

CONFIDENTIALITY AND PATIENT PRIVACY AWARENESS AMONG NURSING STUDENTS ETHICAL DILEMMAS FACED BY NURSING STUDENTS DURING CLINICAL PRACTICE

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ABSTRACT

Background: Organizations like the International Council of Nurses emphasize that patient privacy and confidentiality are essential ethical standards in nursing practice. During their clinical training, nursing students are routinely exposed to real-life scenarios where these principles must be applied, which frequently results in moral conundrums. The aim of the study was to assess the level of awareness regarding confidentiality and patient privacy among nursing students and to explore the ethical dilemmas they face during clinical practice.

Methods: A purposive sample technique was used to perform a quantitative cross-sectional research of 195 nursing students at chosen institutes in Pakistan. A systematic questionnaire comprising an ethical dilemmas scale and a confidentiality awareness measure was used to gather data. IBM SPSS Statistics version 25 was used to analyze the data. The significance level was established at $p < 0.05$, and both descriptive and inferential statistics were used.

Results: The results showed that 11.3% of students had low understanding of patient privacy and confidentiality, 46.7% had moderate awareness, and 42.1% had high awareness. 45.1% reported moderate, 39.0% high, and 15.9% low levels of ethical difficulties. There was a statistically significant correlation ($p = 0.032$) between ethical dilemmas and consciousness. Higher awareness was linked to somewhat fewer ethical conundrums, according to a modest negative association ($r = -0.28$).

Conclusion: Nursing students encountered significant ethical conundrums during clinical practice, despite their moderate to high awareness of patient privacy and confidentiality. To close the gap between knowledge and practice, it is crucial to improve clinical supervision, strengthen ethics teaching, and foster supportive learning settings.

Keyword: Confidentiality, Patient Privacy, Ethical Dilemmas, Nursing Students, Ethical Awareness

Introduction

Confidentiality and patient privacy are essential in nursing, rooted in the International Council of Nurses Code of Ethics. Nurses must safeguard patient information and respect dignity. Patient confidentiality involves protecting personal

health information from unauthorized access, while patient privacy pertains to honoring an individual's autonomy over personal details and bodily exposure [1]. Modern healthcare's confidentiality challenges arise from technological advancements like electronic

health records [2]. Nursing students must be equipped to address these issues during clinical training, where they apply ethical theories to real-life situations. However, evidence indicates that many lack the necessary awareness and preparedness to uphold confidentiality standards effectively [3]. A significant challenge is the disconnect between theoretical instruction in ethics and its practical application in dynamic clinical environments, leading to unforeseen difficulties [4]. Ethical dilemmas in nursing arise as students navigate patient confidentiality versus obligations to healthcare teams and family inquiries, leading to confusion and moral distress [5]. This distress occurs when students recognize the right action but cannot take it due to external pressures. Hierarchical healthcare structures further discourage questioning unethical practices, compromising ethical decision-making and patient privacy advocacy [6]. Cultural and social factors affect privacy perceptions, notably in Pakistan, where family involvement complicates confidentiality [7]. Studies indicate nursing students may unknowingly breach confidentiality, often due to unawareness, insufficient supervision, or social media misuse, particularly on Facebook. Additionally, the rise of mobile devices in clinical settings escalates privacy risks, as unauthorized sharing of patient information can result in ethical and legal issues [8]. Educational institutions are vital for equipping students to address ethical challenges through ethics training and simulation-based learning, enhancing competence in confidentiality [9]. However, gaps remain in understanding ethical principles, necessitating continuous curriculum evaluation. Clinical instructors and mentors significantly influence ethical behavior, with role modeling impacting adherence to ethical standards [10]. Informed consent is crucial for nursing students, emphasizing the need to obtain patient permission before sharing information. Handling sensitive data like HIV status poses ethical challenges, as breaches can cause stigma [11]. Students may grapple with reporting unethical behavior by healthcare professionals due to fear of repercussions. Although legal frameworks exist to guide confidentiality, awareness of these regulations among students is often inadequate [12]. Ethical decision-making models support systematic

resolution of dilemmas, fostering critical thinking and ethical principle consideration. Incorporating ethical competence in nursing education enhances accountability and trustworthiness. Reflective practice is vital for ethical awareness, enabling students to analyze experiences. Furthermore, effective communication is crucial for maintaining confidentiality in patient information sharing [13].

Global organizations emphasize ethical standards in healthcare, but developing countries encounter resource limitations that impact confidentiality practices. Confidentiality and patient privacy are essential ethical obligations in nursing, underscored by bodies like the International Council of Nurses and WHO [14]. It is essential for nursing students to understand these principles to safeguard patient rights and maintain trust. The research identifies a gap between theoretical knowledge and real-world application, as students frequently navigate complex ethical scenarios. Breaches can lead to legal issues and eroded trust. With challenges from digital technologies and culture, particularly in Pakistan, educational interventions must consider local norms. The study also aims to assess nursing students' awareness of confidentiality and explore ethical dilemmas faced in clinical settings.

METHODOLOGY

A cross-sectional descriptive study design using quantitative methods was utilized to evaluate awareness of confidentiality and patient privacy, as well as to examine ethical dilemmas encountered by nursing students during their clinical placements.

The research took place in designated nursing colleges of swat and associated teaching hospitals in Pakistan, where students were involved in hands-on clinical training.

The target population included undergraduate nursing students enrolled in degree programs with clinical experience. The study included a total of 195 students in nursing. The sample size was established considering practicality and prior comparable research. A non-probability purposive sampling method was utilized to select participants who satisfied the inclusion criteria. The Inclusion Criteria was Nursing students currently enrolled in clinical training,

Students who had completed at least one clinical rotation, and student willing to participate in the study. Student having enrolled in first-year students without clinical exposure, Students absent during data collection, and those unwilling to participate excluded from the study. Data were collected using a structured, self-administered questionnaire consisting of three sections:

Section I: Demographic Characteristics: This section included variables such as age, gender, academic year, and clinical experience.

Section II: Confidentiality and Patient Privacy Awareness Scale: This section was adapted from established ethical competency frameworks, including guidelines from the International Council of Nurses Code of Ethics and previous validated tools assessing confidentiality awareness. the total Number of items: 20 having 5-point Likert scale from (1 = Strongly Disagree to 5 = Strongly Agree), and total range a Score range: 20–100. The Cut-off Values as, High awareness: 75–100, Moderate awareness: 50–74, and Low awareness: <50 [15].

Section III: Ethical Dilemmas Scale: Ethical dilemmas were measured using an adapted version of the Ethical Dilemmas in Nursing Scale, originally developed by Corley MC (Moral Distress Scale) and later modified for student populations. The Number of items: 18, using 5-point Likert scale from (1 = Never to 5 = Very Frequently), and total Score range: 18–90. The Cut-off Values a High level of ethical dilemmas: 67–90, Moderate level: 45–66, and Low level: <45 [16].

Higher scores indicate more frequent exposure to ethical dilemmas and greater moral distress.

Expert review by senior nursing faculty and clinical instructors guaranteed content validity. Reliability testing was performed utilizing Cronbach's alpha: Confidentiality Awareness Scale: $\alpha = 0.82$, Ethical Dilemmas Scale: $\alpha = 0.85$. These values demonstrate strong internal consistency.

Data were gathered over a span of 4–6 weeks. Once institutional approval was secured, questionnaires were handed out to students during class sessions. The study's purpose was clarified, and participants provided informed consent before joining.

Approval for ethical considerations was secured from the institutional review board. Participants were guaranteed confidentiality, anonymity, and the choice to participate voluntarily. No personal identifiers were documented.

Data were input and examined using IBM SPSS Statistics version 25. Descriptive statistics (frequency, percentage, mean, and standard deviation) were applied. Chi-square tests and correlation analyses were utilized as inferential statistics, with the significance threshold established at $p < 0.05$

RESULTS AND COMPLETE DATA ANALYSIS

1. Demographic Characteristics of Participants

The majority of participants were aged **21–23 years (50.3%)**, indicating a typical undergraduate cohort. Female students predominated (**72.3%**), reflecting common nursing demographics. Most students had **1–2 years of clinical exposure (42.1%)**, suggesting moderate clinical experience.

Table 1: Demographic Profile of Nursing Students

Category	Frequency (n)	Percentage (%)
Age		
18–20 years	62	31.8
21–23 years	98	50.3
≥24 years	35	17.9
Gender		
Male	54	27.7
Female	141	72.3
Academic Year		
2nd Year	58	29.7
3rd Year	71	36.4
4th Year	66	33.8
Clinical Experience		

<1 year	69	35.4
1-2 years	82	42.1
>2 years	44	22.6

2. Level of Confidentiality and Patient Privacy Awareness

Nearly half of the students (46.7%) demonstrated moderate awareness, while 42.1% had high awareness. However, 11.3% showed

low awareness, indicating a concerning gap in understanding confidentiality principles. The mean score suggests overall borderline adequate knowledge, but not optimal.

Table 2: Awareness Level of Confidentiality and Privacy

Awareness Level	Score Range	Frequency (n)	Percentage (%)
High	75-100	82	42.1
Moderate	50-74	91	46.7
Low	<50	22	11.3
Mean ± SD = 71.4 ± 10.2			

3. Ethical Dilemmas Faced During Clinical Practice

A significant proportion of students (39.0%) experienced high levels of ethical dilemmas, while 45.1% reported moderate levels. This

indicates that ethical challenges are common during clinical practice, with relatively few students (15.9%) experiencing minimal dilemmas.

Table 3: Ethical Dilemmas Faced During Clinical Practice

Level	Score Range	Frequency (n)	Percentage (%)
High	67-90	76	39.0
Moderate	45-66	88	45.1
Low	<45	31	15.9
Mean ± SD = 63.8 ± 11.5			

4. Common Ethical Dilemmas Reported

The most commonly reported dilemma was family demands for patient information, followed by observing staff breaches of

confidentiality. This reflects both systemic issues and cultural influences, particularly in clinical settings where family involvement is strong.

Table 4: Frequency of Specific Ethical Dilemmas (Top Items)

Ethical Issue	Mean Score	Interpretation
Sharing patient information without consent	3.9	Frequent
Observing breach of confidentiality by staff	4.1	Very frequent
Pressure from seniors to disclose information	3.7	Frequent
Use of mobile phones in clinical areas	3.8	Frequent
Family demands for patient information	4.2	Very frequent

5. Association Between Awareness and Ethical Dilemmas

A statistically significant association was found ($p = 0.032 < 0.05$), indicating that awareness levels are related to ethical dilemmas.

Interestingly, even students with high awareness reported high ethical dilemmas, suggesting that knowledge alone does not prevent ethical conflicts, likely due to environmental constraints.

Table 5: Relationship Between Awareness and Ethical Dilemmas

Awareness Level	Low Dilemmas	Moderate	High	Total	P-value
Low	5	9	8	22	0.032
Moderate	14	45	32	91	
High	12	34	36	82	

6. Correlation Analysis

A weak negative correlation ($r = -0.28$) was observed, indicating that higher awareness is associated with slightly fewer ethical dilemmas.

However, the weak strength suggests other factors (e.g., clinical environment, supervision) also play a major role.

Table 6: Correlation Between Awareness and Ethical Dilemmas

Variables	r-value	P-value
Awareness vs Ethical Dilemmas	-0.28	0.001

Discussion

The study found that most participants were aged 21–23 and mainly female, consistent with global nursing education trends. This age group reflects typical undergraduate enrollment patterns. Ethically, younger students may still be forming their professional identities and ethical reasoning. Research shows that ethical awareness increases with academic progression and clinical exposure, highlighting that age and academic level affect ethical competence [17]. Additionally, students with 1–2 years of clinical experience represented the largest group, suggesting moderate exposure to real-world ethical challenges, particularly regarding confidentiality.

The current study findings indicated that 46.7% of students had moderate awareness, 42.1% high awareness, and 11.3% low awareness. This aligns with recent studies showing nursing students have moderate ethical awareness and moral sensitivity, although there are gaps in practical application [17]. Moderate awareness may stem from ethical concepts being taught theoretically but insufficiently reinforced in clinical training [18]. Students recognize confidentiality's importance but struggle to protect patient information in real settings. The complexity of healthcare systems further complicates confidentiality [19]. The low percentage of students with high awareness highlights the need for improved ethics education, as structured programs can enhance ethical sensitivity and awareness [20].

The study revealed that 39% of students reported high levels of ethical dilemmas, while 45.1% experienced moderate levels, supporting

existing literature on the prevalence of such dilemmas in nursing education and practice. Ethical conflicts arise from conflicting values and uncertainty in decision-making [21]. A 2025 study highlighted “powerlessness” and “complex decision-making” as significant themes among nursing students. Contributing factors include lack of confidence, limited authority in healthcare hierarchies, and fear of negative evaluations, showing that ethical dilemmas are influenced by systemic and organizational factors [22].

In the current study the Common ethical dilemmas in patient care often arise due to strong family involvement, particularly in collectivist cultures like Pakistan, which can conflict with patient confidentiality, which is align with finding of a study conducted by (Albert et al., 2020) [21]. Students struggle with balancing patient autonomy and family-centered decision-making. Witnessing unethical practices by healthcare professionals contributes to normalization of such behavior, resulting in ethical desensitization [18]. Furthermore, hierarchical structures in healthcare can lead to moral distress, limiting students' decision-making autonomy [22]. The introduction of mobile devices has generated new ethical challenges, particularly regarding confidentiality breaches, highlighting the need for proper guidelines and training [17]. Overall, while students value confidentiality, they may lack sufficient understanding of informed consent and privacy principles in complicated scenarios. A statistically significant relationship was found between awareness and ethical dilemmas ($p = 0.032$), showing that students with varying levels

of awareness face ethical challenges differently. The existence of dilemmas among highly aware students highlights that knowledge alone is inadequate for ethical competence, which also requires clinical experience, critical thinking skills, and supportive ethical environments. Therefore, ethical dilemmas are shaped by both individual and environmental factors [23].

The study identified a weak negative correlation ($r = -0.28$) between ethical awareness and ethical dilemmas, indicating that greater awareness is linked to fewer dilemmas, though the connection is not robust. This aligns with previous research suggesting that ethical awareness only partially influences ethical behavior, as it predicts moral sensitivity but does not completely determine decision-making outcomes [17]. Additionally, other significant factors include clinical supervision, organizational culture, and emotional and moral resilience.

The study offers valuable insights but has several limitations. A cross-sectional design restricts causal relationship establishment between confidentiality awareness and ethical dilemmas, calling for longitudinal studies for better understanding. The non-probability purposive sampling limits generalizability, as participants were drawn from specific nursing institutes in Pakistan. Data collected via self-administered questionnaires may introduce response bias. Reliance on self-reported ethical dilemmas could be influenced by recall bias. The adapted, rather than standardized, measurement tool and the lack of exploration of environmental factors may affect validity. Lastly, the absence of qualitative exploration limits understanding of students' feelings and coping strategies regarding ethical dilemmas.

Conclusion

This study finds that nursing students have a moderate to high awareness of confidentiality and patient privacy, reflecting foundational ethical principles in practice. However, many face significant ethical dilemmas during clinical practice, highlighting a gap between knowledge and application. Factors such as clinical environment and cultural dynamics in Pakistan complicate confidentiality, despite strong ethical understanding. The study calls for improved ethics education, enhanced clinical supervision

and mentorship, clear institutional policies, and a supportive environment to help students manage ethical dilemmas and uphold patient privacy effectively.

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