ISSN 1998 – 409X

ORIGINAL ARTICLE

Evaluation of Knowledge and Attitudes Regarding the Ability to Identify Common Forensic Cases among Nurses in Saudi Arabia

Boshra A. Alghamdi[1], Farah F. Alghamdi[1], Reem G. Alghamdi[2], Sawsan M. Alsomali[3], Khames T. Alzahrani[4]

[1]Department of Nursing, Albaha University, Albaha, Saudi Arabia, [2]Department of Nursing, King Fahad Hospital, Albaha, Saudi Arabia, [3]Department of Nursing, King Fahad Hospital, Riyadh, Saudi Arabia, [4]Department of Endodontics, Saudi Board of Endodontics, King Faisal Specialist Hospital and Research Centre, Ministry of Health, Riyadh, Saudi Arabia

Abstract

Background: Forensic nursing (FN) is an important specialty that integrates healthcare with legal and forensic sciences to improve the identification, management, and reporting of violence, abuse, and other medico-legal cases. Nurses play a critical role in recognizing forensic cases; however, limited awareness and training may affect their ability to perform these responsibilities effectively. **Aims:** This study aimed to evaluate the knowledge and attitudes regarding the ability to identify common forensic cases among nurses in Saudi Arabia. **Methods:** A cross-sectional study was conducted among 482 participants from different regions in Saudi Arabia, including nursing interns, nursing students, and registered nurses. Data were collected using a structured online questionnaire consisting of sociodemographic characteristics, knowledge-related questions, and attitude-related statements regarding FN. Statistical analysis was performed using descriptive statistics, and the chi-square test was used to assess associations between categorical variables, including knowledge and attitude levels with demographic characteristics. One-way analysis of variance was also applied to compare mean knowledge and attitude scores across demographic groups. **Results:** Females represented the majority of participants (60.4%), and the most common age group was 25–34 years (24.3%). More than half of the participants had neither previously studied FN (55.0%) nor attended FN training/workshops (58.1%). The results revealed limited knowledge regarding FN, as most participants incorrectly answered questions related to forensic nurses' roles, evidence collection, legal documentation, reporting child abuse, and court testimony. Only 31.1% correctly identified domestic violence as a forensic case. Regarding attitudes, participants generally demonstrated natural attitudes toward FN, with nearly half selecting "neutral" for most attitude statements. The majority of participants had poor knowledge levels (88.4%), while only 11.6% had moderate knowledge while 67.0% demonstrated natural attitudes, 32.2% negative attitudes, and only 0.8% positive attitudes. No statistically significant associations were found between knowledge level and demographic characteristics ($P > 0.05$). Moreover, no significant associations were observed between attitude level and most demographic variables, except for region of residence, which showed a statistically significant association ($\chi^2 = 18.033$, $P = 0.021$). **Conclusion:** The study revealed inadequate knowledge and predominantly natural attitudes regarding FN among nurses in Saudi Arabia. The findings highlight the need to strengthen FN education and integrate specialized training programs into nursing curricula and clinical practice to improve nurses' competency in identifying and managing forensic cases.

Key words: Forensic, knowledge, nurses

Address for correspondence:
Boshra A. Alghamdi,
Department of Nursing, Albaha University, Albaha,
Saudi Arabia,
E-mail: boshragha432@gmail.com

Received: 23-08-2026
Revised: 22-09-2026
Accepted: 29-09-2026

© 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0)

INTRODUCTION

Nursing plays a crucial role in ensuring safe, effective, and compassionate healthcare. Numerous disciplines of study centered on the duties and practices of nurses have emerged as a result of the changing healthcare environment and scientific and technological developments. Today, nursing has evolved from a passive profession to an independent one that involves making decisions. Positive effects on patient care result from the nursing profession's role development, which enables nurses to carry out their duties more successfully. Nurses must have a solid understanding of both professional and legal ideas to take on advanced nursing jobs.[1] In addition to providing excellent treatment in interdisciplinary teams, this understanding enables them to stand up for their rights when necessary.[2]

The growing understanding of the special needs of those impacted by crime, trauma, and violence has driven the creation of forensic nursing (FN), which is situated at the nexus of healthcare and the legal system. In addition to meeting patients' immediate medical needs, FN is crucial for guaranteeing that forensic patients receive prompt, skilled medical treatment.[3,4] The International Association of Forensic Nurses (IAFNs) defines FN as the application of nursing science to public or judicial procedures, combining medical care with legal and forensic concepts in the treatment of violent victims and offenders. Sexual assault examination, intimate relationship violence, child abuse, elder abuse, death inquiry, and correctional nursing are all included in the IAFN's definition of FN practice.[5] When victims or offenders are brought to the emergency room, forensic nurses are in charge of keeping precise, comprehensive records, storing clothing, and collecting samples from people to manage substances such as alcohol and narcotics, gather biological evidence, store it properly, and send it to the right authorities.[6,7]

When it comes to forensic inquiry, the cooperation of nursing professionals has the potential to prevent needless evidence loss or destruction.[8] As a result, the discipline of FN was created in response to these conditions, and its members have received specific training.[9] The integrated application of forensic aspects to the field of healthcare, particularly in the context of treating victims of trauma or death due to trauma, perpetrators of violence, criminal activities, and traumatic accidents, is the definition of FN science.[10] Several organizations, such as the IAFNs and the World Health Organization, have mandated that legal concepts and content should be taught to nursing alumnae and undergraduate students.[11]

Nurses often work with patients who have been victims of trauma or violence as primary healthcare professionals. They have a vital role in preserving evidence, especially in cases of physical, sexual, or social assault, and are frequently the initial point of contact for patients and victims.[12] The nurse should be able to protect evidence, identify the crime and the offender, and eliminate the victim as much as other relevant personnel such as forensic doctors, police officers, and prosecutors.[13-16] The significance of nurses in the preservation, gathering, and recording of medico-legal evidence is highlighted by this special role.[17] For example, crucial poisoning evidence, including vomitus, stomach aspirates, urine samples, and soiled cloth, is frequently destroyed by emergency rooms. Understanding the significance of this evidence, forensic nurses help gather, preserve, and uphold the samples' chain of custody.[18]

According to Alsaif *et al*., general nurses in Saudi Arabia often deal with forensic situations as part of their regular work, and they are not easily supported by specific FN programs or training.[19] Forensic examinations may be hampered by a lack of forensic knowledge, which could result in inaccurate clinical judgments and insufficient examinations.[20] According to Alsaif *et al*., evaluating Saudi Arabian nurses' forensic expertise might highlight the need for specialized FN programs and the improvement of forensic practice in general.[19] Similarly, Henshall *et al*. noted that improving FN education can result in a number of advantages, such as better patient care, easier access to services, less burden on the healthcare system, more nurse confidence, and more patient satisfaction.[21]

A study examining forensic knowledge among nursing students identified significant educational gaps; it reported that 80.4% of nursing students had no prior knowledge of FN, while only 19.6% demonstrated some knowledge, indicating the need for stronger educational preparation in this field.[12] Another study on FN in emergency departments found that nurses considered recognizing abuse and preserving evidence highly important but performed these practices less frequently. For example, recognizing signs of child abuse had a mean performance score of 2.65, while evidence preservation had a score of 2.35, indicating a gap between perceived importance and actual practice.[22] Moreover, a study was conducted to assess nursing student knowledge regarding FN at Hafar Al-Batin University; the majority of students have poor knowledge regarding FN, at 57.6%. This increases the level of need for educational courses related to this topic.[17]

A previous study among pediatric nurses in Saudi Arabia shows that nurses generally have adequate knowledge and positive attitudes toward child abuse, but continued education and training are recommended to improve recognition and management of suspected abuse cases.[23] In addition, a study in 2013 shows that child abuse can lead to significant behavioral and psychological problems in children. Healthcare professionals, particularly family physicians, play an important role in recognizing behavioral indicators of abuse and reporting suspected cases.[24] Although these studies provide evidence regarding documentation quality, legal awareness, and violence-related care within specific Saudi clinical contexts, comprehensive national data assessing

forensic knowledge and attitudes across nursing students, interns, and registered nurses remain limited. Accordingly, this cross-sectional study aims to evaluate the level of knowledge and attitudes regarding the ability to identify common forensic cases among nurses in Saudi Arabia, with the objective of informing curriculum development, professional training initiatives, and institutional policy frameworks.

METHODS

Study design, setting, and population

This study employed an analytical cross-sectional design. This approach was appropriate for estimating the prevalence of knowledge and attitudinal patterns within a defined population at a specific point in time, while also allowing examination of associations between these outcomes and relevant demographic or professional characteristics.

Inclusion and exclusion criteria

Eligible participants included nursing students in clinical years, nursing interns, and registered nurses practicing in Saudi Arabia who voluntarily agreed to participate. Other healthcare professionals not residing in the Kingdom of Saudi Arabia, refusing to participate, or with incomplete questionnaire responses will be excluded.

Sample size

The minimum required sample size was calculated using the standard formula for estimating a single population proportion in cross-sectional studies: $n = Z^2P(1-P)/d^2$. Assuming a 95% confidence level ($Z = 1.96$), an estimated proportion (P) of 0.50 due to the absence of national data, and a margin of error (d) of 0.05, the calculated minimum sample size is 384 participants.

Data collection instrument and measurement

Data were collected using a structured, online self-administered questionnaire established through expert review by specialists in FN and research methodology to ensure relevance and cultural appropriateness. The questionnaire had been pilot-tested by 20 participants to ensure its validity. It contained both Arabic and English languages to ensure linguistic clarity and accessibility. It consisted of three main components: demographic characteristics, knowledge assessment, and attitude assessment.

The demographic section included gender, age, educational level, region of residence, and prior exposure to forensic-related education or training. The knowledge section consisted of eight multiple-choice questions evaluating participants' understanding of FN principles, recognition of common forensic cases, evidence preservation procedures, documentation requirements, and reporting responsibilities. The attitude section included nine statements measuring attitudes toward the importance of FN, confidence in identifying forensic situations, and willingness to receive additional training.

Eventually, points were measured to calculate the overall score to categorize participants into specific groups as follows: In the knowledge section, 0–3 is insufficient knowledge, 4–6 is moderate knowledge, and 7–8 is high knowledge. On the other hand, in the attitude section, 0–9 is a negative attitude, while 10–18 is a natural attitude, and 19–27 is considered a positive attitude.

Data management, statistical analysis, and ethical considerations

Collected data were coded, cleaned, and entered into the Statistical Package for the Social Sciences, version 26, for analysis. Descriptive statistics summarized demographic characteristics and outcome variables using frequencies, percentages, means, and standard deviations.

Inferential analyses will be performed to examine associations between independent variables and the primary outcomes of knowledge and attitude scores. The Chi-square test will be used to assess associations between categorical variables. Independent *t*-tests or one-way analysis of variance will be applied to compare mean scores between groups as appropriate. A two-tailed $P < 0.05$ will be considered statistically significant.

Ethical approval was obtained from the appropriate institutional review board before the initiation of the study. Participation was voluntary, and informed consent was obtained electronically before access to the questionnaire. No identifying information was collected, and all data were stored securely with access restricted to the research team.

RESULTS

In Table 1, females represented the majority (60.4%). The most common age group was 25–34 years (24.3%), followed by 18–24 years (19.1%) and 55–64 years (18.7%). Most participants were from the Southern region (34.0%), and the Northern region showed the lowest frequency (8.5%). Educational level revealed that nursing interns were the largest group (38.8%), followed by nursing students (32.4%) and registered nurses (28.8%). More than half of the participants (55.0%) reported that they had not previously studied FN, and 58.1% had not received any training or attended workshops related to FN.

Table 1: Sociodemographic characteristics of the participants (*n*=482)

Variable	Category	Frequency (*n*)	Percentage
Gender	Female	291	60.4
	Male	191	39.6
Age group (years)	18–24	92	19.1
	25–34	117	24.3
	35–44	77	16.0
	45–54	66	13.7
	55–64	90	18.7
	≥65	40	8.3
Region of residence	Southern	164	34.0
	Northern	41	8.5
	Western	115	23.9
	Central	87	18.0
	Eastern	75	15.6
Educational level	Nursing intern	187	38.8
	Nursing student	156	32.4
	Registered nurse	139	28.8
Have you previously studied forensic nursing in your curriculum?	No	265	55.0
	Yes	217	45.0
Have you received any training or attended a workshop on forensic nursing?	No	280	58.1
	Yes	202	41.9

Table 2 shows that the participants demonstrated generally limited knowledge regarding FN. More than half of the respondents incorrectly answered questions related to the role of forensic nurses, evidence collection, and legal documentation of injuries in Saudi Arabia. Moreover, many participants were unaware that nurses may be required to report suspected child abuse or testify in court. Regarding forensic case identification, only 31.1% correctly recognized domestic violence as a forensic case. Concerning priorities in sexual assault cases, the highest proportion incorrectly selected informing the police (33.0%), while only 32.2% identified patient safety and care as the priority. Moreover, most participants reported that FN concepts are either rarely taught (34.0%) or never taught (33.4%) in nursing programs.

The results in Table 3 indicate that participants generally showed neutral attitudes toward FN, with about half of the participants choosing "neutral" for most statements. Around one-fourth of participants agreed that FN is important within the healthcare system or felt confident in identifying forensic cases in clinical practice. Only 24.1% agreed on the legal obligation of nurses to report violence or abuse. Interest in attending FN training was little (28.8%), while many participants remained uncertain about the inclusion of legal education and FN training within nursing curricula. Moreover, 53.9% of the participants reported neutral regarding institutional support for FN training.

In Table 4, most participants showed a poor level of knowledge (88.4%), while only 11.6% had a moderate level of knowledge. None of the participants achieved a high knowledge level. Most participants showed a natural attitude toward FN (67.0%), whereas 32.2% showed a negative attitude and only 0.8% demonstrated a positive attitude. These findings suggest limited knowledge and a generally natural attitude toward FN among the study participants [Figure 1].

Table 5 shows that there were no statistically significant associations between participants' knowledge level and demographic characteristics ($P > 0.05$). Regarding gender, females represented the majority of both poor and moderate knowledge groups (60.3% and 60.7%, respectively), with no significant difference observed ($\chi^2 = 0.003$, $P = 0.956$). Similarly, age groups showed comparable distributions across knowledge levels, and the association was not statistically significant ($\chi^2 = 3.208$, $P = 0.668$). Regional distribution also did not differ significantly between participants ($\chi^2 = 0.609$, $P = 0.962$). For educational levels, interns showed the largest frequency of both poor and moderate; however, no significant association was detected ($\chi^2 = 0.764$, $P = 0.683$). Furthermore, previous study exposure and attendance of training/workshops were not significantly associated with knowledge level ($P = 0.609$ and $P = 0.115$, respectively).

Table 2: Participants' responses regarding knowledge questions (*n*=482)

Question	Response	Frequency (*n*)	Percentage
Forensic nursing involves the care of patients who are victims of violence or abuse?	False	243	50.4
	True	113	23.4
	I don't know	126	26.1
One of the roles of a forensic nurse includes evidence collection from a victim?	False	252	52.3
	True	116	24.1
	I don't know	114	23.7
Are nurses allowed to document injuries for legal reporting purposes in Saudi Arabia?	No	251	52.1
	Yes	116	24.1
	I don't know	115	23.9
Which of the following is an example of a forensic case?	Domestic violence	150	31.1
	Down syndrome	161	33.4
	Hypertension	84	17.4
	Stroke	87	18.0
When dealing with a sexual assault case, what is the nurse's priority?	Collect evidence	81	16.8
	Ensure patient safety and provide care	155	32.2
	Inform police	159	33.0
	Take photographs	87	18.0
In Saudi Arabia, how often are forensic nursing concepts formally taught in nursing programs?	Commonly	85	17.6
	I don't know	72	14.9
	Never	161	33.4
	Rarely	164	34.0
Are nurses required to report suspected child abuse cases in Saudi Arabia?	No	215	44.6
	Yes	141	29.3
	I don't know	126	26.1
A forensic nurse may be called to testify in court?	No	227	47.1
	Yes	124	25.7
	I don't know	131	27.2

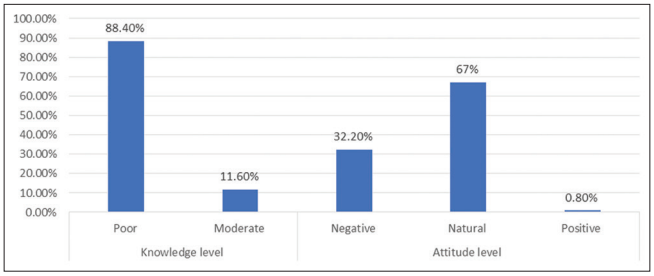


Figure 1: Distribution of knowledge and attitude levels

Table 6 shows that there were no statistically significant associations between attitude level and gender (χ^2 = 0.202, P = 0.904), age (χ^2 = 15.595, P = 0.112), educational status (χ^2 = 3.836, P = 0.429), previous study exposure (χ^2 = 0.325, P = 0.850), or attendance of training/workshops (χ^2 = 0.604, P = 0.739). Females revealed the majority with both negative and neutral attitudes, while positive attitudes were very limited among both genders. Similarly, participants across all age groups predominantly demonstrated neutral attitudes, with very few showing positive attitudes. However, a statistically significant association was observed between region and attitude level (χ^2 = 18.033, P = 0.021). Participants from the Southern region represented the largest proportion of those with negative and natural attitudes, and the majority of participants with positive attitudes were from the Central region.

Table 7 shows that the comparison of mean knowledge and attitude scores according to demographic characteristics revealed no statistically significant differences among the studied groups (P > 0.05). Female participants demonstrated a slightly higher mean knowledge score than males, whereas males showed a higher mean attitude score; however, these differences were not statistically significant. Regarding age groups, participants aged 65 years and above had the highest mean knowledge and attitude scores, while participants aged 55–64 years had the lowest knowledge scores and those aged 25–34 years had the lowest attitude scores. Moreover, age differences were not statistically significant. Regarding educational level, nursing students showed the highest mean

Table 3: Participants' responses regarding attitude questions (*n*=482)

Question	Response	Frequency (*n*)	Percentage
Is forensic nursing important in the healthcare system?	Disagree	128	26.6
	Agree	112	23.2
	Neutral	242	50.2
I feel confident in identifying a forensic case in clinical practice.	Disagree	131	27.2
	Agree	127	26.3
	Neutral	224	46.5
More training in forensic nursing should be included in the curriculum?	Disagree	128	26.6
	Agree	115	23.9
	Neutral	239	49.6
Handling forensic cases is the responsibility of police, not nurses?	Disagree	105	21.8
	Agree	121	25.1
	Neutral	256	53.1
Would I be interested in attending a forensic nursing workshop?	Disagree	102	21.2
	Agree	139	28.8
	Neutral	241	50.0
Should nurses receive legal education as part of their training?	Disagree	117	24.3
	Agree	118	24.5
	Neutral	247	51.2
I know how to preserve evidence in clinical settings.	Disagree	129	26.8
	Agree	110	22.8
	Neutral	243	50.4
I believe nursing professionals have a legal obligation to report violence or abuse.	Disagree	126	26.1
	Agree	116	24.1
	Neutral	240	49.8
My institution supports training in forensic nursing?	Disagree	131	27.2
	Agree	91	18.9
	Neutral	260	53.9

Table 4: Frequency of knowledge and attitude levels

Variable	Category	Frequency (*n*)	Percentage
Knowledge level	Poor	426	88.4
	Moderate	56	11.6
	Total	482	100.0
Attitude level	Negative	155	32.2
	Natural	323	67.0
	Positive	4	0.8
	Total	482	100.0

knowledge score, whereas registered nurses showed the highest mean attitude score. Despite these variations, no significant differences were observed between educational groups.

DISCUSSION

Forensic medicine was introduced in Saudi Arabia following the acknowledgment of the necessity to use medical sciences in the pursuit of social justice. It includes the examination of deceased individuals as well as the evaluation of living cases of sexual and physical assault. This branch has undergone numerous changes since the first specialized forensic medicine doctor was appointed in Riyadh in 1968. Significant progress in this field occurred following the creation of the Saudi specialty certificate in forensic medicine in 2006. Male and female national specialized forensic medical examiners have completed their education and are currently employed at various centers across the country.[19]

This study evaluated the knowledge and attitudes of nurses in Saudi Arabia about their ability to recognize common forensic cases. The results showed that knowledge levels were mostly low and attitudes toward FN were mainly neutral, with no significant links between knowledge or attitude scores and most demographic factors. In the current study, the majority of participants demonstrated poor knowledge (88.4%), particularly regarding the roles of forensic nurses, evidence collection, legal documentation, and mandatory reporting of abuse cases.

Table 5: Association between knowledge level and demographic characteristics (*n*=482)

Variable	Category	Poor *n* (%)	Moderate *n* (%)	Chi-square	Degrees of freedom	*P*-value
Gender	Female	257 (60.3)	34 (60.7)	0.003	1	0.956
	Male	169 (39.7)	22 (39.3)			
Age	18–24	80 (18.8)	12 (21.4)	3.208	5	0.668
	25–34	104 (24.4)	13 (23.2)			
	35–44	67 (15.7)	10 (17.9)			
	45–54	57 (13.4)	9 (16.1)			
	55–64	84 (19.7)	6 (10.7)			
	≥65	34 (8.0)	6 (10.7)			
Region	Southern	144 (33.8)	20 (35.7)	0.609	4	0.962
	Northern	36 (8.5)	5 (8.9)			
	Western	101 (23.7)	14 (25.0)			
	Central	79 (18.5)	8 (14.3)			
	Eastern	66 (15.5)	9 (16.1)			
Education	Intern	167 (39.2)	20 (35.7)	0.764	2	0.683
	Student	135 (31.7)	21 (37.5)			
	RN	124 (29.1)	15 (26.8)			
Previous study	No	236 (55.4)	29 (51.8)	0.261	1	0.609
	Yes	190 (44.6)	27 (48.2)			
Training/workshop	No	242 (56.8)	38 (67.9)	2.482	1	0.115
	Yes	184 (43.2)	18 (32.1)			

Table 6: Association between attitude level and demographic characteristics (*n*=482)

Variable	Category	Negative *n* (%)	Natural *n* (%)	Positive *n* (%)	Chi-square	Degrees of freedom	*P*-value
Gender	Female	93 (60.0)	196 (60.7)	2 (50.0)	0.202	2	0.904
	Male	62 (40.0)	127 (39.3)	2 (50.0)			
Age	18–24	32 (20.6)	60 (18.6)	0 (0.0)	15.595	10	0.112
	25–34	41 (26.5)	76 (23.5)	0 (0.0)			
	35–44	24 (15.5)	53 (16.4)	0 (0.0)			
	45–54	20 (12.9)	46 (14.2)	0 (0.0)			
	55–64	29 (18.7)	59 (18.3)	2 (50.0)			
	≥65	9 (5.8)	29 (9.0)	2 (50.0)			
Region	Southern	52 (33.5)	111 (34.4)	1 (25.0)	18.033	8	0.021
	Northern	19 (12.3)	22 (6.8)	0 (0.0)			
	Western	27 (17.4)	88 (27.2)	0 (0.0)			
	Central	30 (19.4)	54 (16.7)	3 (75.0)			
	Eastern	27 (17.4)	48 (14.9)	0 (0.0)			
Education	Intern	65 (41.9)	119 (36.8)	3 (75.0)	3.836	4	0.429
	Student	48 (31.0)	108 (33.4)	0 (0.0)			
	RN	42 (27.1)	96 (29.7)	1 (25.0)			
Previous study	No	88 (56.8)	175 (54.2)	2 (50.0)	0.325	2	0.850
	Yes	67 (43.2)	148 (45.8)	2 (50.0)			
Training/workshop	No	88 (56.8)	189 (58.5)	3 (75.0)	0.604	2	0.739
	Yes	67 (43.2)	134 (41.5)	1 (25.0)			

Table 7: Comparison of mean knowledge and attitude scores with demographic characteristics (*n*=482) using one-way analysis of variance

Variable	Category	*n*	Knowledge score Mean±SD	F	*P*-value	Attitude score Mean±SD	F	*P*-value
Gender	Female	291	2.08±1.23	0.031	0.860	11.03±3.27	0.143	0.705
	Male	191	2.06±1.14			11.15±3.30		
Age group	18–24 years	92	2.12±1.15	0.744	0.591	10.83±3.10	1.804	0.110
	25–34 years	117	2.13±1.09			10.78±3.13		
	35–44 years	77	2.05±1.27			10.82±3.31		
	45–54 years	66	2.11±1.39			11.41±3.25		
	55–64 years	90	1.88±1.15			11.12±3.39		
	≥65 years	40	2.25±1.26			12.38±3.66		
Educational level	Nursing intern	187	2.09±1.18	0.497	0.609	11.13±3.42	0.262	0.770
	Nursing student	156	2.13±1.22			10.92±3.08		
	Registered nurse	139	1.99±1.20			11.18±3.32		

SD: Standard deviation

These findings are consistent with the findings of Alsaif *et al*., who stated that the majority of the respondents gave invalid or did not know the answers to knowledge questions.[19] Similarly, a study done by Mohamed at Hafar Al-Batin University concluded that the majority of students have insufficient knowledge regarding FN.[17] In a study conducted in Turkey, Erkan *et al*. concluded that the level of knowledge of the healthcare professionals on the FN and its own process is insufficient; these findings supported our results.[25] In the same line of our results, a study in India concluded that it is revealed that majority of staff nurses had inadequate knowledge regarding FN.[26]

Our study also found that only a small proportion of participants correctly identified forensic cases such as domestic violence, and many were uncertain about nurses' roles in sexual assault management and child abuse reporting. Comparable findings were reported in a study conducted in Iran by Emami *et al*., they stated that nurses had lack of education regarding violence this education should equip nurses with the necessary knowledge and skills to identify and handle cases involving violence, abuse, neglect, child and elderly abuse, sexual assault, and domestic violence.[22]

Furthermore, the results show that participants had misconceptions about forensic evidence items despite their stated level of knowledge, pointing to areas that could benefit from additional instruction and clarification. In a similar vein, prior research has demonstrated that nursing students lack sufficient understanding of FN evidence. According to Özden *et al*., nurses working on forensic cases frequently do not know enough about gathering, storing, and building evidence chains.[20] According to Simmons and Grandfield, nurses struggle to evaluate forensic situations and have little understanding of FN.[11] Furthermore, according to Şentürk and Šyükaslan, every participating student stated a desire to improve and acknowledged their lack of expertise in this area, highlighting the necessity of FN training.[27]

Regarding attitudes, most participants in the present study demonstrated neutral attitudes (67.0%), while only a very small proportion showed positive attitudes (0.8%). This finding is in line with a study conducted in Saudi Arabia, which reported that nurses had generally neutral perceptions toward FN and limited confidence in handling forensic cases, and added that the nurses in their study associated their sense of disempowerment with a lack of knowledge, training, skills, and experience related to domestic violence and abuse (DVA). They believed that SA nurses are not well trained.[28] This also aligns with previous research emphasizing the importance of fostering positive attitudes toward FN,[29] which includes attributes of forensic nurses, the value of the learning experience, understanding of forensic nurses' roles, and feelings about caring for victims, all contributing to the development of moral ethics among nursing students.

Ahrens in his study revealed that victims of rape often chose not to speak out because they expected unfavorable responses from healthcare providers, friends, and family members.[30] This resulted in feelings of guilt and uncertainty regarding whether their experiences constituted rape. Survivors of DVA frequently do not know their rights and consider it to be a normal situation.[31] In addition, our research indicated that nurses remained silent due to concerns about their personal safety, job security, and potential consequences of taking action. Similarly, a study in Saudi Arabia found that while nurses recognized the importance of FN, they lacked confidence and willingness to engage in forensic responsibilities due to insufficient training.[28] The predominance of neutral attitudes in the current study may be explained by limited exposure to FN education and lack of clinical training opportunities.

In terms of demographic associations, the present study found no statistically significant relationships between knowledge or attitude scores and gender, age, or educational level. These findings are consistent with studies conducted by Padmakumari, which also reported that demographic variables did not significantly influence FN knowledge.[26] The results of this study indicate a significant deficiency in the education and preparedness for practice in FN among nurses in Saudi Arabia. The absence of strong connections between most demographic factors and knowledge or attitudes indicates that the issue is general rather than confined to particular groups.

CONCLUSION

The current study showed that nurses in Saudi Arabia have a limited knowledge regarding FN and the recognition of typical forensic cases. Many participants could not accurately identify the roles and responsibilities of forensic nurses, which include collecting evidence, documenting legal information, reporting required cases, and prioritizing management in forensic contexts like sexual assault and domestic violence. Participants mostly showed neutral views about FN, with only a small number expressing positive attitudes toward the field. The results also showed that demographic factors, including gender, age, education level, previous study in FN, and participation in training workshops, did not have a significant relationship with knowledge or attitude levels. Regional variations were found to have a notable connection with the levels of attitudes. The results highlight the necessity of including FN concepts in undergraduate nursing programs, improving continuing education initiatives, and offering regular workshops and hands-on training sessions. These measures aim to enhance nurses' readiness and confidence in handling forensic cases in Saudi Arabia.

ACKNOWLEDGMENTS

We acknowledge all volunteers who provided samples for this research.

ETHICAL APPROVAL

The study was fully explained to all participants, and it was emphasized that participation was voluntary. Written informed consent was obtained from each participant before enrollment. All collected information was securely stored and used exclusively for research purposes.

INFORMED CONSENT

Written informed consent was obtained from all study participants.

DATA AND MATERIALS AVAILABILITY

All data generated or analyzed during this study are included in this published article.

REFERENCES

1. Tabanejad Z, Ebadi A, Banazadeh M. A systematic literature review on the role of the forensic nursing. J Educ Health Promot 2025;14:95.
2. Ghofrani Kelishami F, Manoochehri H, Mohtashami J, Kiani M. Consequences of presence of forensic nurses in health care system: A qualitative study. Iran J Nurs Midwifery Res 2020;25:195-201.
3. Patterson D, Pennefather M. Interdisciplinary team conflicts among forensic nurses and rape victim advocates. Affilia 2015;30:40-53.
4. Vietor T, Hountz R. RIGHTS: Response initiative guiding human trafficking services. J Forensic Nurs 2018;14:167-73.
5. Aydin MA, Tuncay B, Gürol A, Adiyaman A. Mapping the evolution of forensic nursing: A bibliometric review of 29 years. Perspect Psychiatr Care 2026;2026:7453449.
6. Saunders D. Out of hours. Pract Nurs 2000;11:4-4.
7. Kent-Wilkinson A. Forensic nursing educational development: An integrated review of the literature. J Psychiatr Ment Health Nurs 2011;18:236-46.
8. De Oliveira Musse J, Santos VS, Da Silva Santos D, Dos Santos FP, De Melo CM. Preservation of forensic traces by health professionals in a hospital in Northeast Brazil. Forensic Sci Int 2020;306:110057.
9. George S. Forensic nursing and the healthcare system's response to sexual violence. Stud Res Day Proceed 2022;7:31.
10. Machado B, Araújo I, Barbieri-Figueiredo MC. Forensic nursing: What is taught in the bachelor's degree in nursing in Portugal. Rev Enferm Ref 2019;4:43-50.
11. Simmons B, Grandfield K. Focus on forensic nursing education. J Emerg Nurs 2013;39:633-4.
12. Abou Hashish EA. Knowledge and attitude of university nursing students towards forensic nursing and their influencing factors: A mixed-methods study. Egypt J Forensic Sci 2024;14:31.
13. Abdool NN, Brysiewicz P. A description of the forensic nursing role in emergency departments in Durban, South Africa. J Emerg Nurs 2009;35:16-21.
14. Lynch VA. Forensic nursing science: Global strategies in health and justice. Egypt J Forensic Sci 2011;1:69-76.
15. Filmalter CJ, Heyns T, Ferreira R. Forensic patients in the emergency department: Who are they and how should we care for them? Int Emerg Nurs 2018;40:33-6.
16. Sakallı D, Aslan M. Levels of knowledge of emergency nurses regarding forensic cases and approaches to evidence. Signa Vitae 2020;16:65-72.
17. Mohamed S. Assess nursing students knowledge regarding forensic nursing inHafar Al-Batin University.

IOSR J Nurs Health Sci (IOSR-JNHS) 2023;12:59-63.
18. Meera T, Singh KP. Forensic nursing: An evolving specialty. J Med Soc 2017;31:141-2.
19. Alsaif DM, Alfaraidy M, Alsowayigh K, Alhusain A, Almadani OM. Forensic experience of Saudi nurses; An emerging need for forensic qualifications. J Forensic Leg Med 2014;27:13-6.
20. Özden D, Özveren H, Yılmaz İ. The impact of forensic nursing course on students' knowledge level on forensic evidence. J Forensic Leg Med 2019;66:86-90.
21. Henshall C, Davey Z, Jackson D. The implementation and evaluation of a resilience enhancement programme for nurses working in the forensic setting. Int J Ment Health Nurs 2020;29:508-20.
22. Emami SZ, Lynch VA, Banazadeh M. Forensic nursing in the emergency department: The distance between nurses' performed role behaviors and their perception of behaviors' importance. BMC Nurs 2024;23:23.
23. Alharbi HF, Moussa FL. Knowledge and attitude of pediatric nurses in Saudi Arabia regarding child abuse. J Multidiscip Healthc 2023;16:2057-69.
24. Al Odhayani A, Watson WJ, Watson L. Behavioural consequences of child abuse. Can Fam Physician 2013;59:831-6.
25. Erkan I, Yesilyurt A, Kayserili A. Analysis of awareness for healthcare professionals in forensic nursing. Forensic Res Criminol Int J 2017;5:00153.
26. Padmakumari SV. A study to assess the knowledge regarding the need of forensic nursing in emergency department among the staff nurses in a selected hospital at Visakhapatnam, Andhra Pradesh. Int J Sci Res Public 2022;12:217.
27. Şentürk S, Büyükaslan B. Determination of 4th year nursing students' knowledge and opinions on forensic nursing. Bozok Med J 2013;3:19-26.
28. Alshammari A, Evans C, Mcgarry J. Nurses' experiences of perceiving violence and abuse of women in Saudi Arabia: A phenomenological study. Int Nurs Rev 2023;70:501-9.
29. Poosumang T, Chatreewatanakul B. Attitude and learning of nursing students in forensic clinic observation. J Res Nurs Midwif Health Sci 2017;37:23-34.
30. Ahrens CE. Being silenced: The impact of negative social reactions on the disclosure of rape. Am J Community Psychol 2006;38:263-74.
31. Githui S, Chege M, Wagoro M, Mwaura J. Nurse's perception on non-disclosure of intimate partner violence by pregnant women: A cross-sectional study. Int J Contemp Res Rev 2018;9:20198-203.

Source of Support: Nil. **Conflicts of Interest:** None declared.