

Effectiveness of Educational Program on Nurses' Knowledge Regarding Ethical and Legal Aspects in Critical Care Units at Holy Karbala Teaching Hospitals

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ABSTRACT

Legal and ethical issues are important for determining whether nurses have appropriately performed their duties and whether those duties are performed within the standards of care. Nurses play a very crucial role in protecting patient rights. Nurses don't just provide clinical services. They are also required to understand patient rights and the legal and ethical aspects that accompany them. To evaluate the effectiveness of an educational program on nurses' knowledge regarding legal and ethical aspects in critical care units. A quantitative study with a quasi-experimental design was conducted using two groups in critical care units at two governmental institutions. First, Al-Imam Alhussain Medical City. Second, Imam Al-Hassan Al-Mujtaba Teaching Hospital in the holy city of Karbala. The study took place between 1st August and 30 November 2025. One hundred nurses working in critical care units were split into two groups: an experimental group and a control group. The study showed a substantial improvement in knowledge scores among the experimental group after the educational intervention, particularly from the pre-test to the first post-test, demonstrating the rapid effects of the training. The results continued to improve between the first and second post-tests, indicating that knowledge is retained over time and enhanced through ongoing professional development. The educational intervention resulted in a rapid and significant increase in the experimental group's knowledge of both ethical and legal issues immediately after the training.

Keywords: Critical care nurses, Ethical and legal aspects, educational program, Knowledge

INTRODUCTION

The nursing profession requires knowledge of ethics to guide performance. Nursing ethics is the professional ethics of care. The nature of this profession necessitates ethical care more than routine care. Ethical concepts are among the basic elements of this profession and an important indicator for its patients. Ethics is the systematic study of what a person's conduct and actions should be with regard to themselves, other humans, and the environment; it also refers to the principles that guide a person's actions with regard to right and wrong and to society at large. Ethical principles provide a foundation for nursing practice and a basis for nurses' decisions on consideration of the consequences and of the universal moral principles when making clinical¹.

A study conducted among nurses at a tertiary care hospital in rural India found that the majority (78%) of participants had inadequate knowledge regarding law and ethics in nursing². In another study conducted in Egypt by Ibrahim Ahmed Al-Abd (2020)³. It was found that about two-thirds of the nurses studied had inadequate knowledge of ethical and legal issues in critical care units.

A study conducted by Subedi et al. (2018)⁴ found that the majority of participants (69.7%) had an average level of knowledge, 19% had adequate knowledge and only 11.3% had poor knowledge on legal and ethical aspects in nursing among selected nurses working in the Shahid Gangalal National Heart Center, Nepal, which emphasizes the need to be updated with present knowledge on ethical and legal aspects of patient care.

Applying professional ethics is essential for hospitals to assess the quality of care provided. It promotes effective interactions between

nurses and patients by emphasizing ethical behavior in the workplace, which is essential for healthy working relationships and may positively affect patient outcomes⁵. Despite its obvious importance, nursing science has not studied professional ethics extensively. Greater knowledge of professional ethics is needed to understand and support nurses' moral decision-making and to respond to the challenges posed by current changes in health care and society⁶.

Nurses who work in intensive care units, emergency rooms, and other highly specialized settings must be able to recognize the ethical issues they face in patient care on a daily basis and be prepared to address them in collaboration with patients, families, colleagues, and administrators⁷. Ethical issues are more common in critical care units⁸. Nurses in these settings regularly encounter situations in which ethical principles may conflict⁹.

Previous research indicates that a lack of legal knowledge among healthcare professionals can lead to legal violations and subsequent litigation, underscoring the value of this study^{10,11}. Critical care nurses perform complex and vital tasks, while staff nurses care for older and sicker patients. The nurse must have basic knowledge about law and the legal process. This knowledge will help ensure that nurses' actions are consistent with legal principles and protect them from liability. Knowledge of legal principles is a necessary component of ethical decision-making for making informed choices¹².

A legal misfortune can happen every second nurse performs patient care. A large number of nurses have insufficient training in the advanced healthcare sector legal aspects of issues such as suit-prone patients, negligence, autonomy, and malpractice. It was noticed that when a nursing study program provides effective and sufficient subjects

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and helps them to be guided by ethics and legal aspects and discuss the ways that help nurses to aware of law related to their, advanced clinical education and training on modern technology can effective to the develop skills and knowledge of nurses. Nurses have a strong, independent, and obvious legal, ethical and professional role to help patients to heal with a high-quality, effective, complete level of care¹³. Therefore, this study aims to investigate the effectiveness of educational program on the nurses' knowledge regarding ethical and legal aspects in critical care units.

METHODOLOGY

Study Design: Quantitative study, quasi-experimental (Non-equivalent pretest-posttest control- group design). The study was conducted from 1st August to 30th November 2025.

Study Setting: The research was carried out with two groups in critical care units in two governmental institutions, first, Al-Imam Alhussain Medical City. Second, Imam Al-Hassan Al-Mujtaba Teaching Hospital in the holy city of Karbala.

Study Sample: A non-probability (convenience sample) of nurses working in critical care units was selected for the study. The sample consists of (100) nurses, who are divided into two groups: (50) nurses are considered as an experimental group, and (50) nurses are considered as a control group.

Target population:

The target population consisted of 134 nurses as a part of the total population (170 nurses) because 36 nurses were unavailable for study due to extended leave from work.

Sample size:

The 134 nurses were divided into two groups (100 nurses included, 34 nurses excluded). Excluded nurses were five with less than one year of experience. Four nurses who refused to participate in the study were also excluded. Twenty-five nurses were selected for the needs assessment and pilot study. Additionally, a final sample size of 100 nurses calculated using the Thompson equation is used to calculate the sample size of the population with a known number at a confidence interval of 95% (or a significance level of 0.05) and a standard deviation of 0.5.

$$n = \frac{N \times p(1-p)}{\left[\left[N - 1 \times \left(d^2 \div z^2 \right) \right] + p(1-p) \right]}$$

Where:

n: sample size

N: size of the population

z: the standard score corresponding to the significance level (0.95) and is equal to (1.96)

d: the margin of error and is equal to (0.05)

P: the proportion of availability and neutrality and is equal to (0.50)

Inclusion criteria:

The sample selection criteria were both male and female nurses who work in critical care units, have at least one year of experience in a previous sitting, and agree to participate in the current study.

Ethical consideration: An official approval letter is obtained from the ethics committee of the Nursing Faculty at the University of Babylon (Code: 90).

A humane face or respect for nurses' personalities as human beings is considered in the current study an ethical issue. Certain steps were followed to achieve the ethical consideration and obtain permission from the nurse him/herself:

- Critical care nurses who agree to participate in the study and meet the inclusion criteria have been given a written informed consent.
- Explaining the purpose of the study and explaining that all of the information will be kept secured and used only for the study purposes.

Study Instrument: The questionnaire was adapted from Verghese et al. (2016)¹⁴. The questionnaire is divided into three parts:

Part I: Socio-Demographic Data Sheet:

This part dealt with the socio-demographic characteristics of critical care nurses, such as age, sex, level of education, type of critical care unit, and critical care nursing experience.

Part II: Critical care nurses' knowledge of ethical aspects:

Nurses' knowledge of ethical aspects was assessed using multiple-choice questions (MCs). The test consisted of 10 MC questions, each with 4 options, only one of which was correct. All items were designed to evaluate nurses' knowledge of the ethical aspects of nursing practice.

Part III: Critical care nurses' knowledge of legal aspects:

This section consists of 26 MCQs used to evaluate staff nurses' legal knowledge in the critical care area. It concerned nurses' knowledge and their roles in various acts. All items were designed using MCQs with one correct answer to evaluate nurses' knowledge about legal aspects.

Reliability of the study Instrument: The reliability of an instrument refers to the consistency of measurements obtained for an attribute, item, or situation in a study or clinical practice. The greater the reliability or consistency of an instrument's measures, the less random error there is in the measurement method. In this study, the researcher examined the instrument's reliability and found that the questionnaire was internally consistent. The reliability of the nurses' knowledge regarding the ethical aspects scale was 0.84, and that of the legal aspects scale was 0.71.

The Educational Program Implementation: The researcher prepared nurses for this educational program by separating the sample into experimental and control groups. The educational program intervention was introduced only to the experimental group. The program consisted of six significant sessions and was implemented for 50 nurses. The pretest was conducted before implementing the educational program with the final drafts of the data collection instrument. Each session was designed and scheduled for 30-45 minutes. Focusing on ethical and legal aspects, knowledge. The work of implementing an educational program started on 1 September 2025 and continued until 21 September 2025.

All nurses (experimental and control groups) who were included in the study selection criteria consented to discuss implementing the educational program and ensure agreement to engage in the study.

All the participating subjects in the study were informed about the steps for program implementation, which are as follows (Table 1):

1. Demographical data were obtained from both the experimental and control groups.
2. The pre-knowledge test was conducted at the same time for the two groups.
3. Implementation of the educational program was designed and presented in six sessions over three weeks.

Each lecture was introduced as follows:

- A. Topic of the session.
- B. Content
- C. Teaching objectives.
- D. Evaluation for each session (feedback).

RESULTS

A comparison of nurses' understanding of ethical and legal concerns throughout three time periods—pre-test, post-test 1, and post-test 2 is shown in Table (2). Three sets of knowledge levels are distinguished by the mean scores (M.S.): low (1.0-1.33), moderate (1.34-1.66), and high (1.67-2.0). The results showed a significant increase in knowledge scores among the experimental group after the educational intervention, particularly from the pre-test to the first post-test, demonstrating the rapid effects of the training. The results continued to improve between the first and second post-tests, indicating that knowledge is retained over time and enhanced through ongoing professional development. This was clearly demonstrated in the ANOVA test results, where the

F-value was 137.1 for ethical issues and 238.8 for legal issues, with a p-value of 0.000 for both issues.

An independent sample t-test was used to compare the mean scores (M.S.) of the experimental and control groups in order to analyze the data shown in Table (3) regarding nurses' understanding of ethical and legal concerns. Three levels were created using the mean scores: low (M.S. 1-1.33), moderate (M.S. 1.34-1.66), and high (M.S. 1.67-2). The statistical significance of the t-test will further clarify whether the observed differences are most likely due to the intervention or simply chance. The test showed a t-value of 14.19 for ethical aspects and a t-value of 14.24 for legal aspects, with a p-value of 0.000. This indicates that there is a difference in the change of nurses' knowledge of those aspects between the two groups (experimental and control) over three different time periods.

Table 4 shows the One Way ANOVA test a statistically significant relationship between nurses' knowledge of ethical issues and some of their demographic information, such as experience in nursing F-value)3.35(at p value =).032(and experience in Critical care unit F-value)11.04(at p value =).007(and exposed that a statistically significant relationship between nurses' knowledge of legal issues and same of their demographic information, such as experience in nursing F-value)4.29(at p value =).030(and experience in Critical care F-value)10.66(at p value =).008(. Independent sample t test show that there

Table 1. Demographical characteristics of the nurses

Demographic Characteristics		Control group		Experimental group		p- value
		f	%	f	%	
Age	20-29 years	42	84	37	74	0.064
	30-39 years	7	14	13	26	
	≥ 40 years	1	2	0	0	
	Total	50	100	50	100	
Sex	Male	30	60	31	62	0.984
	Female	20	40	19	38	
	Total	50	100	50	100	
Educational level	Secondary nursing school	1	2	6	12	0.118
	Diploma	19	38	14	28	
	Bachelor	25	50	28	56	
	Post Graduate	5	10	2	4	
	Total	50	100	50	100	
Experience in nursing	1-5 years	42	84	31	62	0.097
	6-10 years	6	12	18	36	
	11-15 years	2	4	1	2	
	Total	50	100	50	100	
Experience in Critical units	1- 4 years	43	86	41	82	0.624
	5-8 years	5	10	6	12	
	9-12 years	2	4	3	6	
	Total	50	100	50	100	
Type of Critical Care Units	ICU	20	40	22	44	0.632
	CCU	11	22	15	30	
	Emergency	19	38	13	26	
	Total	50	100	50	100	
Have you had any training course about ethical aspects in nursing	Yes	5	10	7	14	0.589
	No	45	90	43	86	
	Total	50	100	50	100	
Have you had any training course about legal aspects in nursing	Yes	5	10	5	10	1
	No	45	90	45	90	
	Total	50	100	50	100	

%; percentage, f : Frequency, SD: standard deviation

Table 2. Overall nurses' knowledge of ethical and legal issues and their differences in across three different time periods (pre-test, post 1, and post 2)

No.	Nurses' knowledge aspects	Period	Control group					Experimental group					ANOVA test			
			Correct answer	Incorrect answer	M.S	Assess.	ANOVA test			Correct answer	Incorrect answer	M.S				Assess.
			(%)	(%)			F	p-value	Sig.	(%)	(%)					
1	Ethical issues	Pre- test	47.8	52.2	1.48		M	1.944	0.174	NS	42.4	57.6	1.42	M	137.1	
		Post 1	45	55	1.45	M	84.8				15.2	1.85	H			
		Post 2	43.2	56.8	1.43	M	69.2				30.8	1.69	H			
2	Legal issues	Pre- test	46.53	53.46	1.47	M	0.625	0.537	NS	50.1	49.9	1.5	M	238.8	0	HS
		Post 1	50.69	49.3	1.51	M				88.2	11.8	1.88	H			
		Post 2	53.09	46.91	1.53	M				68.7	31.3	1.68	H			

M.S = Mean of score = Assess. = Assessment, L = low (M.S. 1-1.33), M = moderate (M.S. 1.34-1.66), H = high (M.S. = 1.67 – 2).

Table 3. Overall nurses' knowledge of ethical and legal issues and their differences in across two groups

No.	Nurses' knowledge aspects	Period	Control group				Experimental group				Independent sample t test			
			Correct answer (%)	Incorrect answer (%)	M.S	Assess.	Correct answer (%)	Incorrect answer (%)	M.S	Assess.	t	Mean Difference	p-value	Sig.
1	Ethical issues	Pre- test	47.8	52.2	1.48	M	42.4	57.6	1.42	M	14.19	.412	.000	HS
		Post 1	45	55	1.45	M	84.8	15.2	1.85	H				
		Post 2	43.2	56.8	1.43	M	69.2	30.8	1.69	H				
2	Legal issues	Pre- test	46.53	53.46	1.47	M	50.1	49.9	1.50	M	14.24	.400	.000	HS
		Post 1	50.69	49.30	1.51	M	88.2	11.8	1.88	H				
		Post 2	53.09	46.91	1.53	M	68.7	31.3	1.68	H				

M.S = Mean of score = Assess. = Assessment, L = low (M.S. 1-1.33), M = moderate (M.S. 1.34-1.66), H = high (M.S. = 1.67 – 2).

Table 4. Relationship between the nurses' knowledge of ethical and legal aspects with their demographic characteristics

Nurses' knowledge	Age	Educational level		Experience in nursing		Experience in care	Critical	Type of Critical Units	Care	Sex	Have training about ethical aspects		Have training about legal aspects			
	One Way ANOVA test								Independent sample t test							
	F*	p-value (Sig.)	F*	p-value (Sig.)	F*	p-value (Sig.)	F*	p-value (Sig.)	F*	p-value (Sig.)	t*	p-value (Sig.)	t*	p-value (Sig.)		
knowledge regarding ethical	1.2	0.066	1.09	0.089	3.35	0.032	11.04	0.007	1.08	0.085	1.26	0.374	15.77	0.005	0.97	0.187
		(NS)		(NS)		(S)		(S)		(NS)		(NS)		(S)		(NS)
knowledge regarding legal	2.1	0.059	1.33	0.093	4.29	0.03	10.66	0.008	2.15	0.071	0.381	0.454	0.99	0.181	13.11	0.002
		(NS)		(NS)		(S)		(S)		(NS)		(NS)		(NS)		(S)

F* (f- value of One Way ANOVA test), t* (t- value of independent sample t test)

is a statistically significant relationship between nurses' knowledge of ethical issues and nurse if have training about ethical aspects t-value (15.77(at p value =).005(. Also exposed that there is a statistically significant relationship between nurses' knowledge of legal issues and nurse if have training about legal aspects t-value (13.11) at p value = (.002.(

DISCUSSION

Discussion of the Overall nurses' knowledge of ethical and legal issues and their differences in across three different time periods

The results of the current study, as shown in Table (2), demonstrate a significant increase in knowledge scores regarding ethical issues among the experimental group after the educational intervention, particularly from the pre-test to the first post-test. This indicates a rapid effect of the training, as evidenced by the p-value ($p = 0.000$) in the ANOVA results. The marked increase in moral knowledge scores among the experimental group after the educational intervention can be explained and linked to the immediate effect of the training. The transition from the pre-test to the first post-test showed rapid improvement, indicating that the new information was clear and straightforward, leading to rapid assimilation.

The current result is consistent with the study by Bayoumi et al. (2017)¹⁵, which showed that nurses' knowledge of their ethical responsibilities in the paediatric oncology unit improved after implementation of the guideline education program. The current result was also confirmed by (Mohammed & AL-Mosawi, 2024)¹⁶, who found that the exhibits the noticeable increasing of nurses' knowledge of ethical issues over the time among the study group while among the control group there is no clear change over the three times.

The current result is consistent with a study Zakaria et al. (2016)¹⁷, which indicated that nurses' knowledge ethical aspects has improved over the long term. A follow-up test was conducted three months later, and the result showed this improvement.

As shown in Table 2, the current study found a significant increase in the experimental group's knowledge of legal issues following the educational intervention, particularly from the pre-test to the first post-test. The ANOVA results show a p-value of ($p = 0.000$), indicating a rapid impact of the training. This result may be explained by participants' strong motivation to learn about legal issues in critical care, given their practical and professional importance in protecting themselves from legal risks. This motivation enhances focus and attention during training, leading to tangible results in a short time. This may be explained by the increasing role of the nurse as a patient care taker and advocate, and to avoid the mistakes that have negative consequences. So the nurse must be aware about the legal issues of nursing profession in order to avoid these legal problems. Another explanation for such finding that lack of governmental affairs in protecting the rights of working nurses during critical situations in which they might exposed to workplace violence.

The current result is consistent with the findings of the Haffiz et al. (2016)¹⁸ study, which found that implementing the information booklet was effective in increasing nurses' knowledge of their legal responsibilities.

This result also aligned with the findings of a study Do & Kim (2021)¹⁹, which indicated that implementing structured educational interventions focusing on legal aspects of nursing records is an effective and evidence-based approach to enhance nurses' knowledge, ultimately contributing to safer and more accountable clinical practice.

The same table also shows that knowledge about legal and ethical issues continued to improve between the first and second post-tests. This observation implies that knowledge remains constant over time and improves through continuous professional development. The ANOVA results clearly demonstrated this, with p-values of ($p = 0.000$) for both ethical and legal issues. From the researcher's perspective, cognitive retention explains the continued improvement in ethical and legal knowledge between the first and second post-tests. The results show that participants' learning during the educational intervention was not short-lived but was retained in long-term memory. The result shows that the training wasn't just memorizing facts; it helped participants understand things better, which makes it easier to remember later. Furthermore, during the period between the two tests, participants likely encountered practical or professional situations involving ethical and legal issues, which helped them apply and further solidify the knowledge they had acquired.

The current result is consistent with the study by Khalil et al. (2019)²⁰, which demonstrated the effectiveness of the educational intervention in significantly changing nurses' knowledge of ethical and legal rights. Therefore, it is a necessity to ensure that nurses working in psychiatric hospitals have the necessary expertise regarding the legal and ethical issues involved with caring for psychiatric patients, to decrease the effects of malpractice and negligence in psychiatric nursing practice.

In addition, the current result is consistent with a study (Lavanya, 2024)²¹ that showed significant improvements in knowledge post-intervention. This study underlines the effectiveness of teaching modules in closing the gap in legal and ethical training among pediatric nurses, suggesting that such educational initiatives could substantially enhance patient care and reduce legal risks.

Discussion of the Overall nurses' knowledge of ethical and legal issues and their differences in across two groups

The results of the current study, as shown in Table 3, indicate a difference in nurses' knowledge of ethical and legal aspects between the experimental and control groups at the same time point. The P-value (0.000) indicates a statistically significant difference in knowledge levels between the control and experimental groups, with the experimental group having higher knowledge levels. The members of the experimental group observed this improvement. Therefore, the implemented educational program was effective in improving knowledge about ethical and legal issues. This means that the nurses in the experimental group may have recognized the importance of ethical and legal considerations in their daily practice, thereby increasing their interest and understanding of the training material, as evidenced by their results.

The current result was consistent with that of Hussein and Hassona's (2021)²² study, which stated that the implemented training program was effective in improving psychiatric nurses' knowledge of the legal and ethical aspects governing work in the health field; the effect was revealed through significant statistical differences between the control and experimental groups.

Similarly, the current finding was consistent with Shafaat et al. (2021)²³, who found that the difference between the intervention and the control groups respecting the pretest mean score of ECD ability was not statistically significant ($P = 0.10$). However, the mean ECD ability score in the intervention group was significantly higher than that in the control group both immediately after the workshop ($P < 0.001$) and after 1 month after the workshop ($P < 0.001$).

These results are consistent with the study by Upasana & Pooja Rani Sood (2022)²⁴, which reported that a planned teaching program significantly improved registered nurses' knowledge of the legal and ethical aspects of obstetric nursing. The control groups showed no discernible change in nurses' knowledge. Ali and Ahmed (2022)²⁵, also confirmed the current result, which found that the civility-training program positively affected head nurses by increasing their knowledge and self-assessment of perceived workplace civility following its implementation and by enhancing their legal and ethical knowledge.

In contrast, the findings of present study are inconsistent with Momennasab et al. (2021)²⁶, that reported no significant difference between intervention and control groups in terms of the mean changes in knowledge scores ($P = 0.83$)

Occupationally, this result can be explained by the fact that the ethics and legal program had a positive impact on the cognitive level of the nurses in the study group. This improvement can be attributed to the program's educational components, which aim to enhance nurses' understanding of ethical and legal considerations. In addition, the results indicate that the level of knowledge among nurses in the control group remained suboptimal throughout the study period. The lack of a comparable educational intervention in the control group may account for the absence of improvement. Overall, the results underscore the importance of targeted educational and training programs for improving nurses' knowledge, especially in critical care.

Relationship between nurses' knowledge of ethical and legal aspects and their demographic characteristics

The results of the current study, as shown in Table 4, indicate a statistically significant relationship between nurses' knowledge of ethical issues and their nursing experience ($p = 0.032$). This schedule mean that after several years of experience, nurses are exposed to diverse situations that require ethical decision-making, which enhances their understanding of ethical issues and increases their awareness; this may explain the current result.

This result was consistent with the findings of Belal et al. (2017)²⁷, who reported a significant association between nurses' knowledge of ethical issues and their years of nursing experience.

In contrast, this finding is inconsistent with those of Bayoumi et al. (2017)¹⁵, who found no significant association ($P > 0.05$) between nurses' knowledge and years of experience. Such findings may be interpreted as indicating that the nurses in this study were young and had low experience in their field.

The results of the current study, as shown in Table 4, also indicate a statistically significant relationship between nurses' knowledge of ethical issues and their experience in the Critical Care Unit (CCU) ($p = 0.007$). Nurses working in these units constantly face complex and sensitive situations that require quick decisions concerning patients' lives. The critical care environment also involves making critical decisions, such as resuscitation, termination of treatment, and maintaining confidentiality, which makes it more exposed to ethical issues and enhances their understanding of them.

The current result is consistent with the findings of Ahmed Al-Abd et al. (2020)³ who concluded that there is a statistically significant relationship between nurses' knowledge of ethical aspects and their years of experience in critical care units.

Verghese et al. (2016)¹⁴ found no significant association between

nurses' knowledge of legal responsibilities and their demographic characteristics of critical care nurses.

Furthermore, the study, as shown in Table 4, revealed a statistically significant relationship between nurses' knowledge of legal issues and their nursing experience ($p = 0.030$). Likely, because of their lengthy exposure to clinical settings, which may strengthen their capacity to efficiently integrate new information. The current result aligns with Lavanya's (2024)²¹ findings, which indicated that nurses' knowledge of legal care increases with working experience. The current finding was inconsistent with those of Haffiz et al. (2016)¹⁸, who found no statistically significant relationship between nurses' knowledge of legal aspects and their years of nursing experience.

The results in the same table also indicate a statistically significant relationship between nurses' knowledge of legal issues and their CCU experience ($p = 0.008$). Nurses working in these units constantly face complex situations that require quick, decisive decisions, making them more exposed to legal issues related to patient rights, informed consent, and the protection of medical confidentiality.

The present findings support the study by Ahmed et al. (2022)²⁸, which demonstrated a highly statistically significant correlation between nurses' total knowledge of legal aspects and CCU experience ($p < 0.01$). In contrast to the present study, SS & SK (2023)²⁹ found that indicating demographic variables has no association on knowledge regarding legal aspects among staff Nurse.

Recommendation

- Fostering nurses with limited experience in general nursing or critical care to attend accredited training programmes that address the legal and ethical aspects of nursing practice. Such programs should be integrated into healthcare institutions' ongoing professional development frameworks to enhance nurses' competencies and reinforce their adherence to professional and ethical standards.
- Utilise nurses with significant overall and ICU experience as mentors, ethics committee members, or unit-based educators to foster a culture of ethical awareness and share practical wisdom.
- Replicate this study in different hospital settings, cultural contexts, and with other healthcare professional groups to validate the findings and generalize the effectiveness of the educational model.

CONCLUSION

The results also show a lack of prior exposure to ethical and legal training, pointing to the need for focused educational initiatives in these fields.

The findings show that after the educational intervention, the experimental group's understanding of ethical and legal issues significantly improved. The programme's ability to promote long-term information retention is demonstrated by the consistent rise in scores over time.

The results of the research showed that nurses' knowledge about ethical and legal concerns was significantly correlated with their experience and previous training. These results imply that professional experience and focused training play a critical role in forming knowledge.

Authorship Contribution: All authors share equal effort contribution towards (1) substantial contributions to conception and design, acquisition, analysis and interpretation of data; (2) drafting the article and revising it critically for important intellectual content; and (3) final approval of the manuscript version to be published. Yes.

Potential Conflicts of Interest: None

Competing Interest: None

Acceptance Date: 19 March 2026

REFERENCE

1. Bharathi NS, Prabha I. A descriptive study to assess the knowledge on legal and ethical aspects of nursing among outgoing and final year BSc nursing students at Sacred Heart Nursing College, Madurai. *Int J Nurs Educ Res* 2020; 8(1): 105-8.
2. Thirunavukarasu M, Velmurugan A. Knowledge regarding law and ethics among nurses at a tertiary care hospital in rural India. *Int J Community Med Public Health* 2018; 5: 3882-6.
3. Ahmed Al-Abd I, Yassien Mohammad S, Said Ali A. Nursing awareness of ethical and legal issues in critical care unit: Recommended guidelines. *Egypt J Health Care* 2020; 11(1): 1-11.
4. Subedi KKP, Timalsina K, Bhele RL. Nurse's awareness on ethico-legal aspects of nursing profession. *J Nepal Health Res Counc* 2018; 16(1): 49-52.
5. Engelbrecht A, Heine G, Mahembe B. The influence of ethical leadership on trust and work engagement: An exploratory study. *SA J Ind Psychol* 2017; 40(1): 1209-10.
6. Ali WA, Ali SA, Mahmoud SF. Professional ethics practiced by nurses working in hemodialysis unit at Zagazig Hospitals. *Zagazig Nurs J* 2018; 14(1): 221-32.
7. Asfour HI, Ahmed FR, Abd El Halim GE. Measuring changes in attitude, practice and knowledge of undergraduate nursing students after receiving an educational intervention in ethical comportment in critical care nursing. *J Nurs Educ Pract* 2016; 6(4): 112-20.
8. Goktas S, Aktug C, Gezginci E. Evaluation of moral sensitivity and moral courage in intensive care nurses in Turkey during the COVID-19 pandemic. *Nurs Crit Care* 2023; 28(2): 261-271.
9. Warner JO. Autonomy vs. beneficence: Shared decision-making in allergy. *Curr Allergy Clin Immunol* 2022; 35(3): 138-42.
10. Huynh G, Han NTN, Ngan VK, et al. Knowledge and attitude toward COVID-19 among healthcare workers at District 2 Hospital, Ho Chi Minh City. *Asian Pac J Trop Med* 2020; 13(6): 260-265.
11. Davey K, Ravishankar V, Mehta N, et al. A qualitative study of workplace violence among healthcare providers in emergency departments in India. *Int J Emerg Med* 2020; 13(1): 33.
12. Parker M, Willmott L, White B, et al. Withholding or withdrawing life-sustaining medical treatment? Empirical findings on attitudes of doctors. *J Law Med* 2016; 24: 342.
13. Mahmoud Farhat AA, Ghandour S, Mohamed HA. Nurses' perception regarding legal aspects liabilities at Port Said General Hospitals. *Port Said Sci J Nurs* 2023; 10(2): 114-37.
14. Verghese D, Latha T, Jomon CU. Knowledge on legal and ethical aspects in patient care among critical care nurses. *Int J Health Sci Res* 2016; 6(3): 197-201.
15. Bayoumi MH, Kamel FF, Fathalla AA. Guideline education program about nursing ethics in pediatric oncology unit: Effect on nurses' knowledge and practice. *IOSR J Nurs Health Sci* 2017; 6(3): 1-9.
16. Mohammed AO, AL-Mosawi KMH. Effectiveness of educational program on nurses' knowledge toward ethical rule in Kirkuk Pediatric Hospital. *J Res Med Dent Sci* 2024; 12(4): 25-33.
17. Zakaria A, Sleem W, Seada AM. Effectiveness of ethical issues teaching program on knowledge, ethical behavior and ethical stress among nurses. *J Nurs Educ Pract* 2016; 6(7): 125-36.
18. Haffiz R, Reshi NH, Maqbool S. A study to evaluate the effectiveness of an information booklet on knowledge and attitude of staff nurses regarding their legal responsibilities in a selected hospital of Jammu and Kashmir. *Asian J Nurs Educ Res* 2016; 6(3): 321-6.
19. Do T, Kim H. Effects of nursing record education focused on legal aspects at small and medium sized hospitals. *J Korean Acad Soc Nurs Educ* 2021; 27(2): 152-162.
20. Khalil AI, Felemban R, Tunker R. Impact of an educational intervention in enhancing nurses' knowledge towards psychiatric patients' ethical and legal rights. *J Nurs Educ Pract* 2019; 9(10): 1-14.
21. Lavanya Palaniappan. Professional development in pediatric nursing: A study on the impact of educational module in legal and ethical care. *IP J Paediatr Nurs Sci* 2024; 7(2): 55-60.
22. Hussien R, Hassona F. Effect of educational intervention on psychiatric nurses' knowledge regarding ethical and legal issues for psychiatric patients. *Egypt J Health Care* 2021.
23. Shafaat A, Alimohammadi N, Shahriari M. The effects of an ethical empowerment program on nurses' ability of ethical care delivery to patients with decreased level of consciousness in intensive care unit. *Nurs Midwifery Stud* 2021; 10(9): 151-7.
24. Upasana, Sood PR. Effectiveness of planned teaching programme on knowledge regarding legal and ethical aspects in obstetric nursing among registered nurses. *Himalayan J Nurs Midwifery* 2022; 1(1): 1-5.
25. Ali AF, Ahmed EAA. Effect of head nurses workplace civility educational program on nurses professional values and awareness of legal and ethical issues. *Int Egypt J Nurs Sci Res* 2022; 2(2): 336-52.
26. Momennasab M, Ghanbari M, Rivaz M. Improving nurses' knowledge, attitude, and performance in relation to ethical codes through group reflection strategy. *BMC Nurs* 2021; 20(1): 1-9.
27. Belal S, Khalil H, Elnady F. Impact of integrated ethics program on nurses' knowledge and performance at rural areas in Fayoum Region, Egypt. *Am J Nurs Sci* 2017; 6(3): 240-50.
28. Ahmed MAEM, Shakweer TT, Mahmoud BH. Nurses' awareness regarding ethical and legal issues in critical care units. *Int J Adv Res Nurs* 2022; 5(1): 201-7.
29. SS S, SK SK. An exploratory study to assess staff nurse knowledge and attitude related to legal responsibilities in patient care at YCR Hospital, Latur, Maharashtra. *Int J Adv Nurs Manag* 2023; 11(2): 120-4.