients admitted to the ward, only conscious patients could participate. The study inclusion criteria for health-care recipients included consciousness, being over 18 years of age, and having been admitted to the ICUs, and for family members, willingness to participate in the study, possessing time and place orientation, having no history of mental illness, and having the ability to communicate, express and recall information-rich experiences. The health-care providers included all professional and non-professional staff with at least 1 year of experience in the ICUs who were willing and free to participate in the study and had the required communication skills. In case of unwillingness of the participants or treatment/care-related factors prohibiting them from collaboration, they were excluded from the study. Thus, 27 participants entered the study: 12 health-care providers from different professions, 3 patients, 2 family members, and 10 individuals who had relevant experience in different roles (for instance, health-care providers with a history of hospitalization in intensive care units).

At the beginning of each interview, the researcher introduced herself and explained the purpose of the study. After gaining the trust of the participants, the researcher obtained their written informed consent to conduct and record the interviews and save their demographic characteristics, and by asking preliminary questions, provided the grounds for a better and easier interview. In order to conduct in-depth, semi-structured interviews, the researcher began with general and open-ended questions. For example, the patients were asked, "What are your needs and expectations with regard to your privacy in the ICU? Tell me about your experiences."

Then, according to the stated issues and by asking progressive and clarifying questions, the interview was guided to cover the objectives of the study. The continuation of the interview process depended to some extent on the questions that arose spontaneously and as a result of the interaction between the interviewer and the interviewee. The in-depth, semi-structured interviews were conducted individually. Initially, a preliminary interview was conducted in order for the researcher to be familiarized with possible and unforeseen issues and to formulate the arrangement of the questions and complete them. The interviews lasted 35 to 90 minutes. Due to the occurrence of the COVID-19 pandemic, the time, place and type of the interviews (face-to-face or non-face-to-face/virtual) were determined by the participants. Overall, 14 face-to-face interviews and 13 non-face-to-face interviews were conducted using the WhatsApp Messenger.

Data Analysis

In this study, the qualitative content analysis method with a conventional approach was employed to analyze the data. Initially, all recorded observations and interviews were carefully typed and analyzed using the MAXQDA software (VERBI GmbH, Berlin, Germany). Then, the key words or phrases were identified, and code-naming was performed by continuing this process. The codes were then divided into subclasses that were more abstract than the original codes based on the similarities and differences among them. In order to create the classes, the subclasses extracted in the previous stage were combined according to the existing relationships and differences and similarities.

Rigor

To ensure the validity and reliability of the study, Lincoln and Guba's criteria were taken into consideration (25). To enhance the validity of the qualitative content analysis, the researcher used the strategies of continuous observation, continuous and long-term involvement in the desired phenomenon in the field and complete immersion in data, triangulation, peer review and transparency, and review by the participants.

To ensure the credibility of the study, the researcher listened carefully to all interviews and then typed them verbatim. To verify the dependability of the study, the researcher tried to carefully record and report the research process in the course of the study to allow others to repeat the study if necessary. In order to ensure transferability, the researcher tried to provide the necessary grounds for judgment and evaluation by

others by accurately describing and explaining the study. Moreover, participants of maximum diversity in terms of demographic characteristics were invited in a targeted manner.

Ethical Considerations

The Ethics Committee of Isfahan University of Medical Sciences approved the research stages in terms of ethical considerations (IR.MUI.RESEARCH.REC.1398.424). The researcher explained the process of the observations and the research goals to participants. All participants gave verbal and written informed consent before each interview and observation, and were able to withdraw from the study at any time. The confidentiality and anonymity of the participants were preserved at all times, and their data were protected in accordance with the Iranian regulations in force.

Results

In this study, 5 months of clinical observation and 27 In-depth and semi-structured interviews were conducted with the associated beneficiaries. The participants included patients, patients' family members, nursing staff, physicians, clinical pharmacists, nutritionists and physiotherapists who met the study inclusion criteria. The majority of the participants (70%) were female, and their ages ranged between 28 and 78 years, with an average of 45.15. The minimum and maximum work experience of health-care providers in ICUs was 2 to 31 years, respectively, with an average of 11.75 (Table 1). Following the analysis of the observations and interviews, 374 primary codes, 12 subclasses and 4 classes (including physical privacy, information privacy, psychosocial privacy, and spiritual-religious privacy) were extracted (Table 2).

Table 1- Participant characteristics

Participants	Education	Work Experience in ICU, Y	Job Status	Marital Status	Age, Y	Gender	Number
Patient's family member	Master's degree	---	Bank manager	Married	52	Male	P1
Patient's Family member + Staff	PhD candidate	4	Faculty member	Married	40	Female	P2
Staff	PhD candidate	3	Nurse	Married	34	Female	P3
Staff	PhD	2	Faculty member + Nursing manager at university	Married	57	Female	P4
Patient's family member + Staff	Bachelor's degree	20	Head nurse	Married	51	Female	P5
Patient's Family member + Staff	Master's degree	25	Nurse	Single	49	Female	P6
Staff	Bachelor's degree	12	Nurse	Married	38	Female	P7
Patient's family member	High school diploma	---	House worker	Married	53	Female	P8
Staff	PhD	8	Educational supervisor in hospital	Single	42	Female	P9
Staff	Bachelor's degree	20	Nurse	Married	47	Female	P10
Patient + Staff	Master's degree in Critical Care Nursing	6	Nurse	Single	36	Female	P11
Staff	Fourth year resident of Anesthesia	8	Resident	Married	40	Female	P12
Patient's family Member + Staff	PhD in Nursing	4.5	Faculty member	Married	47	Female	P13
Patient + Staff	PhD in Nursing	10	Faculty member	Married	41	Male	P14
Patient's family Member + Staff	PhD Candidate	10	Nurse	Single	33	Female	P15
Staff	PhD in Nursing	16	Academic member	Single	59	Female	P16
Staff	PhD in Nursing	31	Faculty member	Married	60	Male	P17
Staff	Anesthesiologist	32	Faculty member	Married	61	Female	P18
Patient's family Member + Staff	Diploma	10	Nurse assistance	Married	40	Male	P19
Patient	Diploma	---	Businessman	Single	30	Male	P20
Patient + Staff	Bachelor's degree	8	Nurse	Single	29	Female	P21
Staff	PhD in Nutritional Sciences	2	Researcher	Single	31	Female	P22
Staff	Bachelor's degree	4	Physiotherapist	Single	28	Male	P23
Staff	Master's degree	11	Physiotherapist	Married	37	Female	P24
Patient's family Member + Staff	PhD in Disaster and Emergency Health	12	Faculty member	Single	41	Female	P25
Patient	HND	---	Retired teacher	Married	78	Female	P26
Patient	High school diploma	---	Retired military officer	Married	65	Female	P27

Table 2- Primary codes, subclasses and classes of qualitative content analysis

Classes	Subclasses	Primary Codes
Physical privacy	Bodily privacy	Level of patient consciousness and dependence Aggressive procedures Providing service in the presence of others Unnecessary touches Gender conformity
	Physical environment of the ward	Ward noise Facilities and equipment Common space
	Human resources	Privatization of units Absence of staff Recruitment policy Employment in other centers
Informational privacy	Confidentiality	Access to patients' records and information Patients' ignorance
	Unintentional disclosure of information	Professional and interprofessional rounds Interviews in the presence of others
	Patient's awareness of his/her condition	Knowing about the progress of the disease Knowing the diagnosis
Psychosocial privacy	Patient's psychological status	Readiness to receive services Preferences and priorities
	Interpersonal interactions	Talking to the unconscious patient Shyness Distance from family
	Cultural diversity	Refusing blood transfusion Wearing local clothes
Spiritual-religious privacy	Religious values and beliefs	Tying the green cloth to the patient Observing hijab
	Facilities for performing religious duties	Helping patients to pray Ritual bathing and ablution Private space for religious practices
	Spiritual care	Identification of spiritual needs

Class 1: Physical Privacy

The physical privacy class comprised of 3 subclasses of bodily privacy, physical environment of the ward, and human resources. The researcher's observations and the experiences of the participants showed that physical privacy was one of the most important dimensions of patient privacy in ICUs. It is, however, affected by various human and environmental factors, for instance complex and critical disease status, level of patient

consciousness and dependence, gender conformity, number and composition of human resources, environmental conditions and facilities, and application of numerous and often aggressive procedures.

With regard to patient privacy preservation, an ICU physiotherapist said, "Often when we dress a patient or change his/her position, we do not draw the folding screen. We forget, or think the patient is unconscious. Sometimes, we do not even draw the folding screen for aggressive procedures, because it interferes with our work. Well, conscious patients or the rest of the staff can see. We may be more careful when the patient is conscious, because he/she can tell us what he/she wants." [Participant No. 23]

On the subject of the need for protecting physical privacy in observation 17, the researcher wrote, "Before visiting hours, one of the ward staff pulled a barrier tape in front of the door of each room so that patients' companions could not enter the rooms. When the ward door opened, the visitors entered the main hallway of the ward and went to the room where their patient was. The folding screens were not drawn and the visitors could see all the patients. If their patient was awake, they would talk to him/her in a loud voice so that he/she could hear."

Based on the study findings, the gender composition and distribution of the employees in different shifts was such that it was not always possible to observe gender conformity. The participants cited the organization's policies on hiring, staff absenteeism and lack of appropriate replacements, the low number of male nurses, and their employment in other centers as the main reasons for non-compliance with gender conformity.

With regard to the ward environment, a 65-year-old female patient said, "All the male and female patients are hospitalized in the same hall or room on beds next to each other or opposite each other, and there are patients who are unconscious, or critically ill. Most of the time, the folding screens are not drawn, unless the staff want to clean or bathe the patient. Patients who, like me, are conscious can see others and hear what the staff say." [Participant No. 27]

Considering the findings, the privatization of some service units in the hospital was associated with a decrease in the recruitment of sufficient human resources in these units. This policy had an impact on providing high-quality services while respecting gender conformity in ICUs.

In this regard, a participant stated, "Due to the self-regulatory administration of the hospital, many

hospital wards have been privatized and few staff have been recruited. For example, we only have 1 male physiotherapist who cares for all our patients. He does not have enough time to provide adequate services to all patients. He gets tired too because many of our patients are unconscious or unable to cooperate." [Participant No. 11]

Class 2: Informational Privacy

The second class was informational privacy with 3 subclasses of confidentiality, unintentional disclosure of information, and patient's awareness of his/her conditions. Based on the study findings, employees' inattention when providing patients' information to others and speaking loudly on professional/interprofessional rounds or in interaction with patients were the most common reasons for unwanted disclosure of patients' information. The participants believed that in cases where patients had specific personal/health issues, the importance of paying attention to this dimension of privacy became more apparent.

Regarding the patient's health and personal information, which is considered a taboo, one of the participants said, "The patient does not want others to know his/her history. He/she does not like to be stigmatized. When we speak loudly on rounds, others hear us. I think guidelines in this regard must be observed, whether or not the patient is conscious." [Participant No. 13]

Based on the results, sometimes the patient's family preferred their patient to be unaware of his/her illness. In this regard, one of the participants said, "My mother was a candidate for cardiac angiography. Before the angiography, one of the nurses came to the front door of the ward and called me. He asked very quietly, "Did you know that your mother has hepatitis B?" I was shocked. I said no and started to cry. I asked the nurse not to tell my mother anything about it, as I believed her condition would get worse. I decided we could tell her later, when the time was right." [Participant No. 8]

The findings also indicated that some colleagues expected to be provided with patient records and information. Observation 56 was indicative of this: "During the visit, a young woman said to a resident standing at the door, 'I am a pharmacy student at this university and he is my uncle (pointing to her patient). Can I take a look at his file?' The resident said, 'No, you are not allowed to.' The young woman continued, 'So tell me what his problem is. They say he has a malignant tumor, is that true?' The resident answered, 'I'm not at liberty to discuss this with you. This information is only given to the patient or one of his first-degree relatives."

Class 3: Psychosocial Privacy

The third class was psychosocial privacy, consisting of the 3 subclasses of patient's psychological status, interpersonal interactions, and cultural diversity. Based on the study outcomes, failure to identify the psychosocial needs of unconscious patients or those with infectious and emerging diseases such as COVID-19 affected the provision of holistic care.

In this regard, participant 12 stated: "A very important thing in hospitals is whether the patient likes to be visited or not. I really did not want anyone to come into the room. Sometimes, patients are not in a good mood and these visits threaten their privacy. I think the conscious patient should at least be asked whether he/she wants to have a visitor and how long he/she would like the visitors to stay."

The findings showed that shyness, separation from family, readiness to receive services, and values, beliefs and preferences also affected social interactions and how psychosocial privacy was preserved. Another finding of the study was related to the diversity of ethnic groups with different subcultures in the society and the need for employees to get acquainted with them.

In this regard, one of the participants said, "We have many ethnic groups in our country, such as Kurds, Lurs, Turks and Arabs, each of whom have specific beliefs they are passionate about. We need to be familiar with these subcultures in order to be able to inspire satisfaction and peace in patients and their families." [Participant No. 25]

One thing that worried and upset conscious patients was the loud noise and fast movements of the staff during the resuscitation of patients. Observation 20 confirmed this issue: "At 10 o'clock in the morning, the patient in bed number 4 had a cardiac arrest. His nurse said loudly, "Guys, my patient had an arrest. Bring the trolley". She opened the patient's screen on one side. The screens of most of the patients were open, and the conscious patients who were awake were watching the events. The head nurse, 2 nurses and 2 doctors were talking at the patient's bedside. The equipment was moved quickly in the ward. At the same time, a conscious patient was crying, and another was murmuring prayers."

Class 4: Spiritual-Religious Privacy

The fourth class was spiritual-religious privacy, which included the 3 subclasses of religious values and beliefs, facilities for performing religious duties, and spiritual care. The study findings emphasized identification of spiritual and religious needs and pointed out the necessity of facilities for ablution and ritual bathing as well as private environments for religious practices such as

praying, the role of spiritual care specialists, the attention of officials, and staff training.

In this regard, one participant stated, "If a patient is awake and wants to pray, there's no prayer hall, and no place to perform ablution. Well, we must have tayammum soil or provide the conditions for patients to perform ablution. The patient wants to fulfill his/her religious duties even in the worst circumstances, to communicate with God so that he/she can calm down for a while." [Participant No. 16]

Regarding the provision of spiritual care in ICUs, another participant said, "In my opinion, there is no spiritual care at the bedside at all. No one expects this from health personnel because we do not have the workforce trained for the purpose. In addition, the workload is so overwhelming that even if someone wants to provide spiritual care, there won't be enough time. We have limited spiritual care to visitation by a cleric from a cultural institution every few months." [Participant No. 18]

Discussion

The present study was carried out with the aim to identify the dimensions of patient privacy in ICUs. Based on the researcher's field observations and participants' experiences, patient privacy has 4 dimensions: physical privacy, informational privacy, psychosocial privacy, and spiritual-religious privacy. In several studies, physical, informational, psychological and social dimensions have been presented for the concept of patient privacy (2, 3). In the present study, hidden layers of the patient privacy concept appeared, which could be related to the type of study, different data collection methods, the diversity of participants, and the nature and extent of the study environment.

The findings of the present study revealed that one of the most important dimensions of patient privacy is physical privacy, which is affected by human and environmental factors. An examination of the experiences of hospitalized patients regarding respect for patient privacy in Iran showed that there are 2 dimensions of bodily and physical space privacy, and observing the patient's physical privacy creates a sense of calm and control and reduces anxiety in the patient (26). The results of a study in Turkey showed that observing physical privacy is actually having respect for the patient's body. Even if the patient is not able to express his/her thoughts and feelings, his/her body is valuable and respectable (27). In a study by Nayeri and Aghajani in the emergency department, more than half of the patients felt that their physical privacy had been violated. In this study,

unnecessary touching and exposure of patients' body parts during the examination were the main causes of violation of physical privacy (11). Based on the experiences of male nurses in Australia, providing intimate care for female clients was a violation of patients' privacy and a major challenge for nurses (28).

The study findings showed that the security and confidentiality of the patient's personal/health information is very important in the health system. In many areas today, technological capabilities have surpassed the legal privacy guidelines. There have also been significant changes in the type and speed of interpersonal communication, such as e-mail, which has replaced traditional methods, but is inherently subject to interception and surveillance by others (29). A systematic review concerning the security and privacy of the electronic health record (EHR) focused on developing policies to ensure the confidentiality of patients' information and control the access of others. Accordingly, only members of the professional team who were in direct contact with the patient were given access to the patient's information (30). Based on the results of a study in Iran, patients expected information that was directly related to their health status to be used for care-treatment purposes only, and to determine the time and conditions of the provision of information to other individuals and organizations themselves (26).

In this study, the third class that emerged from the data was psychosocial privacy. The findings suggested that some factors that promoted patients' feeling of comfort and relaxation included: identification and timely fulfillment of their needs, flexible visiting conditions, and familiarity of employees with the subcultures of the society. Based on the results of a study conducted in Iran, the patient visitor policy varied according to the environmental conditions of ICUs, culture and individual needs of patients. One of the predominant strategies for visiting patients in the ICU was an observational visit that was performed remotely (through a window) without interacting with the patient. This study stated that individualized visits were the most appropriate strategy to enhance the positive effects of visiting on patients' physical and mental recovery (31). The results of a qualitative study in Canada suggested that patients had little knowledge of their rights, such as hospital privacy rules. Patients' perspective on the concept of privacy, demographic characteristics, personality and culture were factors influencing privacy concerns (32). The results of another study conducted to evaluate patients' experience of privacy in the hospital demonstrated

that all patients, especially female patients, valued their privacy greatly and expected staff to be more sensitive in this regard. This did not mean that they demanded single rooms, but rather consideration for their individual, social and cultural characteristics (33).

According to the findings of the present study, the fourth dimension of patient privacy in ICUs was spiritual-religious privacy. The findings showed that several factors were effective on patients' spiritual-religious privacy in ICUs. In numerous studies, religion and spirituality have been identified as factors affecting the understanding of patient privacy (26, 34). Based on the findings of a qualitative exploratory study in Isfahan, Iran, spiritual care had different dimensions and its provision required sufficient knowledge and expertise as well as close inter-professional cooperation. The participants in this study were patients, caregivers and health-care professionals, and mentioned empathy with patients, hope and comfort as effective factors in this regard (35).

According to a review by Timmins et al., regardless of cultural differences, patient privacy in the ICU was an important issue for patients, their families and health personnel, and nurses in particular were the guardians of this aspect of humanity. The results of this study showed that the hospital environment was often considered disrespectful, and staying in the ICU could be a dehumanizing experience for patients and their families. In this study, dignified death was identified as a policy priority of health-care organizations (36). The results of a qualitative study in Canada revealed that patients and health-care providers had various definitions of spiritual care; in this study, empathy and companionship for the patient, active listening, and setting aside time to be with the patient were considered as spiritual care (37). The findings of a study conducted to explain the experiences of ICU nurses regarding religious-spiritual care showed that adhering to religious principles and meeting the spiritual needs of hospitalized patients is a necessity. In times of sickness, religious beliefs are more important than ever in a person's life and help him/her accept the illness. Religious practices also give the patient hope for life and peace (38).

The current study has several strengths. In order to conduct this qualitative study, observation and interview methods were used. The participants in the interviews were selected from different groups of stakeholders, and the research environment included the intensive care units of two selected hospitals of Isfahan and Tehran Universities of Medical Sciences. However, the current research had some limitations. Given the small number of

participants, the findings of this study cannot be generalized to all intensive care settings in Iran or to all ICU patients/staff. The Covid-19 pandemic was an important factor in communication with professionals, patients and their families. Additionally, since this was a qualitative study, some participants might have forgotten certain aspects of their experiences or been unwilling to express their true feelings. Also, a number of patients did not want to be interviewed due to unpleasant memories of hospitalization in intensive care units.

Conclusion

Patient privacy is a very important component of patient rights in ICUs, and is a dynamic and multidimensional concept. The mentioned concept has physical, informational, psychosocial and spiritual-religious dimensions, all of which must receive sufficient attention to ensure provision of comprehensive and holistic care. Based on the results of the present study, patient privacy is influenced by various human, environmental, cultural and religious factors. Therefore, it is necessary to provide a suitable context in health-care centers by emphasizing the observance of the basic rights of patients. The findings of this study provide a clearer and more comprehensive picture of the concept of patient privacy, and can be the basis for preparation and adjustment of programs, protocols and tools for measuring patient privacy, as well as more extensive investigations in this field. This study was the result of analyzing the qualitative content of the researcher's observations as well as experiences of health-care providers and recipients in the ICUs of two selected hospitals affiliated to Isfahan University of Medical Sciences and Tehran University of Medical Sciences, which also receive patients from other cities, provinces, and remote areas. In order to clarify the details of this concept in the social and cultural context of clinical settings, other studies with different methodologies and participants in Iran and other countries are suggested.

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Conflict of Interests

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References

1. Altman I. The Environment and Social Behavior: Privacy, Personal Space, Territory, and Crowding. USA: Brooks/Cole Publishing Company; 1975.
2. Serenko N, Fan L. Patients' perceptions of privacy and their outcomes in healthcare. International Journal of Behavioural and Healthcare Research. 2013; 4(2):101-22.
3. Leino-Kilpi H, Valimaki M, Dassen T, et al. Privacy: a review of the literature. Int J Nurs Stud. 2001; 38(6): 663-71.
4. Leino-Kilpi H, Valimaki M, Dassen T, et al. Perceptions of autonomy, privacy and informed consent in the care of elderly people in five European countries: comparison and implications for the future. Nurs Ethics. 2003; 10(1): 58-66.
5. Leenen HJJ. Patients' rights. World Health. 1996; 49(5): 4-5.
6. Zahedi F, Sanjari M, Aala M, et al. The code of ethics for nurses. Iran J Public Health. 2013; 42(Supple1):1-8.
7. Parsapoor A, Bagheri A, Larijani B. Patient's rights charter in Iran. Acta Med Iran. 2014; 52(1): 24-8.
8. Moore M, Chaudhary R. Patients' attitudes towards privacy in a Nepalese public hospital: a cross-sectional survey. BMC Research Notes. 2013; 6(1): 1-5.
9. Adib-Hajbaghery M, Zehtabchi S. Evaluation of elderly patients' privacy and their satisfaction level of privacy in selected hospital in Esfahan. Medical Ethics. 2014; 8(29):97-120.
10. Erdil F, Korkmaz F. Ethical problems observed by student nurses. Nurs Ethics. 2009; 16(5): 589-98.
11. Nayeri ND, Aghajani M. Patients' privacy and satisfaction in the emergency department: a descriptive analytical study. Nurs Ethics. 2010; 17(2): 167-77.
12. Kim K, Han Y, Kim JS. Nurses' and patients' perceptions of privacy protection behaviours and information provision. Nurs Ethics. 2017; 24(5): 598-611.

13. Akyuz E, Erdemir F. Surgical patients' and nurses' opinions and expectations about privacy in care. Nurs Ethics. 2013; 20(6): 660-71.

14. Yazdanparast E, Davoudi M, Ghorbani SH, Abbaspoor M. The observance of different aspects of patient privacy: Analysis of elderly views. Medical Ethics Journal. 2016; 10(36): 73-80

15. Heidari MR, Anooshe M, Azadarmaki T, Mohammadi E. The process of patient's privacy: a grounded theory. Journal of Shahid Sadoughi University of Medical Sciences. 2011; 19(5): 644-54.

16. Moskop JC, Marco CA, Larkin GL, Geiderman JM, Derse AR. From Hippocrates to HIPAA: privacy and confidentiality in emergency medicine—part I: conceptual, moral, and legal foundations. Ann Emerg Med. 2005; 45(1): 53-9.

17. Alimohammadi N, Ziaeirad M, Irajpour A, Aminmansour B. Clinical care needs of patients with severe traumatic brain injury in the intensive care unit. Trauma Monthly. 2018; 23(2): e57883.

18. Latour JM, Albarran JW. Privacy, dignity and confidentiality: a time to reflect on practice. Nurs Crit Care. 2012; 17(3): 109-11.

19. Fernandes MID, Moreira IMPB. Ethical issues experienced by intensive care unit nurses in everyday practice. Nurs Ethics. 2013; 20(1): 72-82.

20. Baillie L. Patient dignity in an acute hospital setting: a case study. Int J Nurs Stud. 2009; 46(1): 23-37.

21. Streubert HJ, Carpenter DR. Qualitative Research in Nursing: Advancing the Humanistic Imperative, 5th ed. USA: Lippincott Williams & Wilkins; 2011.

22. Swan M. Emerging patient-driven health care models: an examination of health social networks, consumer personalized medicine and quantified self-tracking. Int J Environ Res Public Health. 2009; 6(2): 492-525.

23. Friedman LA. Patient experience of privacy while participating in group healthcare: a phenomenographic description; 2015. [cited October 2022]; Available from: https://dlib.bc.edu/islandora/object/bc-ir%3A104883/datastream/PDF/view

24. WHO. WHO handbook for guideline development, 2nd ed; 2014. [cited October 2022]; Available from: https://apps.who.int/iris/handle/10665/145714

25. Polit DF, Beck CT. Nursing Research: Generating and Assessing Evidence for Nursing Practice, 10th ed. USA: LWW; 2016.

26. Hasan Tehrani T, Seyed Bagher Maddah S, Fallahi-Khoshknab M, Ebadi A, Mohammadi Shahboulaghi F, Gillespie M. Respecting the privacy of hospitalized patients: an integrative review. Nurs Ethics. 2018: 969733018759832.

27. Ozturk H, Bahçecik N, Ozçelik KS. The development of the patient privacy scale in nursing. Nurs Ethics. 2014; 21(7): 812-28.

28. Inoue M, Chapman R, Wynaden D. Male nurses' experiences of providing intimate care for women clients. J Adv Nurs. 2006; 55(5): 559-67.

29. Ansari B. Protection of privacy in Islam, and Iran's legal system (comparative study). Private Law Studies. 2005; 66:1-54.

30. Fernandez-Aleman JL, Senor IC, Lozoya PAO, Toval A. Security and privacy in electronic health records: a systematic literature review. J Biomed Inform. 2013; 46(3): 541-62.

31. Tayebi Z, Dehghan Nayeri N, Borimnejad L. Dominant strategies of patient visiting in selected intensive care units in Iran. Shiraz E-Medical Journal. 2017;18(1): e40689.

32. Shen N, Sequeira L, Silver MP, Carter-Langford A, Strauss J, Wiljer D. Patient privacy perspectives on health information exchange in a mental health context: qualitative study. JMIR Ment Health. 2019; 6(11): e13306.

33. Whitehead J, Wheeler H. Patients' experience of privacy and dignity. Part 2: an empirical study. Br J Nurs. 2008; 17(7): 458-64.

34. Ak Bedriye, Tanrıkulu F, Gundogdu H, et al. Cultural viewpoints of nursing students on patient privacy: a qualitative study. J Relig Health. 2021; 60(1): 188-201.

35. Moghimian M, Irajpour A, Arzani H. The inter-professional dimensions of spiritual care for chronically ill patients: a qualitative study. Nursing and Midwifery Studies. 2019; 8: 34-9.

36. Timmins F, Parissopoulos S, Plakas S, Naughton MT, de Vries JM, Fouka G. Privacy at end of life in ICU: a review of the literature. J Clin Nurs. 2018; 27(11-12): 2274-84.

37. Selby D, Seccaraccia D, Huth J, Kurppa K, Fitch M. Patient versus health care provider perspectives on spirituality and spiritual care: the potential to miss the moment. Ann Palliat Med. 2017; 6(2): 143-52.

38. Araghian Mojarad F, Sanago A, Joibari L. Explanation of the viewpoints and experiences of nurses in intensive care units regarding religious-spiritual care. Journal of Qualitative Research in Health Sciences. 2020; 4(4): 426-37.