



Description of Medical Students' Understanding of Islamic Values in Forming the Professional Character of Muslim Doctors: Literature Review

Ade Lutfia Widya N¹, Sri Julyani¹, Rachmat Faisal Syamsu¹

¹Faculty of Medicine, Muslim University of Indonesia, Makassar, Indonesia

*Corresponding Author: Ade Lutfia Widya N

E-mail: fiah3923@gmail.com



Article Info

Article history:

Received 17 June 2026

Received in revised form 9

July 2026

Accepted 24 July 2026

Keywords:

Islamic Values

Medical Students

Professionalism

Muslim Doctors

Narrative Literature Review

Abstract

Professionalism is a core competency in medical education and requires not only scientific knowledge and clinical skills but also ethical, moral, and spiritual values. In Islamic medical education, values such as amanah, sidq, rahmah, 'adl, ihsan, ikhlas, and sabar are considered essential in shaping the professional character of Muslim doctors. This study aimed to describe medical students' understanding of Islamic values and their role in forming the professional character of Muslim physicians. This study used a narrative literature review design. Literature was searched through PubMed/MEDLINE, Google Scholar, ResearchGate, and manual reference searches. From 160 initially identified articles, 15 articles published between 2021 and 2025 met the inclusion criteria and were analyzed using narrative synthesis. The findings showed that medical students generally demonstrated good cognitive and affective understanding of Islamic values, particularly in relation to integrity, responsibility, and spiritual awareness. However, the behavioral implementation of these values in clinical settings remained limited. Several studies showed a gap between students' understanding of Islamic values and their professional behavior, including low consistency in applying Islamic etiquette and limited courage to report professional misconduct. The internalization of Islamic values was influenced by curriculum integration, role models, academic culture, clinical experience, spirituality, psychological well-being, and peer pressure. This review concludes that Islamic values are highly relevant to medical professionalism, but their implementation requires structured curriculum integration, continuous character assessment, reflective clinical learning, and strong role models from senior clinicians.

Introduction

Professionalism is a fundamental competency in medical education, encompassing scientific knowledge, clinical skills, and ethical and moral values reflected in physicians' daily practice (Mueller, 2015; Mahajan et al., 2016; Desai & Kapadia, 2022). As the medical profession carries a profound responsibility for protecting human life, the development of professional character cannot rely solely on mastery of biomedical sciences. Instead, it requires the cultivation of integrity, accountability, empathy, and commitment to patient welfare. Accordingly, the World Medical Association and international medical education accreditation bodies recognize professionalism as a mandatory competency for all medical graduates (Lin & Lapping, 2026; Romero et al., 2026; Arfeen et al., 2026).

Despite its recognized importance, fostering professionalism among medical students remains a significant challenge. Several studies have reported suboptimal professional attitudes and behaviors during medical training. Alamgir et al. (2025) found that 70.23% of undergraduate medical students in Pakistan demonstrated unprofessional attitudes, while Fahmirauf et al. (2025) reported that only 58.3% of Indonesian clinical medical students achieved a good level of professionalism. These findings suggest that professional competence is influenced not only by cognitive knowledge but also by effective character formation throughout medical education (Habsi et al., 2026; Akmansyah et al., 2026; Chen et al., 2026).

Within the context of Islamic medical education, professionalism extends beyond universal ethical principles by incorporating Islamic values as an essential foundation for character development. Values such as *amanah* (trustworthiness), *ṣidq* (honesty), *rahmah* (compassion), *‘adl* (justice), *ihsan* (excellence), and *ikhlas* (sincerity), which are rooted in the principles of *Maqāṣid al-Sharī‘ah*, are expected to guide Muslim physicians in delivering ethical, compassionate, and accountable healthcare (Yasin & Haq, 2026; Nurhasanah & Idharudin, 2026; Haque et al., 2025; Azis et al., 2025). Consequently, many Islamic medical schools have attempted to integrate these values into their curricula. However, the implementation and effectiveness of such integration remain inconsistent across institutions and lack standardized approaches (Amalia et al., 2026; Mubarak, 2026; Garba et al., 2026).

Evidence also indicates that students' understanding of Islamic values does not always translate into professional behavior in clinical settings. Khalid et al. (2025) reported that although most internship students at Universitas Muslim Indonesia demonstrated good competency in Qur’anic recitation and memorization, only 58.3% consistently practiced Islamic etiquette during clinical training.⁷ Similarly, Tayeb et al. (2023) emphasized that Islamic values play a substantial yet complex role in shaping the professionalism of Muslim physicians, particularly when religious principles interact with the ethical demands of contemporary clinical practice. These findings highlight a persistent gap between knowledge, internalization of values, and their practical implementation in professional conduct (Le Chaffotec et al., 2026; Saputra et al., 2026; Bertoni et al., 2026).

Although numerous studies have examined medical professionalism and the integration of Islamic values separately, literature that comprehensively synthesizes medical students’ understanding of Islamic values and their contribution to the development of the professional character of Muslim physicians remains limited. Therefore, this narrative literature review aims to describe medical students’ understanding of Islamic values and examine their role in shaping the professional character of Muslim physicians. The findings are expected to provide evidence for strengthening curriculum development and character education in Islamic medical institutions.

Methods

Research Design

This study employed a narrative literature review design. This design aimed to collect, examine, and synthesize relevant scientific literature on medical students' understanding of Islamic values in shaping the professional character of Muslim physicians. A narrative review was chosen because the topic under study is conceptual, multidimensional, and encompasses various aspects, such as understanding Islamic values, medical education, medical professionalism, the character of Muslim physicians, and factors influencing the internalization of values in academic and clinical settings. Through this approach, researchers were able to describe findings from various articles descriptively and interpretively, without conducting quantitative meta-analysis. This study did not use a formal systematic review approach and did not conduct meta-analysis. Therefore, the literature selection and synthesis process was conducted narratively-descriptively based on the articles' relevance to the research objectives.

In this study, the literature obtained was analyzed narratively to identify patterns, similarities, differences, and relationships among research findings related to Islamic values and the development of the professional character of Muslim physicians..

Literature Search Strategy

The literature search was conducted through several scientific databases, namely PubMed/MEDLINE, Google Scholar, and ResearchGate. Additionally, a manual search was conducted through the bibliography of articles deemed relevant. The keywords used in the literature search were compiled in both English and Indonesian to broaden the scope of articles retrieved. The English keywords included: "medical student" OR "medical education" AND "Islamic values" OR "Islamic ethics" OR "Muslim" AND "professionalism" OR "professional character" OR "character formation." The Indonesian keywords included: "Islamic values" OR "Islamic ethics" AND "medical students" OR "medical education" AND "professionalism" OR "professional character." The article search was conducted by considering the appropriateness of the title, abstract, and content of the article, as well as its relevance to the research objectives.

Inclusion and Exclusion Criteria

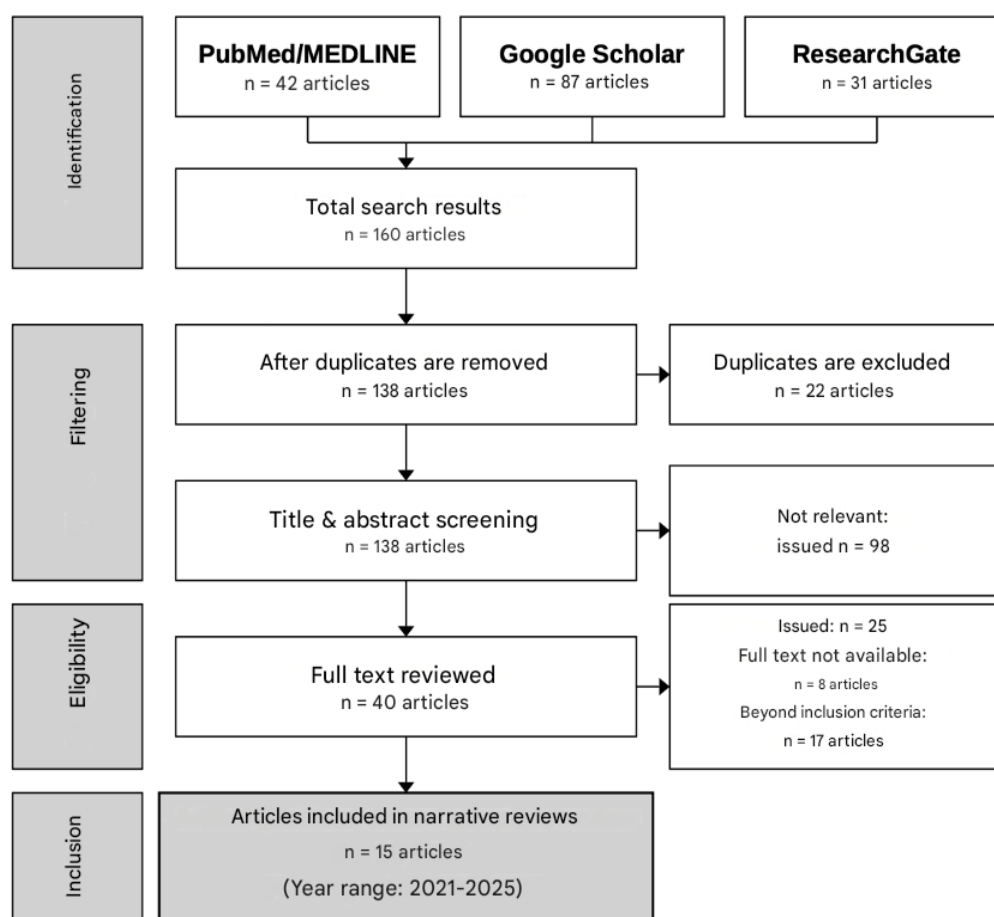
Inclusion criteria for this study included scientific articles discussing Islamic values, Islamic ethics, medical professionalism, or the character development of Muslim physicians. Selected articles must be relevant to medical students, young doctors, healthcare workers, or medical education, and address the understanding, perception, attitudes, or implementation of Islamic values in the context of medical education and practice. Furthermore, articles must be available in full text, published within the last 10 years, in Indonesian or English, and from national or international journals relevant to the research topic. Exclusion criteria for this study included articles that only discuss Islamic values in general without a direct connection to medical education or medical professionalism. Articles that discuss medical professionalism but do not include dimensions of Islamic values, spiritual values, or moral values were also excluded from this review. Furthermore, opinion articles, editorials, or letters to the editor that lack a clear research methodology, as well as articles not available in full text, were excluded from the literature selection process..

Literature Selection Process

Literature selection was conducted in stages. The first stage was identification, which involved searching articles through three major databases: PubMed/MEDLINE (n = 42), Google Scholar (n = 87), and ResearchGate (n = 31), resulting in a total of 160 articles. A manual search was also conducted through the bibliographies of articles deemed relevant. The second stage was screening. A total of 22 duplicate articles were removed, leaving 138 articles, which were then screened based on the relevance of the title and abstract to the research topic. At this stage, 98 articles were excluded due to their relevance to the research objectives, leaving 40 articles for further review. The third stage was eligibility assessment. Articles deemed relevant were then read in full to assess their compliance with the inclusion and exclusion criteria. A total of 25 articles were excluded: 8 articles were not available in full text, and 17 articles did not meet the established inclusion criteria.

The fourth stage was inclusion. Literature meeting the criteria was then used as the primary material in compiling the results and discussion. A total of 15 articles were declared to meet all inclusion criteria and were used in the narrative synthesis process.

Literature Selection Flow



Data Analysis and Synthesis

Data from articles that met the inclusion criteria were manually extracted. Information extracted from each article included the author's name and year of publication, the article title, the journal name or publication source, the study design or type, the study subjects or population, the Islamic values discussed, the aspects of professionalism or character of Muslim doctors studied, the main research findings, and conclusions or implications relevant to the research topic. All data obtained were then compiled into a synthesis table to facilitate analysis, grouping findings, and comparisons between articles.

Data Analysis

Data analysis in this study was conducted using the narrative synthesis method. Narrative synthesis is an analytical method used to describe, compare, and interpret the results from various literatures descriptively. In this study, the results from various articles were analyzed based on several main themes, namely relevant Islamic values in the formation of the professional character of Muslim doctors, an overview of medical students' understanding of Islamic values, the relationship between the understanding of Islamic values and the professional behavior of medical students, supporting and inhibiting factors for the internalization of Islamic values in medical education, and the role of the curriculum, role models, academic environment, and clinical experience in shaping the professional character of Muslim doctors. The results of the analysis are then presented descriptively in the form of a narrative description, emphasizing the patterns of findings that emerged from the various articles. If there are differences in results between studies, these differences are discussed critically based on the research context, study design, population, and instruments used.

Presentation of Review Results

The results of the narrative review are presented in tables and narrative descriptions. Tables are used to describe the characteristics of the included articles, including author names, year of publication, article title, research methods, and main results. Narrative descriptions are used to explain the relationships between variables and to interpret the research findings. The presentation of the results focuses on how medical students' understanding of Islamic values can contribute to the development of the professional character of Muslim doctors. With this approach, the research is expected to provide a comprehensive overview of the role of Islamic values in medical education and their contribution to the formation of professional, integrity-driven, and morally upright Muslim doctors.

Result and Discussion

Based on a literature search using the PubMed/MEDLINE, Google Scholar, and ResearchGate databases, as well as a manual search of relevant article bibliographies, several articles related to Islamic values, medical professionalism, medical education, and the character development of Muslim physicians were obtained. The literature found was then narratively selected based on the suitability of the title, abstract, and content of the article, and its relevance to the research objectives.

After reviewing the literature, 15 articles were deemed relevant and used as primary sources in this narrative review. These articles were selected because they discussed aspects related to the understanding of Islamic values, the integration of Islamic values into medical education, medical student professionalism, professional identity formation, spirituality, and factors influencing the development of professional character in Muslim physicians.

The articles included in this review originated from 2021–2025 and covered several countries, namely Indonesia, Saudi Arabia, Pakistan, and Malaysia, as well as international or conceptual articles not limited to one specific country. The majority of articles originated from Indonesia because the topic of integrating Islamic values into medical education has strong relevance to the context of Islamic-based medical schools in Indonesia. Based on the type of research, the articles reviewed included quantitative studies with cross-sectional or descriptive designs, qualitative studies, mixed-methods studies, literature reviews, article reviews, and conceptual studies. The subjects of the articles included preclinical medical students, clinical or intern students, young doctors, Muslim doctors, and Islamic-based medical educational institutions. A synthesis of the characteristics of all included articles is presented in the following table.

Table 1. Synthesis of Studies on Islamic Values and the Professional Character of Muslim Physicians

Author & Year	Article Title	Journal / Source	Research Design	Subject / Population	Islamic Values Discussed	Aspects of Muslim Doctor Professionalism/ Character	Key Research Results	Conclusions / Implications
Khalid et al., 2025	Implementation of Islamic Values to Strengthen Medical Student's Professionalism at UMI	Journal of Islamic Science and Research, 4(3):396–408	Descriptive cross-sectional; n=24 internship students; purposive sampling	Internship students, Faculty of Medicine UMI Makassar	Islamic etiquette, tahsin Al-Qur'an, memorization	Implementation of Islamic values in clinical practice; Islamic-based professionalism	70.8% completed tahsin; 75% completed memorization; only 58.3% consistently applied Islamic etiquette in clinics	Cognitive and ritual understanding is high, but implementation in clinical behavior remains low; strengthening Islamic

								etiquette is needed.
Tayeb et al., 2023	The Role of Religious Culture in Medical Professionalism in a Muslim Arab Society	Perspectives on Medical Education, 12(1):56–67	Constructivist grounded theory; qualitative; n=15 Saudi physicians	Muslim physicians in Saudi Arabia	Religious values, trust, faith-based responsibility	Medical professionalism within Muslim religious culture; ethical tensions	Muslim doctors apply both medical and religious value systems simultaneously	Islamic values are organically integrated into professionalism and require wise management when ethical conflicts arise.
Susanti & Riskiyah, 2022	Integration of Islamic Values in the Medical Education Curriculum	Journal of Islamic Medicine, 6(1):11–20	Phenomenological qualitative; purposive sampling	Islamic medical schools (PTKIN), Indonesia	Tawhid, morals, worship	Curriculum integration, learning process, character assessment	Each institution applies different integration models	National standardization of Islamic values integration is needed due to institutional variation.
Muhlis et al., 2024	Literature Review: Integration of Islamic Values in the PPD Curriculum	PREPOTIF: Journal of Public Health, 8(1):1304–1309	Narrative literature review	Islamic-based Medical Professional Education Program	Faith, morals, sharia	Curriculum integration, hidden curriculum, character evaluation	Effective integration requires curriculum, academic culture, and assessment	Comprehensive integration should include formal curriculum, hidden curriculum, and continuous character evaluation.
Jannah et al., 2025	Islamic Values in the Ethics of Health Professions	Journal of Islamic Health, 14(2):1–14	Qualitative descriptive; literature review	Muslim healthcare workers	Amanah, 'adl, sidq, rahmah, ihsan, sincerity, patience	Professional ethics and moral character	Amanah, justice, honesty, and compassion are core professional values	Islamic ethics are fully compatible with universal medical professionalism and Maqasid al-Shariah.
Aliah et al., 2025	Integration of Islamic Values in the Medical Education	Innovative: Journal of Social Science Research,	Literature review	Islamic medical education	Philosophical, pedagogical, practical	Character development of Muslim physicians	Integration should occur simultaneously at philosophical,	A three-layer integration model is recommended to produce

	Curriculum	5(4):496–506			Islamic values		pedagogical, and practical levels	competent and ethical Muslim physicians
Afdhaliyah et al., 2025	Medical Students' Perceptions of Professional Behavior (Honor and Integrity)	PREPOTIF: Journal of Public Health, 9(2):3532–3538	Quantitative descriptive; Likert questionnaire; n=100	Internship students, Faculty of Medicine UMI Makassar	Sidq, amanah, muru'ah	Honor, integrity, self-reflection, reporting misconduct	Positive perceptions of integrity; low willingness to report peers	Awareness is high, but implementation is hindered by social pressure.
Fahmirauf et al., 2025	Medical Professionalism and Its Association among Clinical Medical Students	Asian Journal of Medicine & Health Sciences, 8(1)	Cross-sectional; n=302; universal sampling	Clinical medical students, Indonesia	Islamic educational background	Clinical professionalism (LAMPS)	58.3% demonstrated good professionalism; Islamic educational background significantly associated with professionalism	Exposure to Islamic educational environments positively influences professional behavior.
Alamgir et al., 2025	Exploring Medical Professionalism in Undergraduate Medical Students	Pakistan Journal of Medical Sciences, 41(6):1586–1591	Analytical cross-sectional	MBBS students (Years 1–5), Pakistan	General professionalism	Professional attitudes	70.23% demonstrated suboptimal professionalism	Structured guidance is necessary because professionalism does not automatically improve with educational progression.
Nurkholisah et al., 2025	The Relationship Between Psychological Well-Being and Professionalism in Medical Faculty Students	Ibn Sina: Journal of Medicine and Health, 24(1):243–255	Observational cross-sectional; n=295	Medical students, Swadaya Gunung Jati University	Rahmah, patience	Professionalism and psychological well-being	Weak but significant positive correlation (r=0.295; p=0.001)	Psychological well-being contributes to professional behavior and supports compassionate care.

Farooq et al., 2025	Professionalism and Professional Identity in Medical Students	Frontiers in Medicine, 12:1650073	Mixed-methods cross-sectional; n=108	Medical students	General professional values	Professional identity formation	Clinical experience and role models have the greatest influence	Exemplary role models (uswah hasanah) are more influential than formal curriculum alone.
Al Gahtani et al., 2021	Perceptions of Medical Students towards the Practice of Professionalism at Arabian Gulf University	BMC Medical Education, 21:38	Retrospective cross-sectional	Fifth-year medical students	Islamic values within Arab-Muslim culture	Professional climate, teaching, role modeling	Students perceived professionalism teaching and practice as suboptimal	Institutional climate and clinician role models are essential for developing professionalism.
Goodwin et al., 2024	Professionalism in Medical Education : The State of the Art	International Journal of Medical Education, 15:44–47	Commentary / conceptual review	International medical education	General ethical values	Definition, teaching, assessment, development	Professionalism consists of behaviors, attributes, and characteristics requiring systematic teaching	Professionalism development should be explicit, systematic, and sustainable, aligning with Islamic moral education.
Findyartini et al., 2022	Professional Identity Formation of Medical Students: A Mixed-Methods Study	BMC Medical Education, 22:443	Sequential explanatory mixed-methods; n=433 + 6 FGDs	Indonesian medical students	Personal values, religiosity	Professional identity formation	Senior students showed stronger professional identity; curriculum and environment influenced development	Intrinsic motivation and personal values are the strongest predictors of professional identity formation.
Hilmy et al., 2024	Spirituality and Resilience in Medical Students: A Cross-Sectional Study	International Journal of Islamic and Complementary Medicine, 5(1):41–55	Cross-sectional; n=100	Muslim medical students, Indonesia	Spirituality, sincerity, niyyah	Resilience and character of Muslim physicians	Spirituality significantly correlated with resilience (p<0.05)	Islamic spirituality is an authentic source of resilience and supports the profession

								al character of Muslim physicians .
--	--	--	--	--	--	--	--	---

Based on a narrative synthesis of the 15 included articles, the discussion is presented based on five main themes in accordance with the established data analysis method, namely: (1) Islamic values that are relevant in the formation of the professional character of Muslim doctors; (2) an overview of medical students' understanding of Islamic values; (3) the relationship between understanding Islamic values and professional behavior; (4) supporting and inhibiting factors in the internalization of Islamic values; and (5) the role of the curriculum, role models, academic environment, and clinical experience in forming the professional character of Muslim doctors.

Relevant Islamic Values in the Formation of the Professional Character of Muslim Physicians

Based on a literature synthesis, several Islamic values have been consistently confirmed as relevant in the formation of the professional character of Muslim physicians. Jannah et al. (2025), through a literature review of the Qur'an, hadith, and scientific journals, confirmed that amanah (responsibility), 'adl (justice), šidq (honesty), and raḥmah (compassion) are the most fundamental values in the professional ethics of healthcare workers and are fully aligned with universal standards of medical professionalism.⁴ These values are derived from the Maqāšid al-Sharī'ah framework, which serves as a comprehensive moral foundation for clinical decision-making in Muslim physicians, encompassing the protection of life, intellect, lineage, property, and religion.

Tayeb et al. (2023) found, through a qualitative constructivist grounded theory study of 15 Saudi physicians, that Muslim physicians actively utilize two value systems simultaneously in clinical practice: professional medical standards and Islamic religious standards.⁸ These two systems complement each other in many situations, but in certain situations, they can create ethical tensions that need to be managed wisely. These findings confirm that Islamic values are not an artificial external addition, but rather a value system that is organically integrated into the clinical decision-making of Muslim physicians. In addition to the aforementioned values, the values of ihsan (perfect good deeds), ikhlas (sincerity of intention), and sabar (steadfastness) are also identified in the literature as values that strengthen the spiritual and motivational dimensions of Muslim physician professionalism.⁴

Overview of Medical Students' Understanding of Islamic Values

The overview of medical students' understanding of Islamic values shows an uneven pattern across the cognitive, affective, and behavioral dimensions. Khalid et al. (2025) in a descriptive cross-sectional study of 24 interns at the Muslim University of Indonesia (UMI) using purposive sampling found that 70.8% of students achieved the "mumtaz" category in Qur'an recitation and 75% achieved "mumtaz" in memorization, reflecting a relatively high cognitive-ritualistic understanding.⁷ In the affective dimension, Afdhaliyah et al. (2025) conducted a quantitative descriptive study using a Likert-scale questionnaire on 100 in-service students at the Faculty of Medicine, University of Muhammadiyah Malang (UMI), and found that students' perceptions of honor and integrity were very positive, with an average score of 4.38 on a scale of 5. The self-reflection dimension averaged 4.53.¹⁴ This figure indicates that students, at the cognitive-affective level of perception and awareness, highly value the values of integrity (šidq) and responsibility (amanah) as part of their professional identity.

Understanding of the behavioral dimension showed a lower picture compared to the cognitive and affective dimensions. Khalid et al. (2025) found that only 58.3% of in-service students at

UMI were assessed as consistently applying Islamic etiquette in the clinical environment.⁷ Fahmirauf et al. (2025) conducted a cross-sectional study of 302 clinical students using the LAMPS scale, finding that only 58.3% of students had a good level of professionalism, and that an Islamic-based medical school background was significantly associated with better professionalism.³ From an international perspective, Alamgir et al. (2025) on first- to fifth-year MBBS students in Pakistan found that 70.23% of students still demonstrated suboptimal professional attitudes, and professionalism did not automatically increase with educational level.² There are differences in context between the studies: the Indonesian study assessed the implementation of Islamic values specifically, while the Pakistani study measured general professionalism; both studies, however, consistently show that internalizing values into clinical behavior is a challenge across countries and contexts.

The Relationship between Understanding Islamic Values and Medical Students' Professional Behavior

The relationship between understanding Islamic values and medical students' professional behavior is multidimensional and non-linear. Fahmirauf et al. (2025) found that an educational background from an Islamic-based medical school was significantly associated with better professional achievement,³ indicating that exposure to Islamic values in the educational environment has a measurable positive influence on professional behavior. Hilmy et al. (2024) showed a significant positive correlation between students' spirituality and resilience ($p < 0.05$), indicating that students with a higher appreciation of Islamic values had better psychological resilience in maintaining professional behavior under pressure.¹⁹ Nurkholisah et al. (2025) revealed a weak but significant positive correlation between psychological well-being and professionalism ($r = 0.295$; $p = 0.001$),¹⁵ reflecting that internalization of the values of mercy and patience is directly related to the quality of professional behavior.

This positive relationship between understanding values and clinical behavior is not automatic. The gap between high cognitive-affective dimensions and low implementation of behavior (knowledge-behavior gap) is a consistent pattern found in the literature. Afdhaliyah et al. (2025) identified that although perceptions of honor and integrity were very positive (mean 4.38), students' courage to report professional misconduct by colleagues was still very low.¹⁴ From an Islamic perspective, this condition is related to the weak internalization of the values of *ṣidq* and *amanah* in the face of social pressure (peer pressure) in the clinical environment. Findings by Findyartini et al. (2022) showed that upper-level students had better scores on internalization of professional identity, indicating that the relationship between value understanding and professional behavior develops progressively as reflective experience accumulates.¹⁸

Overview of Medical Students' Understanding of Islamic Values

The overview of medical students' understanding of Islamic values shows an uneven pattern across the cognitive, affective, and behavioral dimensions. Khalid et al. (2025) in a descriptive cross-sectional study of 24 interns at the Muslim University of Indonesia (UMI) using purposive sampling found that 70.8% of students achieved the "mumtaz" category in Qur'an recitation and 75% achieved "mumtaz" in memorization, reflecting a relatively high cognitive-ritualistic understanding.⁷ In the affective dimension, Afdhaliyah et al. (2025) conducted a quantitative descriptive study using a Likert-scale questionnaire on 100 in-service students at the Faculty of Medicine, University of Muhammadiyah Malang (UMI), and found that students' perceptions of honor and integrity were very positive, with an average score of 4.38 on a scale of 5. The self-reflection dimension averaged 4.53.¹⁴ This figure indicates that students, at the cognitive-affective level of perception and awareness, highly value the values of integrity (*ṣidq*) and responsibility (*amanah*) as part of their professional identity.

Understanding of the behavioral dimension showed a lower picture compared to the cognitive and affective dimensions. Khalid et al. (2025) found that only 58.3% of in-service students at UMI were assessed as consistently applying Islamic etiquette in the clinical environment.⁷ Fahmirauf et al. (2025) conducted a cross-sectional study of 302 clinical students using the LAMPS scale, finding that only 58.3% of students had a good level of professionalism, and that an Islamic-based medical school background was significantly associated with better professionalism.³ From an international perspective, Alamgir et al. (2025) on first- to fifth-year MBBS students in Pakistan found that 70.23% of students still demonstrated suboptimal professional attitudes, and professionalism did not automatically increase with educational level.² There are differences in context between the studies: the Indonesian study assessed the implementation of Islamic values specifically, while the Pakistani study measured general professionalism; Both studies, however, consistently show that internalizing values into clinical behavior is a challenge across countries and contexts.

The Relationship between Understanding Islamic Values and Medical Students' Professional Behavior

The relationship between understanding Islamic values and medical students' professional behavior is multidimensional and non-linear. Fahmirauf et al. (2025) found that an educational background from an Islamic-based medical school was significantly associated with better professional achievement,³ indicating that exposure to Islamic values in the educational environment has a measurable positive influence on professional behavior. Hilmy et al. (2024) showed a significant positive correlation between students' spirituality and resilience ($p < 0.05$), indicating that students with a higher appreciation of Islamic values had better psychological resilience in maintaining professional behavior under pressure.¹⁹ Nurkholisah et al. (2025) revealed a weak but significant positive correlation between psychological well-being and professionalism ($r = 0.295$; $p = 0.001$),¹⁵ reflecting that internalization of the values of mercy and patience is directly related to the quality of professional behavior.

This positive relationship between understanding values and clinical behavior is not automatic. The gap between high cognitive-affective dimensions and low implementation of behavior (knowledge-behavior gap) is a consistent pattern found in the literature. Afdhaliyah et al. (2025) identified that although perceptions of honor and integrity were very positive (mean 4.38), students' courage to report professional misconduct by colleagues was still very low.¹⁴ From an Islamic perspective, this condition is related to the weak internalization of the values of *ṣidq* and *amanah* in the face of social pressure (peer pressure) in the clinical environment. Findings by Findyartini et al. (2022) showed that upper-level students had better scores on internalization of professional identity, indicating that the relationship between value understanding and professional behavior develops progressively as reflective experience accumulates.

Conclusion

Based on the narrative synthesis of 15 articles that met the inclusion criteria, the following conclusions can be drawn; (1) The most relevant Islamic values in shaping the professional character of Muslim physicians are *amanah* (trustworthiness), *ṣidq* (fairness), *rahmah* (mercy), *'adl* (goodness), *ihsan* (goodness), *ikhlas* (sincerity), and *sabar* (patience). These values are derived from the *Maqāṣid al-Sharī'ah* framework and are proven to be congruent with international standards of medical professionalism; (2) The understanding of Islamic values among medical students shows an uneven pattern: the cognitive and affective dimensions are relatively good, but the behavioral dimension remains low. Only 58.3% of UMI interns consistently apply Islamic etiquette in the clinic (Khalid et al., 2025), and 58.3% achieve good professionalism on the LAMPS scale (Fahmirauf et al., 2025); (3) There is a positive relationship between understanding Islamic values and professional behavior. However, the

knowledge-behavior gap remains consistent across countries and does not automatically decrease with educational level, indicating that understanding values alone is insufficient without structured and sustainable behavioral development; (4) Factors supporting the internalization of Islamic values include intrinsic motivation based on spirituality, psychological well-being, and a conducive learning environment. Inhibiting factors include curriculum inconsistencies between institutions, social pressures in the clinical environment, and dissonance between the values taught in institutions and the reality in the clinic; (5) An integrated curriculum, the role models (*uswah hasanah*) of senior clinicians, a conducive academic environment, and clinical experiences accompanied by value reflection are the most important elements in shaping the professional character of Muslim physicians. Role models from senior clinicians are the most important determinant factor, far surpassing the content of the formal curriculum alone.

References

- Afdhaliyah, N., Mokhtar, S., & Kartika, I. D. (2025). Persepsi mahasiswa kedokteran terhadap perilaku profesionalisme: Honor and integrity. *PREPOTIF: Jurnal Kesehatan Masyarakat*, 9(2), 3532–3538. <https://doi.org/10.31004/prepotif.v9i2.46126>
- Akmansyah, M., Putri, I. A., Nurnazli, N., & Mujahid, A. (2026). Beyond teacher competence: uncovering the key determinants of student learning and achievement of Islamic religious education subjects. *Indonesian Journal of Education and Social Studies*, 5(1), 119-133. <https://doi.org/10.33650/ijess.v5i1.13146>
- Al Gahtani, H. M. S., Jahrami, H. A., & Silverman, H. J. (2021). Perceptions of medical students towards the practice of professionalism at the Arabian Gulf University. *BMC Medical Education*, 21, 38. <https://doi.org/10.1186/s12909-020-02464-z>
- Alamgir, N., Khan, M. A., Mashhadi, S. F., & Naqvi, S. A. Z. (2025). Exploring medical professionalism in undergraduate medical students: A cross-sectional study. *Pakistan Journal of Medical Sciences*, 41(6), 1586–1591. <https://doi.org/10.12669/pjms.41.6.11736>
- Alfahmi, M. Z. (2022). Justification for requiring disclosure of diagnoses and prognoses to dying patients in Saudi medical settings: A Maqasid Al-Shariah-based Islamic bioethics approach. *BMC Medical Ethics*, 23, 72. <https://doi.org/10.1186/s12910-022-00808-6>
- Aliah, A. M., Rachman, M. E., & Alwi, M. K. (2025). Integrasi nilai Islam dalam kurikulum pendidikan dokter. *Innovative: Journal of Social Science Research*, 5(4), 496–506. <https://doi.org/10.31004/innovative.v5i4.19963>
- Amalia, R., Julyani, S., & Alwi, K. (2026). Integration of Medical Ethics from an Islamic Perspective on the Formation of Professionalism in Medical Education: Literature Review. *Journal of Asian-african Focus in Health*, 4(1), 40-51. <https://doi.org/10.71435/734649>
- Arfeen, Z., Robert, M., Kadambari, D., Khan, J. S., Liu, L., Mold, A., ... & Rashid, M. A. (2026). Seeing the world upside down: historical insights for medical Education's future. *Advances in Health Sciences Education*, 1-15. <https://doi.org/10.1007/s10459-025-10496-7>
- Azis, M. U., Mubarak, J., Kholis, N., & Gunardi, S. (2025). Improving the Quality of Healthcare Services for Patient well-being through Maqasid al-Sharia: a Study at Klaten Islamic Hospital. *Tasharruf: Journal Economics and Business of Islam*, 10(2), 262-275. <https://creativecommons.org/licenses/by-nc/4.0/>

- Bertoni, G., Manzati, S. P., Pagani, F., Testa, M., & Battista, S. (2026). Ethical and Bioethical Issues in Physical Therapy: A Systematic Scoping Review. *Physical Therapy*, pzag011. <https://doi.org/10.1093/ptj/pzag011>
- Chen, Y., Hao, P., Lou, Y., & Han, X. (2026). Exploring the Influencing Factors of Professional Identity in Geriatric Nursing Among Undergraduate Nursing Interns From a Life Course Perspective: A Qualitative Study. *Journal of Nursing Management*, 2026(1), 5532147. <https://doi.org/10.1155/jonm/5532147>
- Desai, M. K., & Kapadia, J. D. (2022). Medical professionalism and ethics. *Journal of Pharmacology and Pharmacotherapeutics*, 13(2), 113-118. <https://doi.org/10.1177/0976500X221111448>
- Fahmirauf, A. F. M., Ariffin, A. S. T., Arshad, A., & Shalihin, M. S. E. (2025). Medical professionalism and its association among clinical medical students. *Asian Journal of Medicine & Health Sciences*, 8(1). <https://doi.org/10.70672/1vqzm708>
- Farooq, M., Hashim, M. J., Alhosani, S., Alalawi, A. M., Alalawi, O. M., Qandilo, K. A., Hafeez, U., & Cevik, A. A. (2025). Professionalism and professional identity in medical students: A cross-sectional mixed-methods analysis of correlation and progression. *Frontiers in Medicine*, 12, 1650073. <https://doi.org/10.3389/fmed.2025.1650073>
- Findyartini, A., Greviana, N., Felaza, E., Faruqi, M., Afifah, T. Z., Firdausy, M. A., et al. (2022). Professional identity formation of medical students: A mixed-methods study in a hierarchical and collectivist culture. *BMC Medical Education*, 22, 443. <https://doi.org/10.1186/s12909-022-03393-9>
- Garba, S. A., Yusuf, B., & Yusuf, M. (2026). Enacting global citizenship education through Islamic and Moral Education: A multi-university study of Malaysian teacher educators. *Teaching and Teacher Education*, 181, 105715. <https://doi.org/10.1016/j.tate.2026.105715>
- Goodwin, A. M., et al. (2024). Professionalism in medical education: The state of the art. *International Journal of Medical Education*, 15, 44-47. <https://doi.org/10.5116/ijme.6626.583a>
- Habsi, M., Affan, M., & Nasution, N. R. (2026). Inner development as a transformative paradigm for educational development: A qualitative literature study on consciousness and character formation. *Chalim Journal of Teaching and Learning*, 6(1), 1-15. <https://doi.org/10.31538/cjotl.v6i1.3123>
- Haque, A., Maruf, T. I., Uddin, M. N., & Anis, M. Z. (2025). Empowerment of sustainable community health through the application of the theory of Maqasid Al-Shariah. *Asia Pacific Journal of Health Management*, 20(2), 1-16.
- Hilmy, F., Wiyono, N., Hastami, Y., & Munawaroh, S. (2024). Spirituality and resilience in medical students: A cross-sectional study. *International Journal of Islamic and Complementary Medicine*, 5(1), 41-55. <https://doi.org/10.55116/ijicm.v5i1.71>
- Jannah, R., Faisal, A., Nurfah, Kuraedah, S., Gazali, M., & Azaliah, M. A. R. N. (2025). Nilai-nilai Islam dalam etika profesi kesehatan. *Jurnal Kesehatan Islam: Islamic Health Journal*, 14(2), 1-14. <https://doi.org/10.33474/jki.v14i2.24089>
- Khalid, N. F., Kamaluddin, I. D. K., Royani, I., & Irwan, A. A. (2025). Implementation of Islamic values to strengthen medical student's professionalism at Universitas Muslim Indonesia. *Jurnal Keilmuan dan Keislaman*, 4(3), 396-408. <https://doi.org/10.23917/jkk.v4i3.719>

- Le Chaffotec, A., Partouche-Sebban, J., & Toledano, A. (2026). Valuing patients' experiential knowledge in the development of medical practices: the example of cancer follow-up care. *Journal of Strategy and Management*, 19(1), 49-65. <https://doi.org/10.1108/JSMA-01-2024-0003>
- Lin, Y. L., & Lapping-Carr, L. (2026). Asia Oceania professional education and training in clinical sexology. *International Journal of Sexual Health*, 1-15. <https://doi.org/10.1080/19317611.2026.2691168>
- Mahajan, R., Aruldas, B. W., Sharma, M., Badyal, D. K., & Singh, T. (2016). Professionalism and ethics: a proposed curriculum for undergraduates. *International Journal of Applied and Basic Medical Research*, 6(3), 157-163.
- Mubarok, R. (2026). Integrating the Deep Learning Paradigm and Asta Cita Values in the Development of Multicultural Islamic Religious Education in Indonesia. *J-TELITE: Journal of Transforming Education through Leadership, Innovation, and Teaching Excellence*, 2(01), 56-72. <https://doi.org/10.58586/zek9ws38>
- Mueller, P. S. (2015). Teaching and assessing professionalism in medical learners and practicing physicians. *Rambam Maimonides medical journal*, 6(2), e0011. <https://doi.org/10.5041/RMMJ.10195>
- Muhlis, M. A. P., Royani, I., & Julyani, S. (2024). Literature review: Integrasi nilai Islam dalam kurikulum pendidikan program profesi dokter. *PREPOTIF: Jurnal Kesehatan Masyarakat*, 8(1), 1304–1309. <https://doi.org/10.31004/prepotif.v8i1.27376>
- Nurhasanah, M., & Idharudin, A. J. (2026). A Faith In Action: Islamic Ethical Perspective On The Global Humanitarian Crisis. *IMTIYAZ: Jurnal Ilmu Keislaman*, 10(1), 126-141.
- Nurkholisah, Meidianawaty, V., & Fachrudin, D. (2025). Hubungan kesejahteraan psikologis dengan profesionalisme mahasiswa Fakultas Kedokteran Universitas Swadaya Gunung Jati. *Ibnu Sina: Jurnal Kedokteran dan Kesehatan*, 24(1), 243–255. <https://doi.org/10.30743/ibnusina.v24i1.726>
- Romero Ortuño, R., van Iersel, M., Nuotio, M. S., Kolk, H., Topinková, E., Schoevaerds, D., ... & Macijauskienė, J. (2026). European training requirements in geriatric medicine 2025: driving competency-based education and harmonisation across Europe. *European Geriatric Medicine*, 17(2), 417-428. <https://doi.org/10.1007/s41999-025-01393-8>
- Saputra, H., Az-Zahren, H. M., Agustina, N., Alpy, M., & Bahri, S. (2026). Development of critical thinking skills in Islamic education students: Integrating outcome-based education into higher education courses. *Journal of Instruction and Islamic Religious Education*, 2(1), 53-67. <https://doi.org/10.63826/jiire.v2i1.176>
- Susanti, N., & Riskiyah. (2022). Integrasi nilai Islam dalam kurikulum pendidikan kedokteran. *Journal of Islamic Medicine*, 6(1), 11–20.
- Tayeb, H. O., Tekian, A., Baig, M., Koenig, H. G., & Lingard, L. (2023). The role of religious culture in medical professionalism in a Muslim Arab society. *Perspectives on Medical Education*, 12(1), 56–67. <https://doi.org/10.5334/pme.920>
- World Federation for Medical Education. (2020). *Basic medical education: WFME global standards for quality improvement* (3rd ed.). WFME.
- Yasin, N. A., & Haq, E. D. U. (2026). Maqāṣid al-Sharī 'ah as an Ethical Framework for Artificial Intelligence Governance in Contemporary Muslim Societies. *Indonesian Journal of Sharia and Islamic Sciences*, 1(2), 01-12.