

## Health Professionals' Knowledge And Attitude Towards Patient Confidentiality And Associated Factors

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### Abstract

*Background: Maintaining patients' confidentiality is a crucial ethical and legal obligation for healthcare providers and a fundamental aspect of delivering high-quality care. This study seeks to evaluate the understanding, perspectives, and influencing factors among healthcare professionals regarding patients' confidentiality, particularly in a setting with limited resources.*

*Methods: A cross-sectional study was conducted among 423 healthcare professionals based in institutions. Stratified sampling was utilized for participant selection, and data was gathered through a structured self-administered questionnaire. Data entry was performed using Epi-data version 4.6 and analyzed using SPSS version 25. Both bi-variable and multivariable binary<sup>1</sup> logistic regression analyses were employed to assess the relationship between dependent and independent variables, with odds ratios, 95% confidence intervals, and P-values calculated to determine strength and statistical significance.*

*Results: Among 410 participants, approximately 59.8% [95% CI (54.8–68.8%)] demonstrated good knowledge, and 49.5% [95% CI (44.5–54.5%)] exhibited a favorable attitude towards patient confidentiality. Factors significantly associated with healthcare professionals' knowledge of patient confidentiality included being male (AOR = 1.63, 95% CI [1.03–2.59]), receiving training in medical ethics (AOR = 1.73, 95% CI = [1.11–2.70]), and encountering ethical dilemmas (AOR = 3.07, 95% CI [1.07–8.79]). Similarly, training in medical ethics (AOR = 2.30, 95% CI [1.42–3.72]), direct patient contact (AOR = 3.06, 95% CI [1.12–8.34]), frequent patient visits (AOR = 4.38, 95% CI [2.46–7.80]), and ethical dilemmas (AOR = 3.56, 95% CI [1.23–10.26]) were significant factors associated with healthcare professionals' attitudes towards patient confidentiality.*

*Conclusion: The study indicates that healthcare professionals exhibit a modest attitude but relatively good knowledge regarding patient confidentiality. Encouraging ongoing medical*

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*ethics training for healthcare workers, both pre-employment and during their tenure, could enhance their understanding and attitudes towards patient confidentiality.*

## **Introduction**

Confidentiality refers to the restriction of access to personal information from unauthorized persons and processes at authorized times and in an authorized manner. When we say patients have the right to confidentiality, it refers to keeping privileged communication secret and cannot be disclosed without the patient's authorization. (de Sousa Costa et al., 2020)

Health professionals have a legal obligation to handle patients' information privately and securely. As a result, patients and professionals develop trust and a positive relationship. If such highly sensitive data is improperly disclosed, it could threaten patients' safety. Hence confidentiality needs to be respected to protect patients' well-being and maintain society's trust in the physician–patient relationship. The issue of confidentiality has been recognized as a global concern. As a result, several internationally agreed on principles and guidelines for maintaining the sanctity of patients' private lives during treatment. This law, known as Data Protection Act, was enacted in 1998 and was last revised in 2018. The Data Protection Act was created to provide protection and set guidelines for handling personal data. There is no comprehensive data protection law that covers health data protection. This law mandates health providers to keep patients' health information confidential. Furthermore, only a few research have looked into health professionals' awareness of ethical rules and data security and sharing laws . (Štarchoň & Pikulík, 2019)

Confidentiality is the basis of the legal elements of health records and an ethical cornerstone of excellent care. More importantly, the quality of information shared with healthcare experts is determined by their capacity to keep it private. Otherwise, the patient may withhold important information, lowering the quality of care offered.

Although information sharing is essential in an interdisciplinary health team, each professional should limit information disclosure to an unauthorized health professional to plan and carry out procedures in the patient's best interests. The exchange of patient medical records and data with an unauthorized person continues to be a common occurrence in a variety of clinical settings. Breaches of confidentiality in clinical practice due to negligence, indiscretion, or sometimes even maliciously jeopardize a duty inherent in the physician–patient relationship. Breaches of confidentiality and sharing data with unauthorized parties may have the potential to harm the patients' health. Health care quality declines due to a loss of confidence in the professional–patient relationship. Patients become hesitant to seek care and attend follow-up appointments due to their mistrust of health providers. (Drogin, 2019)

Until recently, the standard curricula of recent medical schools did not include a medical ethics course. Despite the existence of a medical ethics course, patients' concern about maintaining their confidentiality has grown, and reports of unethical behavior by health professionals on patient confidentiality are familiar. (Yilma, 2020)

There are so many problems regarding patient medical record confidentiality and data sharing. The loss of patient medical records due to handling by unauthorized staff without consent and transporting to another department is a big issue . That can affect patients' quality of care by consuming time, harming patient satisfaction, causing improper diagnosis, and making it difficult to get the previous history. (Abuhammad et al., 2020)

The significance of this research is that it addresses the rapidly growing trend of patient data sharing and confidentiality among health practitioners in developing countries taking as an example. There is limited evidence regarding health professional knowledge and attitude related to patients' confidentiality in resources limited settings. Therefore, this study will fill evidence gaps on health professional knowledge, attitude, and associated factors related to patient confidentiality. This study will provide policymakers with up-to-date information on health professionals' knowledge and attitude towards patient confidentiality. Aside from that, the outcomes of this study may aid legislators in developing plans to improve health professionals' knowledge and attitude toward patient confidentiality. (Beltran-Aroca et al., 2019)

## **Method**

### **Study design and setting**

An Institutional based cross-sectional study was conducted among health professionals .

The study included all healthcare professionals , excluding those with less than six months of experience, absent for various reasons, or on yearly leave.

### **Sample size determination and sampling procedure**

The sample size of 423 was calculated using the single population proportion formula, considering a 10% non-response rate. Stratified sampling proportional to the number of healthcare providers in each department was employed, followed by a computer-generated simple random sampling technique to select study subjects.

### **Study variables**

The primary outcome variables were knowledge and attitude towards patient confidentiality, assessed using validated questionnaires based on a review of related literature. Socio-demographic and work-related characteristics served as independent variables.

### **Operational definitions**

Knowledge about patients' confidentiality was assessed using seven items with "yes" and "no" responses, categorized as 'good' or 'poor' based on a calculated mean score. Attitudes were evaluated using 14 Likert scale questions, with scores categorized as 'favorable' or 'unfavorable' based on the mean value.

### **Data collection tool and quality control**

A pre-tested, self-administered questionnaire in English was used, with trained data collectors ensuring clarity and consistency. The instrument's validity and reliability were confirmed through a pre-test, achieving high reliability (Cronbach alpha > 0.7).

### **Data processing and analysis**

Data were entered using Epi Data version 4.6 and analyzed using SPSS version 25. Descriptive statistics summarized socio-demographic variables and participants' knowledge and attitudes. Bi-variable and multivariable binary logistic regression analyses assessed associations between variables. Variables with  $p < 0.2$  in bi-variable analysis were included in multivariable regression. Odds ratios with 95% confidence intervals were calculated, with significance set at  $p < 0.05$ . Assumptions of multi-collinearity were checked before regression analysis, confirming no multi-collinearity issues.

## **Results**

### **Description of participant's socio-demographic and work-related characteristics**

Out of 423 participants, 410 responded to the questionnaire, yielding a response rate of 96.9%. The mean age of participants was 28.12 (SD  $\pm$  5.16) years, ranging from 21 to 50 years. The majority of participants were male (66.1%). Regarding education, over half (55.6%) had a BSc degree. Most participants (79.8%) had less than five years of work experience, and the largest professional group was nurses (47.8%). Nearly all (95.4%) had direct patient contact, with around 39% seeing over 40 patients daily. A small proportion (5.9%) faced more than two ethical dilemmas daily.

### **Health professionals' knowledge about patients' confidentiality**

Among participants, 59.8% [95% CI (54.9–64.5%)] demonstrated good knowledge about confidentiality, with a mean score of 3.91 (SD  $\pm$  1.39) out of 7 points. Most respondents acknowledged that access to medical records should be governed by law (87.3%) and considered non-medical information confidential (44.6%). Additionally, 71% were aware that third-party insurance companies could not access patient examination results without consent, but only 28% knew that policies could not freely access medical records.

### **Health professionals' attitude towards patients' confidentiality**

About 49.5% [95% CI (44.6–54.3%)] of participants had a favorable attitude towards confidentiality, with a mean score of 42.8 (SD  $\pm$  8.90) out of 70 points. A significant proportion (30.7%) agreed that confidentiality affects patients, and 72.9% reported not allowing non-medical personnel into examination rooms during patient discussions. Regarding data storage, 53.7% used lock systems and 39.5% used computers.

### **Factors associated with health professionals' knowledge about patients' confidentiality**

Bi-variable and multivariable logistic regression analyses revealed that sex, training on medical ethics, and encountering ethical dilemmas were significantly associated with good knowledge towards patient confidentiality. Males were 1.63 times more likely to have good knowledge than females, those with medical ethics training were 1.73 times more likely, and those facing more ethical dilemmas were 3.07 times more likely.

### **Factors associated with health professionals' attitude towards patients' confidentiality**

Training on medical ethics, direct patient contact, patient visit numbers, and ethical dilemma encounters were significant factors in the attitude towards patient confidentiality. Participants with medical ethics training were 2.30 times more likely to have a favorable attitude. Those with direct patient contact were 3.06 times more likely, those seeing more patients daily were 4.38 times more likely (more than 40 patients), and 1.96 times more likely (30-40 patients), and those facing more ethical dilemmas were 3.56 times more likely to have a favorable attitude.

## **Discussion**

This study delves into health professionals' knowledge and attitudes regarding patient confidentiality and identifies associated factors.

The study found that approximately 59.8% of respondents possessed good knowledge about patient confidentiality. This aligns with findings from studies in Iran but falls slightly below

figures reported in studies from Spain and Tehran University Medical School. This variance could stem from differences in healthcare systems, with professionals in high-resource settings possibly having more exposure to patient privacy concepts. Moreover, the relatively young and less experienced profile of participants in this study may have influenced the knowledge levels compared to more seasoned professionals in other studies. (Karasneh et al., 2021)

Regarding attitudes, 49.5% of participants exhibited a favorable stance on patient confidentiality. This is consistent with a study in northern Jordan but lower than findings in Turkey. Variations in awareness and training across different healthcare contexts may contribute to these differences in attitude levels. (Hosseini-Ghavam-Abad et al., 2019)

The study identified several factors associated with health professionals' knowledge and attitudes. Males tended to have better knowledge about patient confidentiality, a trend seen in studies from other regions as well. This could be attributed to greater access to information and technology among males. Additionally, training in medical ethics and encountering ethical dilemmas were predictive of both knowledge and attitude. Regular medical ethics training emerged as a crucial strategy to uphold confidentiality standards, as supported by literature from Barbados and Vietnam. (Drogin, 2019)

Direct patient contact and higher patient visit numbers were linked to a favorable attitude towards patient confidentiality. This suggests that hands-on experience and exposure to patient care dynamics contribute to a deeper understanding and appreciation of confidentiality protocols among healthcare professionals. (Adeleke et al., 2011)

In conclusion, while there is room for improvement in health professionals' attitudes towards patient confidentiality, the study highlights the importance of ongoing medical ethics training and practical experience in shaping positive attitudes and enhancing knowledge in this critical aspect of healthcare practice. Regular training initiatives and a supportive ethical framework can significantly contribute to maintaining high standards of patient confidentiality. (Blightman et al., 2014)

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