

## Study of Healthcare Service Recipients' Perceptions Regarding Observance of Patient Privacy and Medical Confidentiality in Teaching Healthcare Centers Affiliated with the Qom University of Medical Sciences in 2015-2016, Iran

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### Abstract

**Background and Objectives:** Medical confidentiality and maintenance of patient personal privacy are considered two important moral obligations in medical ethics with a long history in medicine. To be efficient, a healthcare system needs active participation of and appropriate cooperation between the recipients and providers of healthcare services. This study was conducted to investigate healthcare service recipients' perceptions regarding observance of patient privacy and medical confidentiality in teaching healthcare centers affiliated with the Qom University of Medical Sciences.

**Methods:** In this cross-sectional (descriptive-analytical) study that was conducted in 2015-2016, 380 patients referred to teaching healthcare centers affiliated with the Qom University of Medical Sciences were enrolled according to randomized sampling. Data were gathered by a researcher-developed questionnaire according to Patient Rights Charter and analyzed by descriptive and nonparametric statistics test in SPSS 16.

**Results:** Patient privacy and confidentiality were not observed from the perspectives of 26.3% of them, partly observed from the perspectives of 50%, and fully observed from the perspectives of 23.7%. Alongside observance of patient privacy, the most important item, from the healthcare service recipients' perspectives, was observance of client orientation, which was observed from the perspectives of 24.5% of them, partly observed from the perspectives of 50.4%, and not observed from the perspectives of 25.1%.

**Conclusion:** From half of the patients' perspectives in the healthcare centers affiliated with the Qom University of Medical Sciences, patient privacy and medical confidentiality were partly observed. Therefore, the authorities can take necessary steps to set priorities and appropriately plan for improving observance of the patient privacy and medical confidentiality as well as to respect the patients' territory and rights in all areas, especially nursing, administrative, educational, and research.

**Keywords:** Client Orientation, Confidentiality, Healthcare System, Patient Privacy.

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### Introduction

Medical confidentiality and maintenance of patient personal privacy is considered one of the most important moral obligations in medical ethics with a long history in medicine. This is referred to as a sacred issue in Hippocrates Oath. In Islam, confidentiality is a very significant issue as well. However, confidentiality is not considered to be absolute and in certain conditions, physicians may have to violate confidentiality, for example when a serious danger threatens other people or the

community (1).

Observance of patient privacy refers to a sense of individual identity, value, and dignity and provision of personal space, and is one of the main purposes pursued by the healthcare system (2). Besides that, maintaining dignity is one of the primary and basic principles of human rights (United Nations, 1948). According to the World Health Report 1994, it is important to take into account human dignity to promote the patients' health. Providing informed consent, accessing healthcare

services, keeping information confidential, and maintaining privacy are very important patient rights (3).

Observance of patient privacy is an essential factor for patient-oriented, individualist, and moral caregiving. This process includes protection of the patient's and treatment team's moral integrity. Therefore, it has recently been considered a fundamental principle in medicine and has been growingly increasing in significance. Personal privacy is one of the most important human principles and rights whose observance has been regarded as a requirement in healthcare systems (4).

Privacy consists physical, information, and social aspects. The physical aspect of privacy is concerned with certain issues such as maintaining personal distance, clothing, and touching. In care practices, much emphasis is placed on maintaining patient physical privacy including appropriate clothing, preventing unnecessary exposure, and observing ethical considerations in physical examinations. Information privacy is highly associated with keeping patient personal information private, but social aspect of privacy is realized by control of the patients' environment such as using curtain between the patients' beds or providing a private room for the patients (2).

In Woogara's study, about one fourth of the admitted patients reported that their privacy was not observed during hospital stay. According to Woogara's study, personal privacy is considered a fundamental need in the Western communities. In Iran where the Islamic law pervades, personal privacy is highly important (5).

Emphasis on protection of human privacy in healthcare setting becomes significant when the patient's vulnerability easily exposes him to misconduct. Patient rights have been taken into account more seriously since responding to the patients' non-treatment expectations was referred to as one of the healthcare system purposes in the World Health Report 2000 (6). Moreover, observance of personal privacy is highly necessary to develop an effective relationship between the treatment team and the patient as well as patient satisfaction. Out of patient rights, the right to personal privacy

has been much emphasized. However, little attention is still being paid to protection of the patient personal privacy and some of the behaviors have become so commonplace that the treatment teams may not even think of the necessity of these rights (7).

Defending human rights is aimed to protect humans' respect and dignity and to ensure that their body and soul are protected in diseases especially medical emergency conditions irrespective of their race, age, gender, and economic status. Patient Privacy Charter states that patients have right to receive confidential healthcare services and keep their therapeutic regimen confidential (6).

Medical universities play a significant role in this regard. Institutionalizing moral principles and educating and informing patients of their rights are considered important constituents of healthcare service providers' responsibility.

Because the patients' viewpoints about patient privacy and keeping health information private are important to implement this pillar of Patient Privacy Charter and contribute to preventing irreparable mental and physical damage to patients and decline in efficacy of healthcare services and the rate of observance of patient privacy and medical confidentiality has not yet been adequately investigated from the healthcare service recipients' perspectives, this study was conducted to investigate healthcare service recipients' perceptions regarding observance of patient privacy and medical confidentiality in teaching healthcare centers affiliated with the Qom University of Medical Sciences.

In the present study, all patient privacy aspects were investigated in the light of the effects of personality traits on the patients' perceptions of observance of patient privacy and confidentiality and its association with observance of client orientation. In this study, client orientation is meant to patients' satisfaction with and perception of meeting their desires and expectations as well as measuring how much the patients feel that their expectations have been satisfied.

## Methods

In this cross-sectional (descriptive-analytical) study that was conducted in 2015-2016 in the teaching healthcare centers affiliated with the Qom University of Medical Sciences, 380 inpatients were selected from five healthcare centers [Hazrat Zahra (PBUH) (n:51), Hazrat Masoumeh (n:86), Izadi (n:60), Nekoui-Hedayati (n:51), and Kamkar-Arabnia (n:60)] by convenience sampling.

The questionnaire was developed by the researchers according to the five pillars of Patient Rights Charter: 1. Receiving optimal healthcare services; 2. Being provided with appropriate and adequate information; 3. Being provided with the opportunity of selecting and making decisions voluntarily; 4. Respecting the patient's privacy and keeping his/her health information confidential; and 5. Accessing an efficient system to file complaints.

For each item, observance was rated by a 5-point Likert scale consisting of 1: Strongly disagree; 2: Dissatisfied; 3: Partly satisfied; 4: Satisfied; and 5: Completely satisfied. A high score for the second section indicates high perception of observance of patient privacy and for the third section represents client's, i.e. patient's, high satisfaction.

For more convenient analysis of the data, the scores for observance of patient privacy and medical confidentiality were placed into one of these categories: <49: not adhered to; 49-60: partly adhered to; and >60: fully adhered to, and the scores for client orientation into: <159: not adhered to; 159-195: partly adhered to; and >195: fully adhered to. To investigate the questionnaire's validity, content validity was used. Because the questionnaire was researcher-developed, its content validity was investigated for the fourth pillar of Patient Rights Charter. To do this, 15 faculty members or experts were asked to review the questionnaire, and the questionnaire was used after necessary corrections were made to it.

The reliability of the questionnaire was investigated by computation of Cronbach's alpha coefficient. To achieve this purpose, the questionnaire was administered to 36 patients randomly selected from different healthcare centers. Cronbach's alpha coefficient was

estimated 0.9 for the first and second sections of the questionnaire and 0.8 for the third section.

Patients with moderate to severe pain who were unable to respond to the questions and the patients who had been hospitalized for less than 24 hours were excluded from the study. The study was conducted after the authorities of Qom University of Medical Sciences and the involved healthcare centers provided the necessary approvals. Moreover, the respondents' data were gathered after they agreed to participate in the study. Then, they filled out the questionnaires.

The principles of research ethics were meticulously observed to conduct this study, including explaining research purposes to the participants, their voluntary agreement to participate in the study, and keeping their information confidential and anonymous. The study was conducted after the authorities of the involved hospitals and wards provided informed consent to conduct this study. The data were analyzed by descriptive statistics such as mean, standard deviation (SD), frequency, and percentage as well as nonparametric statistical tests such as Pearson's correlation coefficient, Kruskal-Wallis test, and Mann-Whitney test in SPSS 16. The level of significance was considered < 0.05.

## Result

The mean (SD) age of the respondents was 37.63 (17.48) years. The mean age of the men and women was 42.92 (21.75) and 35.55 (15.03) years, respectively, (Table 1).

From the healthcare service recipients' perspectives, the treatment team's access to patient information and medical records content (86.9% and 84.80%, respectively) were the most important issues.

Observance of client orientation and perception of observance of patient privacy were positively and significantly correlated ( $r=0.4$ ,  $p<0.001$ ).

The mean score of healthcare service recipients' perceptions of observance of patient privacy and medical confidentiality was 55.84 (10.1) in women and 54.63 (8.83) in men with no significant difference ( $P=0.2$ ).

Table 1. Frequency distribution of demographic characteristics in patients referred to teaching healthcare centers affiliated with the Qom University of Medical Sciences

Characteristics	Variable stratification	N	%
Gender	Male	107	28.2
	Female	273	71.8
Education	Illiterate	62	16.3
	Able to read and write	50	13.2
	Under high school diploma	114	30
	High school diploma	81	21.3
	Academic	73	19.2
Marital status	Single	44	11.6
	Married	322	84.7
	Miscellaneous	14	3.7
Nationality	Iranian	336	88.4
	Non-Iranian	44	11.6
Occupation	Civil servant	65	17.1
	Self-employed	42	11.1
	Laborer	15	3.9
	Retired	8	2.1
	Housewife	215	56.6
	Unemployed	19	5
	Student	16	4.2
Place of residence	Native	324	85.3
	Non-native	56	14.7
Patients' perception of observance of client orientation	Not observed (< 159)	95	25.1
	Partly observed (159-195)	192	50.4
	Observed (> 195)	93	24.5
Patients' perception of observance of privacy and confidentiality	Not observed (< 49)	100	26.3
	Partly observed (49-60)	190	50
	Observed (> 60)	90	23.7

According to ANOVA results, education level and healthcare service recipients' perceptions of observance of patient privacy and medical confidentiality were significantly associated. The highest and lowest perception rate of observance of patient privacy was attained by respondents with education levels under high school diploma and academic education, respectively ( $P=0.01$ ) (Table 2).

Table 2. Association between education level and healthcare service recipients' perceptions of observance of patient privacy

Education	Perception of observance of patient privacy and confidentiality		
	Mean	SD	P value
Illiterate	56.08	0.9	1.01
Able to read and write	54.44	1.4	
Under high school diploma	58.37	0.8	
Diploma	54.09	1.0	
Academic	52.19	1.4	

Kruskal-Wallis test demonstrated a significant association between hospitalization wards and

healthcare service recipients' perceptions of observance of patient privacy and medical confidentiality. The highest and lowest perception of observance of patient privacy was obtained for Post.CCU and NICUs, respectively ( $P<0.1$ ).

Age was significantly associated with perception of observance of patient privacy ( $P=0.8$ ). The mean scores of perception of observance of patient privacy in different healthcare centers were significantly different ( $P=0.00$ ) with the lowest mean score (50.46) in Hazrat Masoumeh (PBUH) Healthcare Center. Moreover, observance of patient privacy and medical confidentiality was not significantly associated with some variables such as marital status ( $P=0.4$ ), gender ( $P=0.2$ ), age ( $P=0.5$ ), length of hospital stay ( $P=0.7$ ), occupation ( $P=0.7$ ), nationality ( $P=0.4$ ), place of residence ( $P=0.4$ ), and referral frequency ( $P=0.07$ ).

## Discussion

The present study demonstrated that from half of the patients' perspectives, patient privacy and medical confidentiality were partly observed. Therefore, the patients' viewpoints about observance of privacy and confidentiality can represent the current status and be helpful in the future.

Ghasemi and Behnam reported that the rights and privacy of 57.7% of the patients were often taken into account and respected by healthcare staff. In addition, Aghajani and Dehghannayeri found that 50.6% of the patients reported that their privacy was respected moderately. These findings are consistent with the present study; however, Malekshahi's study reported that the privacy of only 25% of the patients was respected. Moreover, Mossadegh Rad and Esna Ashari found that the treatment team was reported to respect the privacy of 75% of the patients poorly, of 20% very poorly, and of 5% moderately. Karro et al.'s study reported that the privacy violation rate in the emergency ward to be 33% and the likelihood of privacy violation 35%. Barlas et al. reported that 85.2% of the patients believed that their privacy was violated completely or to a large extent by the treatment team (8). This inconsistency in the findings on overall rate of privacy observance

can represent differences in the patients' cultures and perceptions among different cities and countries where the studies have been conducted as well as in the physical structures of the studied wards. Another explanation for the inconsistent findings can be different frameworks of nursing education and lack of emphasis on this issue in university curricula (2,4,7,8-10).

In the present study, from the perspectives of 23.7% of the healthcare service recipients, patient privacy and confidentiality were observed.

Consistent with the present study's findings, Baillie found that the patients' dignity in a hospital in London was inevitably exposed to being degraded, and that the staff's behaviors and the hospital's environment affected the patients' perception of dignity but the staff's behaviors and development of privacy played more important role in treatment-centered relationships. The staff should communicate with the patients in a way that the patients feel comfortable. Torabizadeh et al.'s review article demonstrated that the patients' privacy and dignity were not observed satisfactorily and nursing and medical staff lacked sufficient perception of the patients' privacy. These results represent the difference in the observance rate of the patients' dignity and the patients' perceptions in different regions due to having different backgrounds (11,12).

In this study, the highest perception (86.9%), from the healthcare service recipients' perspectives, was obtained for information privacy, i.e. the treatment team's access to the patients' information and medical records data. Yaghmaei et al. reported that 64.9% of the patients were sure that their information was kept private (13). Karro et al. reported that 12% of the studied patients thought that other patients could hear their conversation with the healthcare staff. A very large proportion of the patients tend to be provided with the opportunity to give consent before their health information is provided for others (4).

Regarding the relationship between observance of privacy and client orientation, these two variables were found to be positively, relatively strongly, and significantly

correlated. More clearly, the more sure about observance of their privacy the patients are, the higher levels of satisfaction they have. Consistently, Lin and Lin's study reported a significant association between the patients' general perception of observance of privacy and the clients' satisfaction (14).

Hudak and Wright's study of the effective factors on patient satisfaction demonstrates that because patient satisfaction is considered to be one of the indexes of healthcare quality and may be affected by various factors, if the treatment team's observance of patient privacy is positively correlated with patient satisfaction, then it can be strongly argued that observance of patient privacy can play a significant role in enhancing healthcare quality (15).

According to the findings, the patients' demographic characteristics and perspectives on the privacy observance rate were not significantly associated, which is consistent with Jafarimanesh and Ranjbaran's study (7). Only education level was statistically significantly associated with the perspectives such that the patients with lower education levels of high school diploma who were able to read and write obtained the highest score, i.e. they believed their privacy was observed much better than others did. This finding is consistent with Jahanpoor Fand and Rasti's study (16), and may be due to these people's lack of knowledge about patient rights. The patients' education level can influence the levels of individual expectations and aspirations as well as the rate of meeting them from their perspectives (17).

Out of the studied departments, the post ICU department was found to obtain the highest score, which can be related to the type of disease and more attention to the patients and higher importance of the staff working in these departments (1). Despite the utilized facilities and technologies, patient privacy remains to be observed completely in these departments. To resolve these problems, the nurses and physicians who have the experience of working in these departments can be hired so that the technologies and equipment are used in a way

that not only privacy is not threatened but also it is observed more conveniently (17).

Regarding the significance of patient privacy in the world, certain strategies compatible with cultural and Islamic background must be developed to observe patient privacy and confidentiality in the healthcare system as much as possible. However, to achieve this purpose, issuing declaration and statement alone does not suffice and necessary training should be delivered to healthcare service providers and medical and paramedical students such that basic steps may be taken to promote active participation in the healthcare system. Therefore, it is necessary for healthcare administrators to deliver appropriate educative programs regarding observance of patient privacy and rights to the staff and incorporate continuous evaluations.

The patients' mental and physical status in responding to the items might affect the accuracy of their responses, which could not be controlled for. Besides that, it is necessary to consider that the environmental and physical factors play a critical role in patient privacy and therefore may influence the findings.

## Conclusion

From half of the patients' perspectives, patient privacy and medical confidentiality were partly observed. The findings generally reflect weakness of the healthcare system to keep the patients' information private. Therefore, the authorities can take necessary steps to set priorities and appropriately plan for improving observance of patient privacy and medical confidentiality as well as to respect the patients' territory and rights in all areas, especially nursing, administrative, educational, and research. Regarding these findings, further studies should be conducted to investigate the facilitators of and barriers to the treatment teams' observance of patient privacy.

In the light of the present study's findings, it is necessary to incorporate courses of patient rights and privacy into medical and paramedical curricula as well as in-service training for healthcare staff. In order to improve the quality of healthcare services,

further studies should be conducted to investigate patient rights and privacy.

## Conflict of interest

The authors declare no conflict of interest.

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