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Association Between Medico-Legal Training and Competency in Ethical Reasoning and Risk Assessment Among Final Year Medical Students in Southwest Nigeria

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Declaration:

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ABSTRACT

Background: Despite rising medical litigation and evolving patient rights, medico-legal training remains peripheral in sub-Saharan Africa. This leaves final-year medical students in Nigeria potentially unprepared for ethical and legal aspects of practice, with limited evidence on its association with ethical reasoning and risk assessment.

Objective: To assess the association between medico-legal training and competency in ethical reasoning and risk assessment among final-year medical students in Southwest Nigeria.

Methodology: A multicentre cross-sectional study among 157 final-year medical students in Southwest Nigeria. Data were collected via a structured, expert validated questionnaire assessing medico-legal training exposure, ethical reasoning, risk assessment, and perceptions. Data were analyzed using descriptive statistics, Pearson correlation, and multiple linear regression ($p<0.05$).

Results: Mean age was 24.03 ± 2.11 years; 65.6% were female. Overall, 73.9% received medico-legal training, mainly lectures (58.3%) and case-based discussions (26.0%). Mean scores were: ethical reasoning 21.06 ± 3.40, risk assessment 27.29 ± 4.86, and perception 27.74 ± 5.35. Ethical reasoning strongly correlated with risk assessment ($r=0.761$, $p<0.001$), with moderate correlations to perception ($r=0.415$-0.576, $p<0.001$). Regression analysis showed a small positive but non-significant association between medico-legal reinforcement and risk assessment ($\beta=0.116$).

Conclusion: Although medico-legal training exposure is common, weak associations with competency outcomes suggest that current training approaches may benefit from greater emphasis on structured, practical, case-based methods. Nigerian medical schools should strengthen medico-legal curricula to better prepare future clinicians.

Keywords: *Medico-Legal Training; Ethical Reasoning; Risk Assessment; Clinical Decision-Making; Medical Education; Southwest Nigeria.*

INTRODUCTION

In the contemporary landscape of healthcare, medical practice has become increasingly complex due to rapid technological advancements, evolving patient expectations, and the integration of multidisciplinary care. This complexity has increased the need for healthcare professionals to possess not only strong clinical expertise but also robust ethical and legal competencies to navigate the many pitfalls in decision-making [1]. Globally, the rise in medical litigation and ethical challenges underscores the imperative for practitioners to balance clinical capacity with adherence to legal standards and moral principles, thereby ensuring patient safety and maintaining public trust in the healthcare system [2]. As healthcare systems worldwide continue to struggle with resource allocation and informed consent, the demand for comprehensive training that equips doctors to mitigate the risks associated with modern medical interventions has become even more critical.

In Nigeria, these challenges are particularly pronounced. The healthcare sector faces a rise in medical litigation and ethical dilemmas, with recent reports highlighting frequent negligence cases and preventable deaths in hospitals. Estimates suggest that medical errors contribute to harm in approximately one in ten patients globally, but this burden is often exacerbated in low- and middle-income countries like Nigeria, where up to 4 in 100 patients may die from unsafe care [3,4]. Local data from Abia State further illustrate the scale of the problem, revealing a prevalence of medical errors at 42.8%, with the majority occurring in medication prescribing (95.2%), laboratory investigations (83.9%), and diagnoses (69.4%) 5. These clinical drawbacks are frequently amplified by ethical lapses, including violations of patient autonomy through inadequate disclosure and breaches of confidentiality, issues often rooted in resource constraints and cultural factors 6. Socioeconomic disparities in the Nigerian context further heighten the vulnerability of both patients and practitioners to medico-legal conflicts.

Medical education is expected to play a pivotal role in addressing these challenges. However, significant gaps in medico-legal training persist, potentially leaving graduates ill-prepared for the realities of clinical practice. In sub-Saharan Africa, including Nigeria, undergraduate curricula often provide limited comprehensive education in ethics and law. This results in deficiencies in students' ability to recognise and manage common ethical dilemmas, such as discharge against medical advice or conflicts involving religious beliefs [7,8]. Without structured integration of medico-legal principles, medical training may fail to foster the holistic competencies required for safe, resilient, and ethically sound professional practice in diverse and often resource-limited settings.

From an international perspective, evidence suggests that integrating medico-legal training into medical curricula can meaningfully improve outcomes. Studies in countries such as Romania and the United States have shown that scenario-based and structured medico-legal education enhances ethical reasoning, strengthens patient advocacy, and reduces malpractice risks [9,10]. In contrast, regions with weaker integration of these topics, particularly parts of Africa, continue to report persistent deficiencies, highlighting the urgent need for curriculum reform [11]. These global insights indicate that adopting more robust medico-legal training strategies could yield substantial improvements in student preparedness, especially in resource-limited settings where adaptive and contextually relevant education is essential.

Final-year medical students represent an ideal cohort for examining these issues. As they stand at the threshold of independent practice, they frequently encounter complex scenarios that demand the integration of clinical acumen with ethical judgment and legal awareness. Their proximity to graduation provides a valuable opportunity to assess the cumulative impact of current undergraduate training on their readiness to meet the demands of professional life [12]. In today's evolving clinical environment, these soon-to-be doctors must navigate diagnostic uncertainty as well as significant ethical obligations and legal accountability. Understanding how exposure to medico-legal training, ethical reasoning, and risk assessment intersect to shape their clinical decision-making is therefore essential for preparing future practitioners for safe, ethical, and legally defensible practice.

Despite the growing emphasis on patient rights, professional accountability, and legal oversight in healthcare, there remains limited empirical evidence on how final-year medical students in Southwest Nigeria integrate medico-legal considerations, ethical reasoning, and risk assessment into their clinical decisions. While global systematic reviews highlight the benefits of integrated curricula, region-specific studies in this context are scarce [14,15]. This deficiency of local data hinders the development of tailored educational strategies capable of addressing Nigeria's unique cultural, systemic, and resource-related challenges. The resulting gaps have important implications for clinical practice and patient safety, potentially contributing to increased adverse events, higher litigation rates, and suboptimal preparedness among graduates [16].

This study is therefore justified by the urgent need to generate context-specific evidence on the current state of medico-legal training in Southwest Nigerian medical schools and its association with students' ethical reasoning and risk assessment abilities. By addressing this gap, the research aims to provide actionable insights that can inform curriculum enhancement, reduce clinical errors, and lower litigation risks, in line with global recommendations for strengthening ethics and law in medical education [17-20]. The aim of this study was to assess the association between medico-legal training and competency in ethical reasoning and risk assessment among final-year medical students in Southwest Nigeria.

Specific objectives were to:

1. Describe the type and frequency of exposure to medico-legal training among final-year medical students in Southwest Nigeria.
2. Assess the level of ethical reasoning and its association with medico-legal training exposure.
3. Examine the associations between medico-legal training (type and frequency) and students' risk assessment competencies.
4. Evaluate students' perceptions of the adequacy and effectiveness of medico-legal training.
5. Explore how demographic and contextual factors (e.g., age, gender, institution type, and prior clinical experience) moderate these associations.

This study focused on final-year medical students in selected universities in Southwest Nigeria, with data collected during the 2025/2026 academic session. It examined formal medico-legal training components within undergraduate curricula to provide a targeted assessment of pre-graduation preparedness.

METHODS

Study Design

This study employed a descriptive cross-sectional design utilizing quantitative methods to evaluate the association between medico-legal training and competencies in ethical reasoning and risk assessment among final-year medical students in Southwest Nigeria. Primary data was collected through the use of structured questionnaires.

Study Area and Population

The study was conducted in Southwest Nigeria, a region comprising six states (Lagos, Oyo, Ogun, Osun, Ondo, and Ekiti). This zone is one of the most urbanised and educationally advanced parts of the country and hosts several Medical and Dental Council of Nigeria (MDCN)-accredited medical schools offering the Bachelor of Medicine, Bachelor of Surgery (MB;BS) programme. Thirteen universities were included in the study: University of Ibadan, Ladoke Akintola University of Technology (LAUTECH), Bowen University, University of Lagos, Lagos State University College of Medicine, Eko University of Medical Sciences (Eko UNIMED), Olabisi Onabanjo University (OOU), Babcock University, Obafemi Awolowo University (OAU), Osun State University, Ekiti State University (EKSU), Afe Babalola University (ABUAD), and University of Medical Sciences, Ondo (UNIMED). These institutions represent a mix of federal, state-owned, and private universities, providing diversity in institutional contexts, resources, and student populations. The region's

heterogeneous cultural and socioeconomic characteristics offered an opportunity to capture varied perspectives on ethical reasoning and risk assessment among medical trainees.

The study population comprised final-year medical students enrolled in the selected accredited medical schools in Southwest Nigeria. These students had completed their core clinical rotations and were at a critical stage of training, preparing for independent practice.

Sample Size and Sampling Technique

The sample size for this study was determined using Cochran's formula for estimating proportions in descriptive cross-sectional studies. A total of 157 final year medical students participated in the study.

A multicentre cross-sectional study design was employed. Participants were recruited using a combination of convenience and voluntary response sampling. Final-year students from the selected institutions were invited through official class communication platforms, institutional mailing lists, and in-person sessions where permitted. All eligible students who provided informed consent were included consecutively until the desired sample size was reached.

Data Collection

Data were collected using a self-administered structured questionnaire developed after reviewing relevant literature, adaptation of validated scales, and contextual refinement for the Nigerian medical education setting. The instrument was organised into five sections corresponding to the core study domains: Socio-demographic Characteristics (age, gender, institution of study); Exposure to Medico-Legal Training and Knowledge; Ethical Reasoning Assessment; Risk Assessment and Clinical Decision-Making; and Perceptions of Training Adequacy and Effectiveness.

Before deployment, the questionnaire was validated via review by experts in public health, medical law and research methodology and reliability ensured following a pre-test for the study. Internal consistency reliability of the scales was assessed using Cronbach's alpha: Ethical Reasoning scale ($\alpha = 0.82$), Risk Assessment scale ($\alpha = 0.79$), and Perception of Training scale ($\alpha = 0.85$).

Scoring for the Likert-scale items was based on a 5-point scale (1 = Strongly Disagree to 5 = Strongly Agree), with vignette items scored dichotomously (correct = 1, incorrect = 0). Adequate competency was operationally defined as achieving ≥70% of the maximum possible score based on expert consensus.

Data Analysis

Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 27. Microsoft Excel 2016 was used for initial data cleaning, coding, and verification before import. The dataset was screened for completeness, outliers, and entry inconsistencies. Cases with substantial missing data were excluded from inferential analyses, while minor missing responses were handled using pairwise deletion to preserve statistical power.

Descriptive statistics were used to summarise demographics, training exposure, ethical reasoning levels, and perceptions using frequencies, means, standard deviations, and percentages. Inferential statistics: Pearson correlations were used to examine bivariate associations. Multiple linear regression was performed with medico-legal training exposure/reinforcement as the predictor variable and ethical reasoning and risk assessment scores as outcome variables. Model fit was assessed using R^2 and adjusted R^2. The level of significance was set at $p < 0.05$.

Ethical Considerations

The study received ethical approval from the UNIMEDTH Research Ethics Committee, with ethical approval number: UNIMED-HREC/Apv/2026/635.

Informed consent was obtained electronically from all participants before filling of the questionnaire coupled with a standardised information sheet outlined the study purpose, procedures, duration, and voluntary nature of participation.

Participants were informed of their right to decline or withdraw at any stage without consequence. All data was anonymized and stored securely. Participation was entirely voluntary, with no incentives offered.

RESULTS

A total of 157 final year medical students completed the questionnaire, with responses obtained from thirteen MDCN-accredited institutions across Southwest Nigeria. The highest participation came from the University of Medical Sciences, Ondo (26.1%), followed by Afe Babalola University, Ado-Ekiti (21.7%) and Bowen University (15.3%).
The mean age of participants was 24.03 ± 2.11 years. Females constituted the majority (65.6%, n=103), while males accounted for 34.4% (n=54). Table 1 shows the detailed sociodemographic characteristics of the respondents.

Table 1: Sociodemographic characteristics of respondents

Variable (N=157)	Category/Summary	N (%) / Mean± SD
Age (years)	Mean ± SD	24.03±2.11
Gender	Male	54 (34.4%)
	Female	103 (65.6%)
Institution of Study	University of Lagos (UNILAG)	7 (4.5%)
	Lagos State University	3 (1.9%)
	Eko University of Medical Sciences (EKO UNIMED)	5 (3.2%)
	Olabisi Onabanjo University	10 (6.4%)
	Babcock University	5 (3.2%)
	University of Medical Sciences, Ondo State	41 (26.1%)
	Obafemi Awolowo University, Ile-Ife, OAU	3 (1.9%)
	Osun State University (UNIOSUN)	9 (5.7%)
	University of Ibadan	3 (1.9%)
	Ladoke Akintola University of Technology (LAUTECH)	2 (1.3%)
	Bowen University	24 (15.3%)
	Afe Babalola University Ado-Ekiti (ABUAD)	34 (21.7%)
	Ekiti State University (EKSU)	11 (7.0%)

EXPOSURE TO MEDICO-LEGAL TRAINING

Of the 157 respondents, 116 (73.9%) reported having received some form of medico-legal training, while 41 (26.1%) had not. Among those who received training (n=116), reinforcement during clinical rotations was reported as "sometimes" or "often" by 74.2% of participants. The most common type of training was school-based lectures (58.3%), followed by case-based discussions (26.0%).

Table 2: Exposure to Medicolegal Training

Variable	Category/Summary	N (%) / Mean± SD
Medicolegal Training	Yes	116 (73.9%)
	No	41 (26.1%)
Frequency of medicolegal reinforcement during clinical rotations	Never	1 (0.9%)
	Rarely	8 (6.9%)
	Sometimes	43 (37.1%)
	Often	43 (37.1%)
	Very often	21 (18.1%)
Type of Medicolegal Training received	Case-based discussions	50 (26.0%)
	Clinical risk management sessions	16 (8.3%)
	Ethics committee participation	5 (2.6%)
	Mock trials/courtroom simulation	2 (1.0%)
	Online modules	7 (3.6%)
	School-based lectures	112 (58.3%)

ETHICAL REASONING

Among the 116 students who had received medico-legal training, self-reported ethical reasoning was generally positive. Over 70% agreed or strongly agreed that they could readily identify ethical dilemmas and recognise issues with both ethical and legal implications. However, only 43.1% agreed or strongly agreed that they would disclose a medical error even if it might have legal consequences.

Table 3: Ethical Reasoning Self-Assessment

VARIABLE (n=116)	STRONGLY DISAGREE (%)	DISAGREE (%)	NEUTRAL (%)	AGREE (%)	STRONGLY AGREE (%)
Can readily identify ethical dilemmas in clinical settings	3 (2.6%)	2 (1.7%)	27 (23.3%)	66 (56.9%)	18 (15.5%)
Can recognize when a clinical issue has both ethical and legal implications.	3 (2.6%)	1 (0.9%)	20 (17.2%)	71 (61.2%)	21 (18.1%)
Feels confident applying ethical frameworks [e.g., autonomy, beneficence, justice, non-maleficence] in clinical situations.	3 (2.6%)	2 (1.72%)	27 (23.3%)	69 (59.5%)	15 (12.9%)

Comfortable balancing patient autonomy with legal obligations.	3 (2.6%)	6 (5.2%)	33 (28.4%)	63 (54.3%)	11 (9.5%)
Would disclose a medical error even if it might have legal consequences	7 (6.0%)	6 (5.2%)	53 (45.7%)	38 (32.8%)	12 (10.3%)

In the clinical vignette assessment, 69.0% chose the correct initial action regarding a patient refusing life-saving blood transfusion on religious grounds, 94.0% responded appropriately to a non-disclosure request of HIV status, and 81.9% gave the correct response to an unreported colleague medication error. The mean ethical reasoning score was 21.06 ± 3.40 (out of a possible maximum score).

Table 3.1: Ethical Reasoning Clinical Vignette

VARIABLE (n=116)	CORRECT (%)	INCORRECT (%)
Appropriateness of initial clinical action in response to a patient refusing a life-saving blood transfusion for religious reasons	80 (69.0%)	36 (31.0%)
Appropriate response to a disclosure decision when a patient requests non-disclosure of HIV status to a spouse	109 (94.0%)	7 (6.0%)
Appropriate response to an unreported colleague medication error with potential patient harm	95 (81.9%)	21 (18.1%)

RISK ASSESSMENT IN CLINICAL DECISION-MAKING

Participants demonstrated good self-perceived risk assessment practices. The majority agreed or strongly agreed that medico-legal training had improved their awareness of risks (82.8%), influenced their management of high-risk cases (77.6%), and encouraged thorough clinical documentation (82.8%). The mean risk assessment score was 27.29 ± 4.86.

Table 4: Risk Assessment in Clinical Decision Making

VARIABLE (n=116)	STRONGLY DISAGREE (%)	DISAGREE (%)	NEUTRAL (%)	AGREE (%)	STRONGLY AGREE (%)
Improved awareness of medico-legal risks in clinical practice following training	3(2.6%)	1(0.9%)	16(13.8%)	59(50.9%)	37(31.9%)

Consideration of potential legal consequences in clinical decision-making	3(2.6%)	2(1.7%)	20(17.2%)	61(52.6%)	30(25.9%)
Influence of medico-legal knowledge on management of high-risk cases	3(2.6%)	1(0.9%)	22(18.9%)	61(52.6%)	29(25%)
Thorough clinical documentation driven by awareness of legal risk	2(1.7%)	2(1.7%)	16(13.8%)	56(48.3%)	40(34.5%)
Perceived impact of fear of litigation on clinical judgment	8(6.9%)	11(9.5%)	39(33.6%)	47(40.5%)	11(9.5%)
Escalation of uncertain cases to a supervisor due to medico-legal concerns	3(2.6%)	4 (3.5%)	40(34.5%)	47(40.5%)	22(18.9%)
Adherence to Medical and Dental Council of Nigeria guidelines in managing high-risk cases	3(2.6%)	1(0.9%)	17(14.7%)	57(49.1%)	38(32.8%)

PERCEPTION OF MEDICO-LEGAL TRAINING

Students held largely positive perceptions of the training they received. Over 70% agreed or strongly agreed that the training was adequate for preparing them for ethical dilemmas, relevant to real-life clinical practice, and had improved their clinical risk assessment. A strong majority (86.3%) expressed the need for increased medico-legal teaching in the undergraduate curriculum, and 78.4% preferred more structured and practical (case-based) teaching over lectures alone. The mean perception score was 27.74 ± 5.35.

Table 5: Perception of Training Advocacy

VARIABLES (n=116)	STRONGLY DISAGREE (%)	DISAGREE (%)	NEUTRAL (%)	AGREE (%)	STRONGLY AGREE (%)
Perceived adequacy of medico-legal training in preparing for ethical dilemmas.	4 (3.5%)	3 (2.6%)	26 (22.4%)	63 (54.3%)	20 (17.2%)
Improvement in clinical risk assessment following medico-legal training.	3 (2.6%)	2 (1.72%)	25 (21.6%)	62 (53.5%)	24 (20.7%)

Relevance of medico-legal training to real-life clinical practice.	5 (4.3%)	0 (0%)	18 (15.5%)	63 (54.3%)	30 (25.9%)
Perceived legal protection associated with medico-legal training.	5 (4.3%)	6 (5.2%)	39 (33.6%)	50 (43.1%)	16 (13.8%)
Need for increased medico-legal teaching in the medical curriculum.	3 (2.6%)	1 (0.9%)	12 (10.3%)	46 (39.7%)	54 (46.6%)
Perceived effectiveness of practical case-based teaching compared to lectures alone.	5 (4.3%)	2 (1.7%)	18 (15.5%)	40 (34.5%)	51 (43.9%)
Preference for more structured medico-legal education prior to graduation.	4 (3.5%)	4 (3.5%)	16 (13.8%)	40 (34.5%)	52 (44.8%)

BIVARIATE ANALYSIS

Cross-tabulations were performed to examine associations between ethical reasoning and medicolegal training, risk assessment and medicolegal training, and between perception and medical training. Pearson correlation and corresponding p-values are reported for each analysis.

Bivariate analysis using Pearson correlation revealed no statistically significant association between self-rated depth of medico-legal training and ethical reasoning score ($r = 0.151$, $p = 0.105$) or risk assessment score ($r = 0.075$, $p = 0.426$).

However, there was a strong positive correlation between ethical reasoning and risk assessment scores ($r = 0.761$, $p < 0.001$). Perception of training also showed moderate positive correlations with both risk assessment ($r = 0.576$, $p < 0.001$) and ethical reasoning ($r = 0.415$, $p < 0.001$).

Table 6: Associations between medicolegal training and independent variables

Variable		Self-rated depth of training	risk_assessment	ethical_reasoning	perception
Self-rated depth of training	Pearson Correlation	1	.075	.151	.151
	Sig. (2-tailed)		.426	.105	.105
	N	116	116	116	116
risk_assessment score	Pearson Correlation	.075	1	.761**	.576**
	Sig. (2-tailed)	.426		.000	.000

	N	116	116	116	116
ethical_reasoning score	Pearson Correlation	.151	.761**	1	.415**
	Sig. (2-tailed)	.105	.000		.000
	N	116	116	116	116
Perception score	Pearson Correlation	.151	.576**	.415**	1
	Sig. (2-tailed)	.105	.000	.000	
	N	116	116	116	116

**. Correlation is significant at the 0.01 level (2-tailed).

MULTIVARIATE ANALYSIS

Multiple linear regression was conducted to determine whether risk assessment, ethical reasoning, and perception scores independently predicted the frequency with which medico-legal principles were reinforced during clinical rotations. The analysis showed that none of the independent variables were statistically significant predictors in the model ($p > 0.05$). A small positive association was nevertheless noted between risk assessment score and frequency of reinforcement ($\beta = 0.116$, $p = 0.473$), while ethical reasoning and perception scores showed negligible effects ($\beta = 0.004$ for both).

Table 7: Predictors of efficacy of medicolegal training

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.030	.574		5.275	.000
	risk_assessment	.021	.029	.116	.720	.473
	ethical_reasoning	.001	.038	.004	.027	.978
	perception	.001	.019	.004	.033	.974

DISCUSSION

This study evaluated the association between medico-legal training exposure and competencies in ethical reasoning and risk assessment among final-year medical students in Southwest Nigeria, offering important empirical evidence in a context where such data are scarce. While a substantial proportion of participants (73.9%) reported exposure to medico-legal training, the findings revealed only weak and non-significant associations between training exposure and both ethical reasoning ($r = 0.151$, $p = 0.105$) and risk assessment ($r = 0.075$, $p = 0.426$). These results suggest that current training approaches may have limited impact on developing these critical competencies.

The predominance of lecture-based teaching (58.3%), with limited use of case-based discussions (26.0%), may explain the weak associations observed. This aligns with educational theory, which suggests that didactic approaches alone are insufficient for developing higher-order cognitive skills such as ethical reasoning and clinical judgment 21,22. Studies have shown that experiential and problem-based learning approaches are more effective in fostering critical thinking and decision-making in complex clinical scenarios. [23,24]

Despite widespread exposure to medico-legal training (73.9%) and largely positive perceptions (>70%), the absence of statistically significant associations between training depth and both ethical reasoning ($r = 0.151$, $p = 0.105$) and risk assessment ($r = 0.075$, $p = 0.426$) raises concerns about the effectiveness of current training models. This apparent contradiction may be explained by differences in the quality versus quantity of training received, possible ceiling effects in self-reported competency measures, and the influence of self-report bias. This finding suggests that exposure alone may not strongly translate into competence, supporting previous research indicating that knowledge acquisition does not necessarily predict ethical performance in clinical practice [25,26].

It highlights the need for more structured, competency-based training that emphasizes application rather than theoretical understanding. Nevertheless, the relatively high mean scores for ethical reasoning (21.06 ± 3.40) and risk assessment (27.29 ± 4.86) indicate that students possess a foundational level of competence. The vignette-based responses further support this, with high correct response rates in scenarios involving HIV disclosure (94.0%) and management of colleague error (81.9%). These findings suggest that students are more comfortable handling structured ethical dilemmas, likely due to repeated exposure during training. However, the relatively low willingness to disclose medical errors in the face of potential legal consequences (43.1%) reveals a critical gap. This reluctance likely stems from fear of litigation, a prevailing "culture of blame" in healthcare, limited emphasis on psychological safety during training, and broader cultural and systemic factors in the Nigerian context [27,28].

A key finding of this study is the strong positive correlation between ethical reasoning and risk assessment ($r = 0.761$, $p < 0.001$). This suggests considerable conceptual overlap between the two constructs, which is theoretically expected given that ethical competence forms the foundation for safe and responsible clinical decision-making [29]. However, this high correlation also raises the possibility of measurement redundancy, and future studies may benefit from more distinct instruments to differentiate these domains. The moderate correlations between perception of training and both risk assessment ($r = 0.576$, $p < 0.001$) and ethical reasoning ($r = 0.415$, $p < 0.001$) further emphasize the importance of learner engagement. Students who perceive training as relevant and practical are more likely to internalize medico-legal principles. This is consistent with adult learning theory, which emphasizes the role of perceived relevance in knowledge retention and application 30. The strong preference for more structured and case-based teaching (78.4%) reinforces the need to redesign curricula to align with student expectations and learning needs.

Interestingly, the regression analysis indicated that ethical reasoning, risk assessment, and perception did not significantly predict the frequency of medico-legal reinforcement during clinical rotations. This suggests that reinforcement in clinical settings may be inconsistent or inadequately structured. The theory–practice gap remains a persistent challenge in medical education, where knowledge acquired in classrooms is not always effectively translated into clinical behavior 31. Without deliberate integration of medico-legal principles into clinical supervision, students may struggle to apply theoretical knowledge in real-world situations.

From a policy perspective, these findings underscore the need for curriculum standardization across Nigerian medical schools, particularly under the oversight of the Medical and Dental Council of Nigeria. Standardization would ensure consistency in training quality and expected competencies. Furthermore, there is a need to transition from passive to active learning strategies, incorporating simulation, interdisciplinary teaching, and reflective practice. Longitudinal integration of medico-legal education throughout medical training, rather than isolated modules, may also improve retention and application.

This study has several limitations. The cross-sectional design limits causal inference and the use of self-reported measures introduce the possibility of social desirability bias. Additionally, although multiple institutions were included, the findings may not be generalizable to all regions of Nigeria due to convenience sampling and overrepresentation from certain institutions such as UNIMED (26.1%) and ABUAD (21.7%). Future studies should adopt longitudinal or interventional designs, objective assessments (e.g., OSCEs), and more representative sampling to better evaluate medico-legal competence.

CONCLUSION

This study demonstrates that although medico-legal training exposure among final-year medical students in Southwest Nigeria is relatively common, the current mode of delivery remains largely passive and may not be sufficient to produce the desired level of ethical reasoning and risk assessment competencies required for safe clinical practice. The positive correlations observed between ethical reasoning, risk assessment, and medico-legal perception suggest that these domains are closely interrelated and that strengthening one may reinforce the others [2,3]. However, the weak and non-significant associations between training depth and both ethical reasoning and perception indicates that mere exposure, without structured and interactive pedagogy, is unlikely to translate into meaningful competence [2].

These findings are consistent with earlier Nigerian studies showing that medical students desire formal ethics education and often report inadequate exposure within the undergraduate curriculum 3,1. They also align with broader evidence that legal and ethical teaching is most effective when delivered through scenario-based learning, small-group discussion, simulation, and other active methods rather than didactic teaching alone [2]. In a setting such as Nigeria, where medical litigation, patient rights awareness, and ethical complexity are increasing, medico-legal education should be deliberately integrated into the medical curriculum as a longitudinal, competency-based component rather than an occasional or peripheral topic [2,4].

Accordingly, medical schools, regulators, and curriculum planners should prioritize standardized medico-legal content, practical case-based instruction, and assessment strategies that test real decision-making capacity. Such reform will better prepare future doctors to respond ethically, assess clinical risk more accurately, and make legally defensible decisions in routine practice [2,3].

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REFERENCES

1. Abbasi M, Shirazi M, Torkmandi H, Homayoon S, Abdi M. Impact of teaching, learning, and assessment of medical law on cognitive, affective and psychomotor skills of medical students: a systematic review. BMC Med Educ [Internet]. 2023 Sep 26 [cited 2026 Feb 12];23:703. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10523676/
2. Dunn M. On the relationship between medical ethics and medical professionalism. Journal of Medical Ethics [Internet]. 2016 Oct 1 [cited 2026 Feb 12];42[10]:625–6. Available from: https://jme.bmj.com/content/42/10/625
3. Okonofua F. Medical negligence in Nigeria: what's known, and what needs to be done. The Conversation [Internet]. 2026 Jan 20 [cited 2026 Feb 12]. Available from: https://theconversation.com/medical-negligence-in-nigeria-whats-known-and-what-needs-to-be-done-273592
4. Adejumo OA, Adejumo OA. Legal perspectives on liability for medical negligence and malpractices in Nigeria. The Pan African Medical Journal [Internet]. 2020 Feb 17 [cited 2026 Feb 12];35[44]. Available from: https://www.panafrican-med-journal.com//content/article/35/44/full
5. Iloh GUP, Chuku A, Amadi AN. Medical Errors in Nigeria: A Cross-sectional Study of Medical Practitioners in Abia State. Arch Med Health Sci [Internet]. 2017 [cited 2026 Feb 12];5[1]:44-9. Available from: https://journals.lww.com/armh/fulltext/2017/05010/medical_errors_in_nigeria__a_cross_sectional_study.9.aspx
6. Monsudi KF, Oladele TO, Nasir AA, Ayanniyi AA. Medical ethics in sub-Sahara Africa: closing the gaps. African Health Sciences [Internet]. 2015 [cited 2026 Feb 12];15[2]:673–81. Available from: https://www.ajol.info/index.php/ahs/article/view/117621
7. Okoye O, Nwachukwu D, Maduka-Okafor FC. Must we remain blind to undergraduate medical ethics education in Africa? A cross-sectional study of Nigerian medical students. BMC Med Ethics [Internet]. 2017 Dec 8 [cited 2026 Feb 12];18:73. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC5723059/
8. Moodley K, Kabanda SM, Kleinsmidt A, Obasa AE. COVID-19 underscores the important role of Clinical Ethics Committees in Africa. BMC Med Ethics [Internet]. 2021 Sep 25 [cited 2026 Feb 12];22:131. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC8465788/
9. Constantin GD, Hoinoiu B, Veja I, Lile IE, Mazilescu CA, Luca RE, et al. Scenario-Based Ethical Reasoning Among Healthcare Trainees and Practitioners: Evidence from Dental and Medical Cohorts in Romania. Healthcare [Basel] [Internet]. 2025 Oct 14 [cited 2026 Feb 12];13[20]:2583. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC12563331/
10. Evans A, Refrow-Rutala D. Medico-Legal Education: A Pilot Curriculum to Fill the Identified Knowledge Gap. J Grad Med Educ [Internet]. 2010 Dec [cited 2026 Feb 12];2[4]:595–9. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC3010946/
11. Coleman AME. Medical Ethics and Medical Professionalism in Low and Middle Income [LAMIC] Countries: Challenges and Implications. Bangladesh Journal of Bioethics [Internet]. 2015 Jul 1 [cited 2026 Feb 12];6[2]:1–7. Available from: https://www.banglajol.info/index.php/BIOETHICS/article/view/25739
12. Yarhere IE, Ogundipe O, Williams A, Farouk AG, Raji Y, Makanjuola V, et al. Scaling Up Numbers and Competency of Graduating Medical and Dental Students in Nigeria: Need to Improve Medical Trainers' Competency in Teaching. Nigerian Journal of Clinical Practice [Internet]. 2023 Sep [cited 2026 Feb 12];26[9]:1377. Available from: https://journals.lww.com/njcp/fulltext/2023/09000/scaling_up_numbers_and_competency_of_graduating.22.aspx
13. Bayuo J, Koduah AO. Pattern and outcomes of medical malpractice cases in Ghana: a systematic content analysis. Ghana Med J [Internet]. 2022 Dec [cited 2026 Feb 12];56[4]:322–30. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10416294/
14. Arbel E, Reese A, Oh K, Mishra A. Medical Law and Medical School Curricula: A Systematic Review. Cureus [Internet]. 2024 Feb 17 [cited 2026 Feb 12];16[2]:e54377. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10948381/
15. Sharma M, Murphy R, Doody GA. Do we need a core curriculum for medical students? A scoping review. BMJ Open [Internet]. 2019 Aug 30 [cited 2026 Feb 12];9[8]:e027369. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC6720253/

16. Zhao B, Cajas-Monson LC, Ramamoorthy S. Malpractice Allegations: A Reality Check for Resident Physicians. Am J Surg [Internet]. 2019 Feb [cited 2026 Feb 12];217[2]:350–5. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC6322954/
17. Barnie BA, Forson PK, Opare-Addo MNA, Appiah-Poku J, Rhule GP, Oduro G, et al. Knowledge and Perceptions of Health Workers' Training on Ethics, Confidentiality and Medico-Legal Issues. J Clin Res Bioeth [Internet]. 2015 Feb [cited 2026 Feb 12];6[1]:205. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC4795178/
18. Shihah ASB, Alrashed AH, Al-Abduljabbar KA, Alamri HA, Shafiq M, Ahmed MN, et al. Awareness of medical law among health care practitioners in Saudi Arabia. Saudi Medical Journal [Internet]. 2022 Aug 1 [cited 2026 Feb 12];43[8]:954–8. Available from: https://smj.org.sa/content/43/8/954
19. World Medical Association. WMA Resolution on the Inclusion of Medical Ethics and Human Rights in the Curriculum of Medical Schools World-Wide [Internet]. [cited 2026 Feb 12]. Available from: https://www.wma.net/policies-post/wma-resolution-on-the-inclusion-of-medical-ethics-and-human-rights-in-the-curriculum-of-medical-schools-world-wide/
20. Hsieh H yen, Lin C her, Huang R, Lin G chun, Lin JY, Aldana C. Challenges for Medical Students in Applying Ethical Principles to Allocate Life-Saving Medical Devices During the COVID-19 Pandemic: Content Analysis. JMIR Medical Education [Internet]. 2024 Jan 5 [cited 2026 Feb 12];10[1]:e52711. Available from: https://mededu.jmir.org/2024/1/e52711
21. Wiggins, J. S. (1965). Book Reviews : Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook II: Affective Domain by David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia. New York: David McKay Company, 1964. Pp. Vii + 196. Educational and Psychological Measurement. https://doi.org/10.1177/001316446502500324
22. Harden R. M. (2000). The integration ladder: a tool for curriculum planning and evaluation. Medical education, 34(7), 551–557. https://doi.org/10.1046/j.1365-2923.2000.00697.x
23. Kolb, D. A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, NJ: Prentice Hall. [cited 2026 Feb 12]. Available from: http://academic.regis.edu/ed205/Kolb.pdf
24. Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., Fineberg, H., Garcia, P., Ke, Y., Kelley, P., Kistnasamy, B., Meleis, A., Naylor, D., Pablos-Mendez, A., Reddy, S., Scrimshaw, S., Sepulveda, J., Serwadda, D., & Zurayk, H. (2010). Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. Lancet (London, England), 376(9756), 1923–1958. https://doi.org/10.1016/S0140-6736(10)61854-5
25. Self, D. J., Olivarez, M., & Baldwin, D. C., Jr (1998). The amount of small-group case-study discussion needed to improve moral reasoning skills of medical students. Academic medicine : journal of the Association of American Medical Colleges, 73(5), 521–523. https://doi.org/10.1097/00001888-199805000-00019
26. Goldie J. (2000). Review of ethics curricula in undergraduate medical education. Medical education, 34(2), 108–119. https://doi.org/10.1046/j.1365-2923.2000.00607.x
27. Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.). (2000). To Err is Human: Building a Safer Health System. National Academies Press (US). https://doi.org/10.17226/9728
28. Gallagher, T. H., Waterman, A. D., Ebers, A. G., Fraser, V. J., & Levinson, W. (2003). Patients' and physicians' attitudes regarding the disclosure of medical errors. JAMA, 289(8), 1001–1007. https://doi.org/10.1001/jama.289.8.1001
29. Beauchamp, T., & Childress, J. (2019). Principles of Biomedical Ethics: Marking Its Fortieth Anniversary. The American Journal of Bioethics, 19(11), 9–12. https://doi.org/10.1080/15265161.2019.1665402
30. Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015). The Adult Learner (8th ed.). Routledge.
31. Eraut *, M. (2004). Informal learning in the workplace. Studies in Continuing Education, 26(2), 247–273. https://doi.org/10.1080/158037042000225245

APPENDIX I: INFORMED CONSENT FORM

TITLE OF STUDY: Medico-Legal Training and Competency in Ethical Reasoning and Risk Assessment among Final Year Medical Students in Southwest, Nigeria

FINANCIAL SPONSORSHIP: This research is self-sponsored.

PURPOSE OF THE RESEARCH: This study aims to evaluate the impact of medico-legal training on ethical reasoning and risk assessment in clinical decision-making among final-year medical students in Southwest Nigeria.

PROCEDURES INVOLVED: You will be asked to complete a structured questionnaire. The process will take approximately 10 minutes. No personal identifiers will be collected, and your responses will be used solely for research purposes.

RISKS: There is little to no risk involved in participating in this study.

BENEFITS: While there may be no direct benefit to you, your input will contribute to improved Medico-legal training and clinical decision-making skills amongst near-independent doctors in Nigeria. The findings may influence future health policies and promote more effective and robust medico-legal curriculum.

CONFIDENTIALITY: All information collected in this study will be kept strictly confidential. No names or personal identifiers will be used or published.

COMPENSATION:

There shall be no financial compensation for participating in this study.

VOLUNTARY PARTICIPATION: Participation in this study is entirely voluntary. You are free to decline participation or withdraw at any point without any consequence or loss of benefits to which you are otherwise entitled. Your choice will not affect you in any way.

CONTACT INFORMATION: For further inquiries or complaints, please contact:

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CERTIFICATE OF CONSENT: I certify that I have been adequately informed about the research, including the purpose, procedures, risks, and potential benefits. I voluntarily give permission to participate in this study.

APPENDIX II: QUESTIONNAIRE

TITLE: MEDICO-LEGAL TRAINING AND COMPETENCY IN ETHICAL REASONING AND RISK ASSESSMENT AMONG FINAL YEAR MEDICAL STUDENTS IN SOUTHWEST, NIGERIA

Dear Respondent,

Thank you for participating in this primary study titled "Medico-Legal Training and Competency in Ethical Reasoning and Risk Assessment among Final Year Medical Students in Southwest, Nigeria." This questionnaire aims to evaluate the impact of medico-legal training on ethical reasoning and risk assessment in clinical decision-making among final-year medical students in Southwest Nigeria. The insights will contribute to understanding how medico-legal training enhances legal consciousness and clinical decision-making skills in future doctors.

Your responses are voluntary, anonymous, and confidential. No personal identifying information will be collected, and data will be used solely for research purposes. The questionnaire should take approximately 10-15 minutes to complete. If you feel uncomfortable with any question, you may skip it.

By proceeding, you provide informed consent to participate.

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Age (as at last birthday) _____
2. Gender: Male [ ] Female [ ]
3. Institution of study:

[ ] University of Ibadan
[ ] Ladoke Akintola University of Technology, LAUTECH
[ ]Bowen University
[ ] University of Lagos
[ ] Lagos State University College of Medicine
[ ] Eko University of Medical Sciences, Eko UNIMED
[ ] Olabisi Onabanjo University, OOU
[ ] Babcock University, Ilishan-remo, Ogun State
[ ] Obafemi Awolowo University, Ile-Ife, OAU
[ ] Osun State University
[ ] Ekiti State University, EKSU
[ ] Afe Babalola University, Ado-Ekiti (ABUAD)
[ ] University of Medical Sciences, Ondo (State)

SECTION B: EXPOSURE TO MEDICO-LEGAL TRAINING AND KNOWLEDGE

4. Have you had any training on medico legal? Yes [ ] No [ ]
5. What type of medico legal training did you receive? [SELECT ALL THAT APPLIES]

[ ] School-based lectures
[ ] Case-based discussions
[ ] Mock trials / courtroom simulations
[ ] Ethics committee participation
[ ] Clinical risk management sessions
[ ] Online modules

6. How frequently were medico-legal principles reinforced during clinical rotations?

Never [ ] Rarely [ ] Sometimes [ ] Often [ ] Very Often [ ]

7. Self-rated depth of training [scale of 1-10]

Part B: Medico-legal Knowledge

Choose the option you think is correct

8. A valid informed consent requires

Patient signature only [ ] Disclosure of risks, benefits, and alternatives, with voluntary agreement [ ] Family approval [ ] Documentation by nursing staff [ ]

9. To establish medical negligence, it must be shown that:

The patient had a poor outcome [ ] The doctor breached a duty of care and caused harm [ ] The patient was unhappy [ ] Documentation was incomplete [ ]

10. The legal "standard of care" is generally determined by:

The personal opinion of the treating physician [ ] Hospital policy only [ ] What a reasonably competent physician would do in similar circumstances [ ] Patient expectations [ ]

11. A physician may breach patient confidentiality WITHOUT consent when:

The doctor feels it is necessary [ ] There is a legal obligation to report certain conditions [ ] The information is useful for teaching [ ] The family asks for details [ ]

12. A patient has decision-making capacity if they can:

Agree with the doctor [ ] Understand, appreciate, reason, and communicate a choice [ ] Sign a document [ ] Speak clearly [ ]

13. Which statement regarding clinical documentation is TRUE?

Documentation can be altered later if necessary [ ] If it was not documented, it is presumed not to have occurred [ ] Verbal communication replaces written records [ ] Documentation is optional in low-risk cases [ ]

14. Which of the following are attributes of medical professionalism?

Honesty and integrity [ ] Personal responsibility [ ] Commitment to learning [ ] All of the above [ ]

SECTION C: ETHICAL REASONING SELF ASSESSMENT

Ethical reasoning is the process of thinking carefully about what the right thing is to do when faced with a difficult or morally complex situation.

Mark the box that most nearly describes your response

QUESTIONS	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
15. I can readily identify ethical dilemmas in clinical settings					
16. I can recognize when a clinical issue has both ethical and legal implications.					
17. I feel confident applying ethical frameworks [e.g., autonomy, beneficence, justice, non-maleficence] in clinical situations.					
18. I am comfortable balancing patient autonomy with legal obligations.					
19. I would disclose a medical error even if it might have legal consequences					

20. A patient refuses a life-saving blood transfusion for religious reasons. The most appropriate initial action is:

Respect the patient's autonomy after assessing competence [ ] Proceed with transfusion regardless of refusal [ ] Get a court order before life-saving transfusion [ ] Transfer care without explanation [ ]

21. A patient asks you not to tell their spouse about an HIV diagnosis. What should guide your decision?

Personal opinion [ ] Nigerian public health laws and ethical guidelines [ ] Pressure from family [ ] Fear of legal action [ ]

22. You notice a colleague has made a medication error that could harm a patient but has not reported it. What is the most appropriate action?

Ignore it [ ] Report to the clinical supervisor according to MDCN reporting guidelines [ ] Confront the colleague publicly [ ] Correct the mistake secretly without informing anyone [ ]

SECTION D: RISK ASSESSMENT IN CLINICAL DECISION MAKING

Mark the box that most describes your response as a near independent doctor

QUESTIONS	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
23. The training improved my awareness of medico-legal risks in clinical practice.					
24. I consider potential legal consequences when making clinical decisions					
25. Medico-legal knowledge influences how I manage high-risk cases.					
26. I document thoroughly due to awareness of legal risk.					
27. Fear of litigation may affect my clinical judgment.					
28. I would escalate uncertain cases to a supervisor due to medico-legal concerns.					
29. I will follow MDCN guidelines to manage high-risk cases safely.					

SECTION E: PERCEPTION OF TRAINING ADEQUACY
Mark the box that most nearly describes your response

QUESTIONS	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
30. My medico-legal training adequately prepares me for ethical dilemmas.					
31. The training improved my ability to assess clinical risk.					
32. The training was relevant to real-life clinical practice					
33. I feel more legally protected because of my training.					
34. More medico-legal teaching should be included in the curriculum.					
35. Practical case-based teaching was more helpful than lectures alone.					
36. I would like more structured medico-legal education before graduation.					

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