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The development of the patient privacy scale in nursing

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Abstract

Background: The developments in technology and communication channels, increasing workload, and carelessness cause problems regarding patient privacy and confidentiality in nursing services.

Research objectives: The study was conducted to develop a patient privacy scale to identify whether nurses observe or violate patient privacy at workplace.

Research design: This research was a methodological and descriptive study.

Participants and research context: Participants were 354 nurses working at private hospitals and hospitals affiliated with the Ministry of Health in Istanbul/Turkey. Data were collected with a questionnaire about the demographic characteristics of nurses and their opinions about patient privacy and with patient privacy scale.

Ethical considerations: After getting permission from the top management of hospitals, information about the study was given to nurses. Those willing to participate were informed that participation was voluntary and invited to give written consent before data collection.

Findings: The content validity index of scale was 0.91, Cronbach's alpha was 0.93, Spearman–Brown and Guttman coefficients were 0.85, the upper and lower 27% test was −29.65, and item-total correlation values ranged from 0.47 to 0.71. The scale had five subscales. In addition, 49% of the nurses stated that patient privacy was always observed in their services/units. They appraised with a mean score of 4.51 $\pm$ 0.49 for the total scale, 4.39 $\pm$ 0.61 for confidentiality of personal information and private life, 4.39 $\pm$ 0.70 for sexual privacy, 4.56 $\pm$ 0.57 for the privacy of those unable to protect themselves, 4.60 $\pm$ 0.59 for physical privacy, and 4.60 $\pm$ 0.52 for ensuring a favorable environment.

Discussion: The findings of this study were in contrast with the results of some international studies which determined the violation of the patient privacy.

Conclusion: The patient privacy scale is a valid and reliable tool to collect data on whether nurses observe or violate patient privacy, and the nurses generally reported observing or paying attention to patient privacy in all hospitals and especially private hospitals.

Keywords

Hospital, nurse, nursing, patient, privacy, scale

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Introduction

The term privacy is derived from Latin *privatus* and *privo*, meaning to dispossess, to deprive, to be deficient, and to lose something.[1] The Turkish equivalent for the word privacy is originally an Arabic word which means confidentiality, the state of being confidential or keeping personal things confidential. It refers to having a kind of personal privilege. When the Turkish equivalent is used in the context of human body, especially sexual desires, it refers to sexual privacy. In other words, it refers to privacy related to body regions which are not allowed to be seen, touched, or talked about by other people.[2] In addition, it may refer to anything specific to a person or anything a person does not want anybody to know.[2,3] Based on obscurity, inaccessibility, and privilege, the word *privacy* means that one draws a line at accessibility to his or her physical and mental integrity, such as not allowing physical contact or not explaining his or her emotions and thoughts.[4] Privacy is commonly studied under four categories: physical, psychological, social, and cognitive. *Physical privacy* deals with the degree of physical contact with others and the degree of intimacy in the contact. *Psychological privacy* refers to one's controlling processes related to cognition and mood, shaping values, and maintaining an individual identity. *Social privacy* is the management of social relationships and possession of a control over the parties, frequency, and duration of such relationships in addition to the scope of interaction. *Cognitive privacy* is one's ability to control the extent to which his or her personal information is accessed by others or disclosed by them.[3]

Once considered within the scope of personal rights in modern societies, where individuals are regarded as a unique value and entity and importance is attached to individual rights and liberties, the right to privacy has been turned into a separate and special category of rights over time and has been acknowledged in many constitutions, civil codes, and international agreements.[5] In this respect, the right to privacy and confidentiality, which is a basic human requirement as well as a key concept in nursing, is acknowledged as a fundamental personal right in any environment where humans exist. Therefore, provision of the individual's privacy and confidentiality, which holds a significant place in the field of health and nursing, should be ensured because it leads to a decrease in one's sense of shame, fragility, and vulnerability and enables him or her to establish honest and open communication with the healthcare team and to count on them.[6,7] Due to this important role of privacy in healthcare services, the concept was included in many official documents like the Bill of Human Rights in 1948, The Bill of Patient Rights by The World Doctors' Association in Bali in 1995,[4,8,9] and in European Standards of Privacy in Healthcare Services in 2007.[10,11] In Turkey, privacy was acknowledged in Articles 20 and 21 of the Patient Rights Regulations in 1998. It was assured that any medical treatment would be in respect for patients' privacy. These articles require that medical evaluation of patients' health status should be kept confidential, procedures requiring direct physical contact with patients should be performed away from others' sight, and one relative of a patient should be allowed to accompany him or her unless it creates harm, people not directly involved in treatment of patients should not be present during medical interventions, patients' personal and familial lives should not be intervened unless it is mandatory, financial sources of healthcare costs should be kept confidential, and that privacy should not be violated even in cases of death.[12] In addition, patient privacy and confidentiality are acknowledged in Law No. 20/1-3 of the Constitution of the Republic of Turkey, namely, The Privacy of Private Life and Protection of Personal Information, which is included in the section of Fundamental Rights and Duties; in articles 134, 135, 136, and 137 of the New Turkish Penal Code governing violations of privacy and personal data and related punishments; in article 7 of the Regulations on the Operation of Inpatient Treatment Institutions; and in article 38 of the Private Hospitals Regulations.[12–17]

Nursing practitioners and managers, trainers and researchers, and nursing associations have been held responsible for ensuring privacy and confidentiality by the International Council of Nurses (ICN) Code of Ethics for Nurses, adopted in 1953 and most recently revised in 2012.[18,19] In Turkey, the Turkish Nurses Association declared that privacy and confidentiality are one of the four ethical principles and

responsibilities.[20] This principle explains that physical, mental, and social privacy of individuals provided care by nurses should be protected, information about individuals and their families should be kept confidential, and their disclosure should be prevented unless they permit or unless there is a legal requirement and that individuals should be protected against any harm likely to result from disclosure of personal information.[18] However, the right to privacy is not a new notion; it is the first fundamental principle to be taught and observed in nursing practices.

Patient privacy has social and psychological aspects which involve private and personal lives of patients, physical aspects which involve keeping patients' and dead people's bodies in appropriate physical conditions, and cognitive aspects which involve privacy related to information about health status of individuals.[2,4,9,21,22] Patient privacy encompasses patients' private life and personal life space, the body of the dead and patients, and health status of individuals. The privacy of patients' private life and personal living space involves the life space one shares or wants to share with others and the life space where he or she wants to be independent, confidential, privileged, and inaccessible. It includes one's house, communication, appearance, identification, and so on.[4,9,22] The privacy of the body of the dead or patients is concerned with one's physical privilege. It involves one's physical privacy not only when he or she is alive but also when he or she is dead. Physical privacy involves respecting one's body, whether he or she is alive or dead; it also requires respect for one in a vegetative state whose life is not terminated yet and still valuable to somebody despite being deprived of the ability to express thoughts. The privacy of one's health status is concerned with the protection of reports, documents, and data related to his or her diagnosis, prognosis, and treatment as well as the confidentiality of secrets revealed or all other private information even after he or she is dead. It also refers to the privacy during case discussions, consultations, examinations, and treatment.[4,9,18]

In today's world, rapid advances in healthcare services and technology, an increase in the number of communication channels, and effects of the media have led to such serious problems with confidentiality and privacy that patients' right for privacy is violated, limits are transgressed, it becomes easier to access information about a patient through electronic channels, and it occasionally becomes an obligation to disclose information about patients for legal reasons. Therefore, it has become necessary to establish ethical, legal, and institutional regulations on the protection of privacy and confidentiality and to maintain the operability of such regulations.[4,9,23,24]

In addition, personal sovereignty is limited at hospitals or other areas where healthcare services are delivered. Interventions in personal space directly lead to corresponding interventions in personal privacy. For instance, nurses, even if obligatorily/unwillingly, penetrate into patients' private areas, know what is happening in such areas, and learn about many issues that are confidential. Studies have indicated that several privacy problems are experienced by patients. Among them are: early routines, nurses or other healthcare staff entering into patients' rooms without knocking on the door or getting permission, leaving the doors open all the time, touching or looking at private belongings during practices, sharing a room with other patients, beds that are separated by curtains, having to get undressed during practices and examinations in the presence of healthcare staff or having to disclose part of their bodies to be examined, and nurses discussing patient information in public.[4,6,7,25,26] It is important to consider privacy in terms of the fact that Turkey is a country where the majority of the population is Muslim because it is expected that only the body parts on which nursing interventions will be performed should be undressed before interventions and should be redressed as soon as the interventions are performed, privacy should be ensured in places where the interventions are carried out, curtains and covering sheets should be used when necessary, patients with the same gender should stay together if more than one patient has to be in the same room and caution about gender of patients' relatives should also be exerted, people not involved in the interventions should not be allowed into intervention rooms, information about patients' bodies and private lives should not be disclosed, and no information about patients should be revealed to or should be accessible to anyone unless patients permit.[2,3] In Turkey, it is also expected that not only patients' but also dead people's privacy should be respected. Not

only Muslim patients but also all patients presenting to health institutions are believed to deserve respect for their privacy. It is required that patients' physical, social, and cognitive privacy should not be violated and that should be respected as they like. However, patients' privacy can be violated due to the belief that there is no point in feeling uneasy or embarrassed in health institutions and that privacy can be disregarded in front of doctors and nurses. Patients whose privacy is violated may not complain about it for fear that they may be deprived of healthcare.[2] This belief is still common in the Turkish culture although there have been strong attempts to ensure patient rights at present[2,22] and patients avoid complaining about violation of their privacy since they are worried that they may be prevented from receiving healthcare they need.[2] Nurses, who are in touch with patients on a 24-h basis, have a number of significant roles to play in the problems or conflicts associated with privacy and confidentiality.[4] Furthermore, there is a need for nurses who patients/individuals can count on, who are attentive to patients' physical, social, psychological, and cognitive privacy, and who are sensitive to and respectful of patients' individual preferences. Nevertheless, in a study by Namlı, 63% of the participants reported that their right for privacy was not protected, 73% reported that other people's right for privacy was not safeguarded, and 80% reported that they could not complain about violation of their privacy. Besides, a study evaluating media coverage about patients' rights revealed that the second most frequent news was related to patients' privacy (15%).[27] In another study from Turkey, the patients in general surgery and internal diseases departments at a university hospital did not feel comfortable about fulfilling their needs in bed (43%) and constantly being seen by others (40%).[28] In a study in Israel, it was noted that nurses less frequently could keep their behavior under control, which is likely to threaten patients' privacy.[29] Therefore, we thought to conduct a study aiming to investigate patients' privacy and whether there were violations of privacy in hospitals from nurses' point of view and to develop a scale to evaluate all aspects of privacy. Reviewing the relevant literature revealed that only one subscale of a scale (composed of eight subscales) was about privacy in a study evaluating physical environment in intensive care units and included only items about arrangements of physical environment of patients' rooms to prevent people from accessing or hearing about patients' personal information.[30] In a study by Nayeri et al.[31] about adolescents' and nurses' opinions regarding respect in nursing care, only one subscale of a scale (a total of three subscales) was about privacy and included items about entering into patients' rooms, asking patients questions about their illnesses, not personal questions, covering body parts and placing patients with the same gender in the same rooms. In a study by Leino-Kilpi et al.,[32] a questionnaire with four subscales, one of which was about privacy and composed of items patients satisfying their basic needs in front of others and entering and leaving patients' rooms, was used. In a study by Street and Love,[33] semi-structured interviews were used to evaluate subscales of privacy in palliative care. In a study by Olsen et al.,[34] an instrument involving the subscales external threats to privacy, degree of importance of privacy, integrity of information management, and trust was developed to evaluate both patients' and nurses' concerns about privacy. However, the items of the scale were limited to an evaluation of whether privacy is respected while nursing practices are carried out.[34] In a study by Akyüz from Turkey, two question forms were used to reveal what patients undergoing operations and nurses providing care for them think about privacy and confidentiality of personal information during nursing practices. The form given to the nurses was a Likert scale composed of questions about confidentiality of personal information and ensuring confidentiality. However, the tool developed was only about patients having surgery, and reliability and validity of the tool was limited to expert opinions.[3] All of the abovementioned studies were directed toward either certain patient groups or certain aspects of privacy, and in some studies, privacy was evaluated under one subscale of a scale regarding other subjects.

In addition, as Akyüz[3] and Akyüz and Erdemir[35] mentioned, there has been a limited number of studies about patients' privacy among nurses in Turkey, and privacy has been evaluated under the scope of patients' rights using patients' rights scales or questionnaires or under the scope of patient satisfaction using one or two items. Therefore, development of a practical, valid, and reliable tool to evaluate patients' privacy and

confidentiality of information about physical, personal, and private lives of patients, alive, and dead, in emergency, internal diseases, and surgery clinics, intensive care units, and outpatient and diagnostic units in private, foundation, and state hospitals in Istanbul can be beneficial and can contribute to the relevant literature.

The purpose of the study

The purpose of this study is to develop a patient privacy scale (PPS), to identify whether nurses observe or violate patient privacy at their workplace, and to define the activities of nursing management for patient privacy.

Materials and methods

The design of the study

This study is a methodological one as it attempts to develop a PPS and also a descriptive one as it identifies whether nurses observe patient privacy.

Population and sample

At the time of the study, there were 48 private hospitals, 10 training and research hospitals, and 12 state hospitals affiliating with the Ministry of Health in the Asian side of Istanbul. The study was conducted on 16 private hospitals, 6 training and research hospitals, and 7 state hospitals affiliating with the Ministry of Health that agreed to participate in the study. Administrations in 32 private hospitals did not participate in the study due to commercial reasons and concerns about loss of prestige, and administrations of 4 training and research hospitals and 5 state hospitals funded by the Turkish Ministry of Health did not participate in the study due to a loss of prestige in public and other hospitals and having to account for possible results of the study. In Turkey, there are three types of hospitals in Istanbul, Turkey, that is, private/foundation, public (training and research hospitals and state hospitals), and minority hospitals. Most of the patients presenting to hospitals except for the minority hospitals are Muslim. However, all types of hospitals admit patients from all religions. Almost all the nurses working in hospitals in Turkey are citizens of Turkish Republic and Muslim. All the hospitals in the country and the nurses working in these hospitals observe universal ethical principles and obey ethical codes and principles.

The population of the study comprised 1194 nurses working at private hospitals, 2122 nurses working at training and research hospitals, and 1030 nurses working at state hospitals. The sample of the descriptive study consisted of a total of 354 volunteering nurses—97 nurses from private hospitals, 173 nurses from training and research hospitals, and 84 nurses from state hospitals—selected through stratified sampling. The validity and reliability of the PPS was tested on the same sample. However, the retest analysis was conducted on another sample of 50 nurses, selected through simple random sampling from a total of 530 nurses working at a university hospital in Istanbul. Data collection process was carried out at intervals of 2 weeks.

Ethical considerations

Written permission was taken from the Provincial Health Directorate for the training and research hospitals and state hospitals of Ministry of Health and also from the administrations of each hospital between 16 October 2012 and 26 January 2013. In addition, written permission was taken from the top management of each private hospital between 16 October 2012 and 26 December 2012. Data collection forms were filled out by volunteering nurses whose informed consent had already been obtained.

Instruments

For the descriptive study, data were collected via the PPS after its validity and reliability were tested and a questionnaire that contained 7 questions regarding the demographic characteristics of nurses and 11 questions on their opinions about patient privacy. The PPS and the questionnaire were handed out to nurses and collected individually by the researchers between October 2012 and January 2013.

Data analysis

One sample Kolmogrov–Smirnov test, histograms, and skewness and kurtosis tests were used to determine whether the data were normally distributed. The validity of the data was tested via percentage, mean, factor analysis tests (Kaiser–Meyer–Olkin (KMO) coefficient, Bartlett's test, anti-image correlation test, principal components analysis, and Promax rotation), and independent samples t-test. The reliability was assessed through percentage, Cronbach's alpha, Spearman–Brown and Guttman coefficients, Pearson correlation test, and paired-samples t-test. In addition, demographic characteristics of the nurses and their opinions about patient privacy were revealed and compared via frequency, percentage, mean, Kolmogrov–Smirnov correlation, Mann–Whitney U test, Kruskal–Wallis test, and chi-squared test.

Limitations of the study

One limitation of the study is that it revealed only opinions of the nurses working at private and public hospitals in the Asian site of Istanbul since only these hospitals gave consent. Another limitation of the study is that it included only the nurses working in intensive care units, emergency, gynecology, internal diseases, and surgery clinics, but did not include pediatric clinics and operating theaters. The final limitation of the study is that the scale is directed toward evaluation of nurses' opinions about privacy and not directed toward other health staff.

Results

Results of reliability and validity analyses of PPS

The PPS was designed in an attempt to reveal whether nurses acted in a way that would safeguard and maintain patient privacy or whether they were involved in any violations of privacy. The rating was based on a 5-point Likert scale: 5 = strongly agree, 4 = agree, 3 = could not decide, 2 = disagree, and 1 = completely disagree. The validity of the scale was studied under the headings *face validity*, *content validity*, *construct validity*, and *internal consistency* whereas its reliability was studied under the headings *internal consistency* and *time invariance*.

Face validity and content validity

In the context of surface validity, items of the draft scale were created by the researchers specializing in nursing, nursing management, and nursing ethics by making use of primary sources describing patients' privacy and its aspects,[3,4,9,12,20] and data collection tools.[1,3,9,25,31,33,36] Items of the scale were created under such components as private life and personal information (F1), body of a person, dead/unconscious or vulnerable people (F2), confidentiality of health information (F3), organization of the environment (F4), and protective practices (F5). Then two colleagues were asked to study the scale to decide whether the statements were comprehensible and to test the length of the sentences. In addition, the face validity of the scale was assessed in line with its content validity.

A total of eight people experienced and specializing in nursing principles, management in nursing, and ethics in nursing were asked to assess the content validity of the scale in March, 2012. The specialists assigned 1 to 4 points to each item (1 = not relevant, 2 = unable to assess relevance without revision, 3 = relevant but needs minor revision, 4 = very relevant). In this way, they assessed the extent to which each item was compatible with the purpose or conceptual framework and how proper, accurate, clear, and plain it was expressed. Eight items were revised at the end of the expert evaluation. No item was excluded from the scale. The 30-item scale had a content validity index (CVI) of 0.91.

Construct validity

An explanatory factor analysis was carried out to test the construct validity of the PPS. The analysis involved Principal Components Analysis and Promax Rotation Method with Kaiser Normalization.[37] Before the factor analysis, the draft scale had a KMO coefficient of 0.93. Bartlett's test yielded $\chi^2 = 5192.122$ and $p = 0.000$, and showed that values in the diagonal part of the anti-image correlation matrix ranged from 0.88 to 0.97 and the values outside the diagonal part of the matrix were nearly zero (0.00–0.46). In the pattern matrix, the items were scattered to five subscales and 1 item with a factor load of less than 0.45 (item 22) and 2 items with a factor load of less than 0.45 and loaded on two subscales (items 2 and 24) were excluded from the scale. As a result, a total of 3 items were excluded from the scale. The ultimate scale had 27 items distributed across five subscales, and the factor loads of these items ranged between 0.45 and 0.90 (Table 1). The scree plot graph for the scale indicated that the slope plateaued following the fifth point, supporting the idea that the scale had five subscales.[38] The eigenvalue of the scale was considered as 1 and the five subscales accounted for 61% of the total variance with the first sub-dimension accounting for 40%, the second one for 7%, the third one for 6%, the fourth one for 4%, and the last one for 4%. At this stage, the subscales were named. Great care was taken to make sure that the name of the subscales would be meaningful and in line with the theoretical ground.[38,39]

Furthermore, the validity of the scale was tested via item-total correlation and item-remainder correlation analyses as well as an independent t-test for the upper and lower 27% of the group. Since item-total and item-remaining correlation analyses are also reliability tests, they were discussed within the scope of reliability tests.

The t-test on the upper and lower 27% of the group yielded the following findings: $t = -29.562$ in the overall scale, $t = -27.775$ for F1, $t = -24.739$ for F2, $t = -25.278$ for F3, $t = -21.444$ for F4, and $t = -26.714$ for F5. Each value was statistically significant ($p = 0.000$).

Reliability analysis

The internal consistency of the draft scale was tested through Cronbach's alpha, Spearman–Brown and Guttman coefficients. Additionally, the researchers carried out item-total correlation and item-remaining correlation tests, two tests used for both reliability and validity. The scale was subjected to a test–retest analysis to reveal its time variance. The analyses reported that the whole scale had a Cronbach's alpha of 0.93, Spearman–Brown coefficient of 0.85, and Guttman coefficient of 0.85 (Table 2).

The results of the item-total correlation analysis—an item analysis used to test internal consistency, reliability, and validity—varied between 0.47 and 0.71, whereas the item-remainder correlation coefficients ranged from 0.43 to 0.68. All values were statistically significant ($p = 0.000$). The item-total correlation coefficients varied from 0.64 to 0.77, from 0.59 to 0.79, from 0.78 to 0.82, from 0.77 to 0.85, and from 0.76 to 0.80 for F1, F2, F3, F4, and F5, respectively. All values were statistically significant ($p = 0.000$). In addition, the item-remainder correlation coefficients ranged from 0.56 to 0.70, from 0.48 to 0.62, from 0.63 to

Table 1. The distribution of items loaded on subscales of PPS.

Item no.	Subscales of PPS	Min	Max	Mean	SD	Factor loads
	Factor 1. Confidentiality of personal information and private life	1.40	5.0	4.39	0.61	
21	A patient's private life, way of life, and personal information are not discussed in public	1.0	5.0	4.55	0.76	0.901
18	A patient's personal information is not discussed with colleagues except for the purpose of benefiting him or her and maintaining his or her care	1.0	5.0	4.16	0.95	0.780
23	Even if a patient exhibits aggressive behavior, he or she is not treated in a humiliating way, nor is his or her personal information disclosed	1.0	5.0	4.44	0.79	0.752
19	When one talks about a patient's personal information (shift changes, etc.), he or she takes certain precautions such as speaking quietly	1.0	5.0	4.42	0.78	0.737
20	A patient's private and personal information is not disclosed to his or her relatives/other third parties without his or her informed consent	1.0	5.0	4.53	0.77	0.736
29	When one has a problem with or difficulty in protecting and maintaining a patient's privacy, he or she takes action to receive support from relevant authorities	1.0	5.0	4.32	0.92	0.641
30	Information about a patient (records, identity, etc.) is not used without his or her consent even if for educational purposes	1.0	5.0	4.54	0.77	0.591
17	Great care is taken to safeguard patient information and to communicate it safely when communication devices are used	1.0	5.0	4.39	0.81	0.551
16	Necessary measures are taken to prevent access to a patient's personal information	1.0	5.0	4.27	0.89	0.511
28	Great care and necessary measures are taken to safeguard a patient's physical privacy even in case of emergency	1.0	5.0	4.29	0.86	0.494
	Factor 2. Sexual privacy	1.0	5.0	4.39	0.70	
26	Hospital attendants are allowed with a consideration given to privacy when more than one patient is hosted	1.0	5.0	4.46	0.97	0.813
6	Patients' rooms are not entered without knocking and asking for permission	1.0	5.0	4.33	0.97	0.732
7	Practices/interventions are not witnessed by anybody in the room except for one(s) approved by the patient	1.0	5.0	4.29	1.03	0.727
25	When it is necessary to host more than one patient in a room, great care is taken to make sure that they belong to the same sex and curtains are used to ensure confidentiality	1.0	5.0	4.61	0.80	0.700
27	At a patient's will, servants are assigned in accordance with the patient's gender	1.0	5.0	4.07	1.21	0.509
	Factor 3. The privacy of those unable to protect themselves	2.0	5.0	4.56	0.57	
14	Privacy/confidentiality of patients unable to protect themselves (mentally retarded, children, etc.) is ensured	1.0	5.0	4.62	0.64	0.691
13	Even if he or she is unconscious/dead, a patient's privacy and confidentiality are ensured except for legal/unavoidable circumstances	2.0	5.0	4.56	0.69	0.663
12	Necessary precautions are taken to safeguard his or her physical privacy when a patient is unconscious/dead	2.0	5.0	4.55	0.71	0.648
15	Practices are administered with a consideration given to a patient's view of privacy in reference to his or her religious beliefs, and so on	1.0	5.0	4.50	0.78	0.595
	Factor 4. Physical privacy	1.75	5.0	4.60	0.59	
9	A patient is dressed in surgery clothes or similar clothes in a way that will safeguard his or her physical privacy	1.0	5.0	4.61	0.72	0.938
10	His or her physical privacy is observed when a patient is mobilized	1.0	5.0	4.62	0.68	0.829
11	His or her physical privacy is observed when a patient is involved in excretion	1.0	5.0	4.66	0.63	0.714

(continued)

Table 1. (continued)

Item no.	Subscales of PPS	Min	Max	Mean	SD	Factor loads
8	A patient is enabled to dress and undress in a private place	1.0	5.0	4.52	0.81	0.533
	Factor 5. Ensuring a favorable environment	2.0	5.0	4.60	0.52	
2	The environment is absolutely arranged in a way that will safeguard a patient's privacy before practices are administered (e.g. entries/exists are disallowed)	1.0	5.0	4.57	0.71	0.750
3	When necessary, such materials as folding screen and covering are used to ensure privacy	2.0	5.0	4.72	0.59	0.712
4	A patient is informed about practices beforehand and the way of ensuring his or her privacy is decided upon together	1.0	5.0	4.46	0.79	0.605
5	Necessary precautions are taken during any practice to safeguard a patient's physical privacy (e.g. only opening the part of the body that will be dealt with)	2.0	5.0	4.65	0.59	0.458

PPS: patient privacy scale; SD: standard deviation.

Table 2. Subscales as determined by the factor analysis and their reliability coefficients.

Subscales	Cronbach's alpha	Split-half reliability	
		Spearman–Brown	Guttman
F1: Confidentiality of personal information and private life	0.90	0.87	0.87
F2: Sexual privacy	0.77	0.73	0.71
F3: The privacy of those unable to protect themselves	0.82	0.80	0.80
F4: Physical privacy	0.84	0.84	0.84
F5: Ensuring a favorable environment	0.77	0.78	0.78
Total	0.93	0.85	0.85

0.67, from 0.54 to 0.74, and from 0.50 to 0.62 for F1, F2, F3, F4, and F5, respectively. Similarly, all values were statistically significant ($p = 0.000$).

The Pearson Correlation analysis was conducted to determine whether there were significant correlations between the subscales. The analysis revealed that all subscales were positively correlated with one another with levels of significance varying between 0.54 and 0.67 ($p = 0.000$).

The test–retest correlation coefficients for the whole scale were $r = 0.674$, $p = 0.000$; and $t = 1.768$ and $p = 0.83$.

Subscales

The first subscale, confidentiality of personal information and private life (F1), comprised items 16, 17, 18, 19, 20, 21, 23, 28, 29, and 30. The second one, sexual privacy (F2), consisted of items 6, 7, 25, 26, and 27. The third one, privacy of those unable to protect themselves (F3), comprised items 12, 13, 14, and 15. The fourth one, physical privacy (F4), consisted of items 8, 9, 10, and 11. The last one, ensuring a favorable environment (F5), consisted of items 2, 3, 4, and 5 (Table 1). A score approximating to 135 meant that the nurse observed patient privacy or personal confidentiality, while one close to 27 referred to not observing them. When divided by the number of items for the purpose of making comparisons, these scores varied from 1 to 5 for the whole scale and subscales, and scores in the scale were graded in this way.

Table 3. The mean scores of the nurses in the patient privacy scale and its subscales.

Subscales	Private hospitals Mean ± SD	Training hospitals Mean ± SD	State hospitals Mean ± SD	Total Mean ± SD
F1: Confidentiality of personal information and private life	4.66 ± 0.39	4.22 ± 0.68	4.45 ± 0.57	4.39 ± 0.61
F2: Sexual privacy	4.70 ± 0.43	4.18 ± 0.81	4.45 ± 0.53	4.39 ± 0.70
F3: The privacy of those unable to protect themselves	4.78 ± 0.34	4.41 ± 0.64	4.61 ± 0.55	4.56 ± 0.57
F4: Physical privacy	4.85 ± 0.34	4.45 ± 0.67	4.63 ± 0.53	4.60 ± 0.59
F5: Ensuring a favorable environment	4.82 ± 0.29	4.45 ± 0.60	4.64 ± 0.45	4.60 ± 0.52
Total	4.76 ± 0.28	4.34 ± 0.54	4.56 ± 0.43	4.48 ± 0.50

SD: standard deviation.

Demographic characteristics

The nurses that participated in the study were 30.92 ± 7.42 years old and had professional experience of 9.86 ± 7.42 years. Nearly two-thirds of them (67%) were married. Less than half of the participants (44%) had a bachelor's degree. Almost half of them (49%) were working for a training and research hospital of the Ministry of Health and 69% were working as a nurse. More than half (55%) reported not attending a course or a seminar about patient rights or privacy. Although exactly half of them reported not reading the Patient Rights Regulations, 55% of them reported studying the part of the regulations linked with patient privacy.

Descriptive analysis

Nearly half of the nurses (49%) stated that patient privacy was always observed in their clinics/units and 71% of them reported watching over patient privacy during their own practices. The overwhelming majority of the participants (91%) noted that their primary concern was physical privacy of patients and 93% of them, therefore, maintained that the aspect of privacy to be protected principally was physical privacy. However, 83% of the participants reported that the privacy of patients in terms of their living space and social life was not observed or violated by nurses. As for precautions for patient privacy, 83% of the nurses reported that the nursing management had provided them with such materials and equipment as folding screens and covering to ensure patient privacy and confidentiality. In addition, 81% of them stated that they had been provided with a favorable environment including curtains, covering, and similar equipment. Another 57% noted that nurses were informed, both in a written and verbal way, about relevant rules during orientation. Similarly, 57% of the participants said that they had developed a system for accepting and assessing patient complaints. Even so, 84% of the nurses admitted that the nursing management failed to take disciplinary action against violations of privacy or confidentiality, whereas 82% of them noted that the nursing services management remained incapable of tracking and tracing violations of privacy.

All nurses rated the overall scale and the subscales, with the mean scores being 4.51 ± 0.49 for the overall scale, 4.39 ± 0.61 for confidentiality of personal information and private life, 4.39 ± 0.70 for sexual privacy, 4.56 ± 0.57 for the privacy of those unable to protect themselves, 4.60 ± 0.59 for physical privacy, and 4.60 ± 0.52 for ensuring a favorable environment (Table 3).

There were significant differences between the participants from different hospitals in their opinions about the extent to which patient privacy was observed. The differences in the overall scale and subscales were as follows: $\chi^2_{K-W} = 47.42, p = 0.000$ in the overall scale; $\chi^2_{K-W} = 32.69, p = 0.000$ in confidentiality of personal information and private life; $\chi^2_{K-W} = 34.67$, $p = 0.000$ in sexual privacy; $\chi^2_{K-W} = 24.2$,

Table 4. Medians, quartiles, and mean ranks of PPS and its subscales according to hospitals.

Hospitals		F1	F2	F3	F4	F5	Total
Private hospitals, n = 97	Median	4.8	5.0	5.0	5.0	5.0	4.85
	Percentile 25	4.5	4.6	4.75	4.75	4.75	4.65
	Percentile 75	5.0	5.0	5.0	5.0	5.0	5.0
	Mean rank	221.19	224.9	212.14	218.98	218.13	231.77
Training hospitals, n = 173	Median	4.4	4.4	4.5	4.75	4.75	4.46
	Percentile 25	3.8	3.8	4.0	4.0	4.0	4.0
	Percentile 75	4.8	5.0	5.0	5.0	5.0	4.80
	Mean rank	148.6	150.38	153.29	154.71	152.11	143.23
State hospitals, n = 84	Median	4.6	4.6	5.0	5.0	5.0	4.64
	Percentile 25	4.02	4.0	4.31	4.31	4.25	4.32
	Percentile 75	5.0	5.0	5.0	5.0	5.0	4.96
	Mean rank	186.57	178.62	187.35	176.53	182.86	185.41
	χ^2_{K-W}	32.69*	34.67*	24.2*	29.5*	29.8*	47.42*

PPS: patient privacy scale.
*$p = 0.000$.

$p = 0.000$ in the privacy of those unable to protect themselves; $\chi^2_{K-W} = 29.5, p = 0.000$ in physical privacy; and $\chi^2_{K-W} = 29.8, p = 0.000$ in ensuring a favorable environment (Table 4). The difference in the overall scale was in favor of private hospitals when compared to training and research hospitals (U = 4196.0, $p = 0.000$) and state hospitals (U = 3004.5, $p = 0.002$). In other words, patient privacy was observed at private hospitals at a better level than others. This was also the case for all the subscales ($p < 0.02$).

In addition, there was also a significant difference in mean scores for the overall scale and subscales between the nurses working at different clinics. The differences in the overall scale and subscales were as follows: $\chi^2_{K-W} = 14.09$, $p = 0.001$ in the overall scale; $\chi^2_{K-W} = 23.81$, $p = 0.000$ in sexual privacy; $\chi^2_{K-W} = 6.87$, $p = 0.032$ in the privacy of those unable to protect themselves; $\chi^2_{K-W} = 6.60$, $p = 0.037$ in physical privacy; and $\chi^2_{K-W} = 8.89, p = 0.012$ in ensuring a favorable environment. However, there was not a significant difference in the subscales of confidentiality of personal information and private life ($\chi^2_{K-W} = 4.93$, $p = 0.085$). The difference in the overall scale (U = 1980.0, $p = 0.010$), sexual privacy (U = 1675.5, $p = 0.000$), the privacy of those unable to protect themselves (U = 2386.5, $p = 0.010$), physical privacy (U = 2417.5, $p = 0.011$), and ensuring a favorable environment (U = 2283.5, $p = 0.003$) results from the fact that the nurses working in the clinics/departments took better care for privacy than those working in the intensive care units.

Discussion

It is essential for the development of nursing theory and practices that suitable and high-quality means should be designed to assess existing or new concepts.[40] Therefore, the purpose of this study is to design a valid and reliable instrument to reveal whether nurses observe or violate patient privacy, one of the most fundamental concepts of nursing.

While reliability is defined as the extent to which a scale can measure what it intends to measure in a consistent and steady manner, validity is described as the ability of a scale to measure or comply with what it intends to measure[41] or defined as the extent to which the data obtained from measurements represent what is actually intended to be measured.[39]

The validity of the scale was initially tested in terms of face validity and content validity. For face validity, the opinions were received from both the researchers themselves and their immediate colleagues.

Besides, the comprehensibility and length of the items in the scale were tested. The specialists were asked to assess not only the content validity but also the face validity of the scale.

Although some research in the literature deals with face validity and content validity under separate headings, others study face validity and consensual validity under the heading *content validity*.[40]

For content validity, it is reported that one should prepare a detailed draft covering the specific dimensions of the variable to be studied and submit it to a group of specialists that contains at least three, but ideally five, members.[39,40] In this respect, the draft scale used in this study was formed in a way that would contain five main headings, or dimensions. A total of eight specialists were asked to assess the draft scale and learned opinion was evaluated through CVI, which was developed by Waltz and Bausell.[42] Afterward, an analysis was made of the mean scores for each item as assigned by the group of specialists. The reason for this is that it is necessary to exclude or revise items with minimum fit indices.[40,42,43] Although no item was excluded from the draft scale used in this study, 8 items were revised in accordance with learned opinions. In the end, the 30-item draft scale had a CVI of 0.91, suggesting that the scale had a decent content validity because a CVI of 0.80 and above is acknowledged as an acceptable value.[43,44]

The next step was to test the construct validity of the scale. Construct validity is to determine what concepts or qualities a scale measures, or the extent to which it can describe the theoretical construct or constructs that it measures.[41,43] The construct validity of the PPS was assessed through an explanatory factor analysis, whose purpose was to identify the dimensions that accounted for the concepts.[45] In other words, factor analysis is a multivariable statistic that intends to gather a number of interdependent variables and to discover a smaller number of new variables or dimensions that are conceptually meaningful.[38,46,47] The prerequisite for a factor analysis is a certain amount of correlation between variables. In this respect, Bartlett's test is used to determine whether there is a sufficient amount of correlation between variables. If p value is lower than the level of significance (0.05), there is a sufficient amount of correlation between variables. In this study, the KMO coefficient for the 30 items was significant beyond expected limits. Similarly, Bartlett's test yielded a very significant value. A KMO value higher than 0.50 means that one can proceed to the factor analysis.[39,41,45] In addition, for the items of the draft scale, anti-image correlation values in the diagonal part of the anti-image correlation matrix ranged from 0.88 to 0.97, and the values outside the diagonal part of the matrix were nearly zero (0.00–0.46),which did not cause exclusion of any of the items from the scale.[39,41,45] All these findings indicated that it was feasible to conduct a factor analysis. The following step was rotation, after which 3 items with a low loading (less than 0.45) and overlapping loading items were excluded from the scale. While the standard factor loading for a good selection is 0.45–0.50 or higher,[45,46] it is commonly acknowledged that the minimum factor loading should be 0.30.[38,39,48] At the end, 3 items were excluded from the sample and the ultimate scale had 27 items in five subscales (Table 1). The scree plot graph and the amount of variance explained also supported the presence of five factors in the scale.[38] More than 60% of the total variance was accounted for by these five subscales, which is quite desirable in practice. According to some researchers, however, the minimum percentage is 50%.[41] On the other hand, before the rotation, the first subscale accounted for 40% of the total variance, suggesting that the scale might also have one general factor. In that case, the test is called "pure factorial," too.[40] The scale can be used either as a five-factor/subscale or one-factor.[47]

The next step was to focus on the discrepancy in the mean scores of the upper and lower 27% of the group. The purpose was to have an idea about internal consistency and item discrimination. It was observed that the items had significant item discrimination indices, or they could properly distinguish between the top and bottom groups. In other words, the items can be said to be highly valid, to properly distinguish between nurses in terms of the behavior in question, and to be able to measure the same behavior.[47,49] The significant discrepancy between the groups, which was desirable, was an indicator of the internal consistency of the test.[47]

Afterward, the internal consistency of the 27-item scale was evaluated so as to test its reliability or homogeneity. In this study, the internal consistency analysis revealed quite high Cronbach's alpha, Spearman–

Brown, and Guttman coefficients. The higher these coefficients are, the more the items are consistent with each other, and the more they test the same quality.[39,40,46,49] An internal consistency coefficient of 0.70 or higher is commonly accepted as sufficient for reliability.[39,45,47,49]

An item-total correlation analysis explains the correlation between the scores in the items and the total score in the overall scale. When the score in an item is in a positive and "sufficiently high" correlation with the score in the overall scale, that item is discriminating, or it illustrates similar behaviors, and is admitted into the scale.[47,49] Şencan argues that the item-total correlation coefficient is a test of reliability. The author reported that some researchers consider the item-total correlation test as part of item analysis, which is, however, a much broader concept.[39] The 27-item scale had an item-total correlation coefficient higher than 0.47. Certain limit values are accepted as criteria for assessment of item-total correlation coefficients. It is reported that a correlation coefficient should be 0.30 or higher and items with these coefficients can properly distinguish between individuals.[39,47,50] The item-remainder coefficient, or corrected item-total correlation, is another criterion for internal consistency, and items with a correlation coefficient of 0.40 are acknowledged to measure the factor in question.[39] In this study, the lowest item-remainder correlation coefficient was 0.43. In addition, the correlation analysis conducted to determine a possible correlation between the subscales confirmed that they were correlated with one another. All these high coefficients suggested that all the items in the scale belonged to the same structure and the 27-item scale was a reliable one.

The scale was also subjected to a test–retest analysis, which is a statistical method used to determine whether a quality measured changes over time or how consistent a scale can measure or yield similar results.[49,51] It is also used for analyzing correlations between scores in a scale administered twice at 2- to 4-week intervals.[39,47] The test–retest analysis suggested that the scale was consistent regardless of time and it was reliable in terms of coefficient of stability. Although such analysis works with a sample involving 30 or more members in practice, Sims argues that the sample must have at least 50 members.[51] Therefore, the sample used in the study contained 50 nurses.

The nurses that contributed to the development of the PPS and expressed opinions as to patient privacy had a professional experience of almost 10 years and had a bachelor's degree. Nearly half of them worked as a nurse at training and research hospitals of the Ministry of Health. In general, the nurses reported that patient privacy was observed or watched over by nurses working at all the hospitals. Even so, the nurses working at private hospitals reported that patient privacy was observed much more in terms of both the overall scale and all sub-dimensions (private life/confidentiality of personal information, sexual privacy, privacy of those unable to protect themselves, physical privacy, and ensuring a favorable environment) according to nurses at the hospitals of the Ministry of Health. This attention regarding privacy may be that private hospitals have to enhance customer satisfaction since it directly affects their profit. Another finding is that nearly half of all nurses reported that patient privacy was observed in their units/clinics and that they themselves were attentive to patient privacy. In addition, privacy was found to be better observed in the wards/clinics than in the intensive care units. This may be due to the fact that most of the patients in the wards are conscious and are allowed to be visited by their relatives and that wards are open to all health staff and are not frequently kept locked. However, in a study conducted in Iran, half of the emergency patients reported that their privacy was respected at a low or intermediate level, while another study in Australia discovered that violations of patient privacy were rather common in emergency departments and attributed this to lack of walled rooms and the length of hospital stay.[36,52] Similarly, several other studies have reported that physical privacy of patients is neglected or not protected by nurses.[6,53] In another study performed in emergency departments, it was noted that similar violations of privacy in both walled rooms and rooms separated by curtains occurred, 36% of the patients and their relatives heard what people in the adjacent rooms talked about and 1.6% of the dialogues were unprofessional and unacceptable.[54] In a study performed in five European countries, patients' privacy was most guarded in the United Kingdom and was least guarded in Greece.[21] Nevertheless, there are studies in which patients reported their satisfaction with

the respect for their privacy, supporting the findings of this study.[35,55–58] This is desirable and not surprising because protecting or observing patient privacy is among the first principles of nursing to be taught to prospective nurses.[3,6] Furthermore, the Patient Rights Regulations made an effort to safeguard patient privacy and confidentiality of personal information.[12] In fact, most of the nurses in this study reported studying the parts of the regulations related to patient privacy and confidentiality of personal information.

Views of protection of privacy are reported to be generally limited to curtains or folding screens for physical privacy.[3,25,35] This is supported by this study, which discovered that the nursing management provided nurses, in particular, with an environment favorable for physical privacy of patients including folding screens, covering, curtains, or similar equipment. However, although curtains, folding screens, or covering make patients invisible and are necessary for physical privacy, privacy requires much more than this.[3] Being an essential requirement, privacy is a principal component of one's right to autonomy. Privacy in healthcare has not only a physical aspect but also social, psychological, and cognitive aspects.[3,33,59] This is supported by the finding of this study. In fact, according to most of the nurses, it was the living space and social life of patients that were not protected or violated by nurses, suggesting that nurses were not attentive to patients' social privacy. Social privacy is a collective effort made to control individual and social skills and synergy. It requires one to consider people as individuals and parts of a group and to take their cultural characteristics into account.[1] Thus, nurses should not act in accordance with their own views of life, social values, and beliefs; instead, they should recognize the factors in patients' social and cultural life, approach patients with this in mind, and observe their privacy. In order to reduce the number of violations, we need to monitor and assess complaints by both patients and employees and to make sure that disciplinary actions are deterrent enough. As a matter of fact, most of the nurses in this study noted that the nursing management had ineffective disciplinary actions and monitoring systems against violations of privacy and confidentiality.

Conclusion

A review of the reliability and validity analyses of the scale indicated that face validity was ensured in the scale, that it had a high CVI, and that its items complied with the purpose and structure. The scale had high Cronbach's alpha, Spearman–Brown, and Guttman coefficients. In addition, the item-total and item-remainder correlation coefficients were satisfactory. Similarly, the test–retest analysis yielded consistent results. All these considered, the 27-item scale can be said to be a reliable one. The KMO test and explanatory factor analysis reported that the sample and questions were suitable for a factor analysis, whereas the anti-image correlation test showed that each item could be subjected to a factor analysis. Furthermore, Bartlett's test indicated that there were correlations between the variables. Following the rotation, the sample had 27 items in five subscales: confidentiality of personal information and private life, sexual privacy, privacy of those unable to protect themselves, physical privacy, and ensuring a favorable environment. The scale can be argued to have one single general factor, too. In addition, the discrepancy between the upper and lower 27% of the group was significant and the internal consistency analysis yielded high results. All these findings confirm that the scale is a valid one.

According to the responses to the scale and explanations of the nurses, nurses observed patient privacy in all hospitals included in the sample, particularly in private hospitals. However, privacy was found to be better observed in the wards/clinics than in the intensive care units. Attention to privacy generally focused on physical privacy, and curtains, folding screens, or similar tools were attached more importance. On the other hand, it was discovered that nurses did not pay proper attention to patients' life space or social life, components of social privacy. Furthermore, the nursing services had ineffective disciplinary actions or monitoring systems against violations or negligence of privacy.

Practical implications

The PPS is a valid and reliable tool that can make it easier to collect data on whether nurses observe or violate patient privacy. The scale could make great contributions to development of a tracking and tracing system for complaints about violations of particular aspects of patient privacy, and to discipline and improve people or the system in case of violations.

As revealed by this study, nurses should pay attention to all aspects of privacy, social privacy in particular, in addition to physical privacy. Furthermore, it is essential that systems for admitting and evaluating patient complaints should be brought into force and that a timely response should be given to such complaints. In addition, this study will hopefully contribute to the literature, which contains a limited number of studies on privacy in nursing. Furthermore, it could be a resource for further studies that would focus on determining whether members of other healthcare staff than nurses observe patient privacy or not and for those studies that would deal with patient privacy from patients' perspective. Finally, a new scale for patients can be created by making use of the scale developed in this study.

Conflict of interest

The authors declare that there is no conflict of interest.

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References

1. Leino-Kilpi H, Valimaki M, Dassen T, et al. Privacy: a review of the literature. *Int J Nurs Stud* 2001; 38: 663–671.
2. Namlı S. *Hastanelerde yaşanan mahremiyet ihlalleri raporu* [Report regarding violation of privacy experienced in hospitals]. İstanbul, Turkey: Hasta Hakları Aktivistleri Derneği, 2012.
3. Akyüz EB. *Ameliyat olan hastalarda hemşirelik bakım uygulamalarının mahremiyete/kişisel gizliliğe etkileri konusunda hastaların ve hemşirelerin görüşleri* [The opinions of patients and their nurses about the effects on privacy of the nursing care practices in patients having surgery]. Yüksek Lisans Tezi, Başkent Üniversitesi Sağlık Bilimleri Enstitüsü, Ankara, Turkey, 2008.
4. Sert G. *Tıp etiği ve mahremiyet hakkı* [Medical ethics and the right to privacy]. İstanbul, Turkey: Babil yayınları, 2008.
5. Yüksel M. Mahremiyet hakkı ve sosyo-tarihsel gelişimi [The right of privacy and its socio, historical development]. *Ank Üniv Siyasal Bilim Fak Derg* 2003; 58(1): 181–213.
6. Martin J. Notes on the tension between privacy and surveillance in nursing. *Online J Issues Nurs* 2005; 10(2): 110–130.
7. Burkhardt MA and Nathaniel AK. *Çağdaş hemşirelikte etik* [Ethics in contemporary nursing] (Çev., Ed Ş Alpar, N Bahçecik and Ü Karabacak). İstanbul, Turkey: İstanbul Medikal Sağlık ve Yayıncılık Hiz. Tic. Ltd.Şti., 2013.
8. Demirhan AE, Oğuz Y, Elçioğlu Ö, et al. *Klinik etik* [Clinical ethics]. İstanbul, Turkey: Nobel Tıp Kitapevleri, 2001.
9. Alan S and Erbay H. Tıp etiği açısından ambulans hizmetlerinde hasta mahremiyeti [Patient privacy and confidentiality in the ambulance services from the perspective of medical ethics]. *Akad Acil Tıp Derg* 2011; 10: 33–38.
10. Van der Velde ET and McLelland R. *Standards on confidentiality and privacy in healthcare among vulnerable patient populations*. Vienna: ESC, 2007.
11. Canural R, Gökalp N, Ekici G, et al. Sağlık hizmetlerinde hasta mahremiyeti: Hasta sağlık bilgilerinin paylaşımı [Patient privacy in healthcare services: sharing of health information of patient]. In: Kırılmaz H (ed.) *II. Uluslararası Sağlıkta Performans ve Kalite Kongresi Bildiriler Kitabı* [Presentations Book of II. International Congress on Quality and Performance in Healthcare], Cilt: 2. Ankara, Turkey: Turunç Matbaacılık, 2009, pp. 55–59.

12. Hasta Hakları Yönetmeliği (HHY) [Regulation on patients rights]. *Resmi Gazete*, 1 August 1998, 23420, pp. 67–73.
13. Aydın N. Hasta haklarının hukuki boyutu ve korunma yolları [Legal dimension of patient rights and their protection]. *Dumlup Üniv Sosyal Bilim Derg* 2008; 22: 1–33.
14. Türkiye Cumhuriyeti Anayasası [The constitution of the Republic of Turkey]. *Resmi Gazete*, 9 November 1982, 17863, pp. 130–182.
15. Türk Ceza Kanunu [Turkish criminal law]. *Resmi Gazete*, 12 October 2004, 25611, pp. 8965–9047.
16. Yataklı Tedavi Kurumları İşletme Yönetmeliği [Business regulation of inpatient treatment institutions]. *Resmi Gazete*, 13 January 1983, 17927, p. 2889.
17. Özel Hastaneler Yönetmeliğinde Değişiklik Yapılmasına Dair Yönetmelik [The regulation amending the regulation on private hospitals]. *Resmi Gazete*, 27 May 2012, 28305.
18. Little CB and Dorman J. Ethical aspects of healthcare. In: Kelly P (ed.) *Nursing leadership & management*. New York: Thomson Delmar Learning, 2008, pp. 517–533.
19. International Council of Nurses (ICN). *The ICN code of ethics for nurses*. Geneva: Imprimeria Fornona, 2012.
20. THD. *Hemşireler için etik ilke ve sorumluluklar* [Ethical principles and responsibilities for nurses]. Ankara, Turkey: Türk Hemşireler Derneği, 2009.
21. Schopp A, Leino-Kilpi H, Valimaki M, et al. Perceptions of privacy in the care of elderly people in five European countries. *Nurs Ethics* 2003; 10(1): 39–48.
22. Çobanoğlu N. *Kuramsal ve Uygulamalı Tıp Etiği* [Theoretical and practical medical ethics]. Ankara, Turkey: Eflatun Yayınevi, 2009.
23. Uzeltürk S. *Özel hayatın gizliliği hakkı* [The right to confidentiality of private life]. İstanbul, Turkey: Beta Yayın, 2004.
24. Duffy M. Patient privacy and company policy in online life. *Am J Nurs* 2011; 111(9): 65–69.
25. Lin YP and Tsai YF. Maintaining patients' dignity during clinical care: a qualitative interview study. *J Adv Nurs* 2010; 67(2): 340–348.
26. Petronio S and Sargent J. Disclosure predicaments arising during the course of patient care: nurses' privacy management. *Health Commun* 2011; 26: 255–266.
27. Güvercin CH. *Türkiye'deki gelişimi açısından hasta hakları kavramı* [The development of the concept of patient rights in Turkey]. Doktora tezi, Ankara Üniversitesi Sağlık Bilimleri Enstitüsü, Ankara, Turkey, 2007.
28. Tunçay GY. *Hastaların yoğun bakım ünitesinin fiziksel ortamına ilişkin görüşleri* [The Patients' views regarding the physical environment of the intensive care unit]. Yüksek lisans tezi, Hacettepe Üniversitesi Sağlık Bilimleri Fakültesi, Ankara, Turkey, 2005.
29. Tabak N and Ozon M. The Influence of nurses' attitudes, subjective norms and perceived behavioral control on maintaining patients' privacy in a hospital setting. *Nurs Ethics* 2004; 11(4): 1–2.
30. Rashid M. Developing scales to evaluate staff perception of the effects of the physical environment on patient comfort, patient safety, patient privacy, family integration with patient care, and staff working conditions in adult intensive care units. *Crit Care Nurs Q* 2007; 30(3): 271–283.
31. Nayeri ND, Karimi R and Sadeghee T. Iranian nurses and hospitalized teenagers' views of dignity. *Nursing Ethics* 2011; 18(4): 474–484.
32. 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: general overview. *Nurs Ethics* 2003; 10(1): 18–27.
33. Street AF and Love A. Dimensions of privacy in palliative care: views of health professionals. *Soc Sci Med* 2004; 60: 1795–1804.
34. Olsen DP, Dixon JK, Gery M, et al. Privacy concern of patients and nurse practitioners in primary care-an APRNET study. *J Am Acad Nurs Pract* 2005; 17(12): 527–534.
35. Akyüz EB and Erdemir F. Surgical patients and nurses' opinions and expectations about privacy in care. *Nurs Ethics* 2013; 29: 1–2.
36. Karri J, Dent AW and Farish S. Patient perceptions of privacy infringements in an emergency department. *Emerg Med Australas* 2005; 17: 117–123.

37. Hair JF, Black WC, Babin BJ, et al. *Multivariate data analysis*. Upper Saddle River, NJ: Pearson—Prentice Hall, 2010.
38. Çokluk Ö, Şekercioğlu G and Büyüköztürk Ş. *Sosyal bilimler için çok değişkenli istatistik SPSS ve LISREL uygulamaları* [SPSS and LISREL applications of multivariate statistics for social sciences]. Ankara, Turkey: Pegem Akademi, 2010.
39. Şencan H. *Sosyal ve davranışsal ölçümlerde güvenilirlik ve geçerlilik* [Reliability and validity of social and behavioural measures]. Ankara, Turkey: Seçkin Yayıncılık, 2005.
40. Erefe İ. Veri toplama araçlarının niteliği [The nature of the data collection instruments]. In: Erefe I (ed.) *Hemşirelikte Araştırma* [Research in Nursing]. Ankara, Turkey: Odak Ofset, 2002, pp. 169–188.
41. Altunışık R, Çoşkun R, Bayraktaroğlu S, et al. *Sosyal bilimlerde araştırma yöntemleri* [The research methods in social sciences]. Sakarya, Turkey: Sakarya Yayıncılık, 2010.
42. Waltz CF and Bausell RB. *Nursing research: design, statistics, and computer analysis*. Philadelphia, PA: F.A. Davis Company, 1981.
43. Fawcett AL. *Principles of assessment and outcome measurement for occupational therapists and physiotherapists: theory, skills and application*. Chichester: John Wiley & Sons Ltd, 2007.
44. Waltz CF, Strickland OL and Lenz ER. *Measurement in nursing and health research*. 3rd ed. New York: Springer, 2005.
45. Sipahi B, Yurtkoru ES and Cinko M. *Sosyal bilimlerde SPSS ile veri analizi* [Data analysis with SPSS in social sciences]. İstanbul, Turkey: Beta Basım Yayım Dağıtım A.Ş., 2008.
46. Tezbaşaran AA. *Likert tipi ölçek geliştirme kılavuzu* [The guide of scale development as Likert type]. Ankara, Turkey: Türk Psikologlar Derneği Yayınları, 1997.
47. Büyüköztürk S. *Sosyal bilimler için veri analizi el kitabı* [Handbook for data analysis in the social sciences]. Ankara, Turkey: Pegem Yayıncılık, 2009.
48. Tabachnick BG and Fidel LS. *Using multivariate statistics*. 4th ed. Boston, MA: Allyn & Bacon, Inc, 2001.
49. Erkuş A. *Psikometri* [Psychometry]. Ankara, Turkey: Türk Psikologlar Derneği Yayınları, 2003.
50. Öner N. Kültürlerarası ölçek uyarlamasında bir yönetim bilim modeli [A model of management science in adaptation of the intercultural scale]. *Psikol Derg* 1987; 6: 80–83.
51. Sims RL. *Bivariate data analysis: a practical guide*. Huntington, NY: Nova Science Publishers, Inc., 2000.
52. Nayeri ND and Aghajani M. Patients' privacy and satisfaction in the emergency department: a descriptive analytical study. *Nursing Ethics* 2010; 17(2): 167–177.
53. Woolhead G, Calnan M, Dieppe P, et al. Dignity in older age: what do older people in the United Kingdom think? *Age Ageing* 2004; 33(2): 165–170.
54. Olsen JC and Sabin BR. Emergency department patient perceptions of privacy and confidentiality. *J Emerg Med* 2003; 25(3): 329–333.
55. Ataç A, Azal Ö, Uçar M, et al. TSK sağlık kurumlarından yararlanan personelin hasta hakları ve sağlık personeli-hasta ilişkisi konusundaki memnuniyetlerinin intranet üzerinden araştırılması [Research on satisfaction of the Turkish armed forces personnel concerning patient rights and health service staff-patient relationship]. *Gülhane Tıp Derg* 2003; 45(4): 309–315.
56. Geçkil E, Dündar Ö and Şahin T. Adıyaman il merkezindeki hastaların hemşirelik bakımından memnuniyet düzeylerinin değerlendirilmesi [Evaluation of patients' satisfaction levels from nursing care at the centre of the city Adıyaman]. *Hacet Üniv Sağlık Bilim Fak Hemşire Derg* 2008; 15: 41–51.
57. Erdem R, Rahman S, Avcı L, et al. Hasta memnuniyetinin hasta bağlılığı üzerine etkisi [The effect of patient satisfaction on patient commitment]. *Erciyes Üniv İktis İdari Bilim Fak Derg* 2008; 31: 95–110.
58. Taşlıyan M and Akyüz M. Sağlık hizmetlerinde hasta memnuniyet araştırması: Malatya Devlet Hastanesi'nde bir alan çalışması [Patient satisfaction in health services research: a case study of a state hospital in Malatya]. *KMÜ Sosyal Ekon Araşt Derg* 2010; 12(19): 61–66.
59. Ahmad A and Alasad J. Predictors of patients' experiences of nursing care in medical-surgical ward. *Int J Nurs Pract* 2004; 10: 235–241.