Review Article

Promoting Professionalism in Medical Practice through Compassionate Transformation: A Systematic Review.

Alam MS[1], Tusar NN[2], Rahman M[3], Khan NA[4], Barman N[5], Tapu TT[6], Talukder MAS[7], Rahman MM[8], Miah MA[9]

Abstract

Objective: Medical professionalism (MP) refers to the values, behaviors, and attitudes that enhance professional relationships, public trust, and patient safety. Formal and informal medical curricula convey expectations about professionalization. The We conducted this systematic review with aimed to explain the motivation for exploring compassionate transformation as a pathway to improved medical professionalism in healthcare settings.

Methods: A systematic review was performed in accordance with PRISMA guidelines. These electronic databases encompassing MEDLINE, Hinari, PsycInfo, SCOPUS, EMBASE; and grey literature were systematically searched using the following MeSH search terms: Promoting Professionalism, Medical practice, Compassionate Transformation. The search criteria incorporated relevant full articles published in English from January 1, 2000, to March 31, 2025 that targeting any aspect of medical professionalism were included. Review articles and evaluations that included non-health care professionals were excluded. Of the included reviews, all included reviews did not conduct quantitative or meta-analysis of the results but rather conducted a qualitative descriptive summary. The systematic quality of the included reviews was assessed using the A MeaSurement Tool to Assess Systematic Reviews (AMSTAR) 2 tool.

Results: The search identified 1898 studies for eligibility screening. Ultimately, 14 studies characteristics were eligible for inclusion. The fundamental elements of medical professionalism (MP) were altruism, honesty, professional competence, compassion, responsibility, confidentiality, respect, accountability, excellence, communication, maturity, self-directed learning, scholarship, and leadership. Although measuring professionalism in healthcare is difficult, it is essential to ensuring high-quality treatment and patient trust. Physician burnout also affects professionalism and patient safety, highlighting a structural problem in the medical field that needs to be addressed. MP differs depending on a variety of elements, including generational, social, cultural, contextual, and conceptual issues.

Conclusion: Medical professionalism has been a core value and responsibility of physicians in the care of patients. It became a powerful slogan in medical science that "professionalism must be taught", and a consensus had to be built that professionalism should be an intrinsic part of the curriculum.

Key Words: "Medical Professionalism," "Compassionate Care," "Transformational Healthcare,".

1) Prof. Dr. Mohammed Shadrul Alam, Pediatric Urologist & Health Economist, Ex-Professor, Dept. of Pediatric Surgery, DMC. & Director, Centre for Medical Education, Dhaka, Bangladesh. Phone-01711364377; e-mail: professorshadrulalam@gmail.com .

2) Dr Nahid Noor Tusar, and 3) Dr. Mowshumi Rahman. -Lecturer, Centre for Medical Education, Dhaka.
4) Md. Nizamot Ali Khan, - Graphix Artist, Centre for Medical Education, Dhaka.
5) Dr. Neela Barman, - Research Associate, Centre for Medical Education, Dhaka.
6) Dr. Thanadar Tamjeeda Tapu,
7) Dr. Mohammad Abu Sayeed Talukder, and
8) Dr. Md. Mohibur Rahman. - Assistant Professor, Centre for Medical Education, Dhaka.
9) Prof. Dr. Md. Abdal Miah. - Professor (c.c.), Centre for Medical Education, Dhaka.

*Corresponding author:
Prof. Dr. Mohammed Shadrul Alam
Pediatric Urologist & Health Economist, Ex-Professor, Dept. of Pediatric Surgery, DMC. & Director, Centre for Medical Education, Mohakhali, Dhaka, Bangladesh.
e-mail: professorshadrulalam@gmail.com .

Introduction

Medical professionalism (MP) refers to the values, behaviors, and attitudes that enhance professional relationships, public trust, and patient safety. It is an important capability in health professions education.[1] Medical professionalism is essential for expressing the importance, values, and core structure of medical society.[2] Physicians have unique expectations and responsibilities when it comes to professionalism. In addition, physicians interact with a variety of different groups, including patients, medical colleagues, trainees, other physicians, and allied care partners. Communication between all of these groups should be respectful, proper, and medical professionalism has a distinct exclusivity due to cultural, circumstantial, theoretical, and generational diversity.

Compassion is how care is given through relationships based on empathy, respect and dignity - it can also be described as intelligent kindness, and is central to how people perceive their care. There is no standard instructional strategy for exploring medical professionalism comprehension in a coherent, organized, collaborative manner.[3]

A gap remains in reporting the characteristics of professionalism and the sustainable impact on a standardized method to teaching medical professionalism. Medical professionalism is required to teach basic medical knowledge, skills, and qualities and to promote excellence in their professional conduct. Formal and informal medical curricula convey expectations about professionalization. It is necessary to be familiar with the concept of compassion in healthcare and its potential link to enhancing medical professionalism. We want to ensure that we provide the best care to our patients with compassion and clinical expertise, ensuring pride in our medical professionalism and building respect. We don't know what the barriers and facilitators are in implementing an empathy-centered approach to increasing medical professionalism.

We would like to emphasize the importance of researching compassionate transformation as a strategy of improving medical professionalism. By prioritizing areas, governments might create an atmosphere in which medical professionalism succeeds, resulting in higher quality of care. This would entail assessing present difficulties and establishing future directions for new researchers. Therefore, we conducted this systematic review to explain the motivation for exploring compassionate transformation as a pathway to improved medical professionalism in healthcare settings.

Methods (Evidence Review):

The systematic review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.[4] The following electronic databases were searched for relevant literature: Ovid MEDLINE(R), EMBASE, Hinari, PsycInfo, SCOPUS, Web of Science; and grey literature were systematically searched using the following MeSH search terms: Promoting Professionalism, Medical practice, Compassionate Transformation.

Eligibility Criteria

Studies meeting the following criteria were included (Supplementary file, Appendix B):

• Research population: Physicians, including medical practitioner.

• Condition studied: Medical professionalism in all health-related extents.

• Outcomes: Outcomes relating to aspects of medical professionalism, and patient care through the practice of compassionate transformative medical professionalism.

• Study Design: Qualitative research studies including those with a cross-sectional/ prospective/ longitudinal design.

• Context: Studies in medical professionalism context were considered.

Studies were included:

• Primary original research studies (quantitative qualitative, mixed-methods), review article or commentary, systematic review and meta-analysis, systematic reviews linking compassion training or cultivation to measurable aspects of medical professionalism in practicing clinicians or trainees.

• The search criteria incorporated relevant full articles published in English from January 1, 2000, to March 31, 2025 that targeting any aspect of medical professionalism were included.

Studies were excluded if they:

• Were published in languages other than English.

• Were a conference paper or grey literature.

• Review articles, editorials, and articles without linking compassion to defined medical professionalism elements were excluded.

Data was extracted in a data extraction sheet. Of the included reviews, two independent reviewers screened the full texts, articles. Disagreements resolved via consensus or third reviewer. Narrative synthesis is used because of the heterogeneity in qualitative descriptive summaries. The systematic quality of the included reviews was assessed using the A MeaSurement Tool to Assess Systematic Reviews (AMSTAR) 2 tool. Primary end points are features of medical professionalism, and patient care through the practice of compassionate transformative medical professionalism.
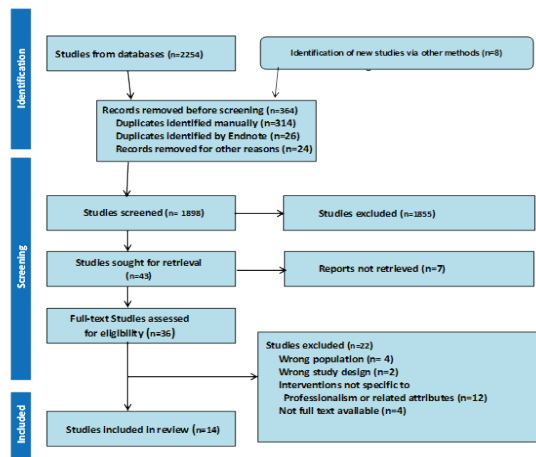
Fig.- 1. PRISMA Flowchart.

Results

The search identified 1898 studies for eligibility screening. Ultimately, 14 studies characteristics were eligible for inclusion (Fig- 1.).

1 Characteristics of relevant articles:
There were Quantitative Analytic Cross-Sectional Study-1, Qualitative Study- 2, Systematic Review-1, Systematic Review and Meta-analysis- 2, Review Article-2, Original Research Article-2, Commentary- 2, Conceptual Analysis- 1, Qualitative Consensus-Building- 1. The included studies exhibited important methodological diversity, with differences in study design and assessment methods, along with professional outcomes.

2 Medical professionalism as a whole:
The collection of studies emphasized that medical professionalism was a dedication that distinguished successful professionals apart. The core components of professionalism included altruism, honor and integrity, professional competence, caring and compassion, responsibility, confidentiality, respect, accountability, excellence, communication, maturity, self-directed learning, scholarship, and leadership (Figure 2).

Fig.- 2. Framework for Medical Professionalism.

3 Nature and Development of Medical Professionalism:
Educational interventions aimed at fostering professionalism include structured curricula, team-based learning, and humanities-based approaches. One original research paper tested a faculty workshop for new healthcare teachers, and looked at how well a workshop helped new teachers at a health institute became more professional and feel like true professionals. These results were useful for planning future training programs for healthcare teachers.

4 Measurement of Professionalism:
Measuring professionalism in healthcare is complex but crucial for ensuring quality care and trust. This article examined how literature contributes to understanding medical professionalism, noting its growing role in medical school curricula to shape future professionals. A separate scoping study investigated how professionalism is measured in healthcare, addressing the question: "How is professionalism evaluated across various healthcare fields?" Professionalism is vital for good care and confidence. This review, following JBI and PRISMA-SCR guidelines, analyzed 44 articles (out of 1,558 identified between 2005-2024) and found diverse, valid, and reliable qualitative and quantitative methods for measuring professionalism.

5 Decoding the interplay of medical professionalism with Medical Student Mental Well-being and Coping:
There was a growing recognition of the interplay between medical professionalism, mental well-being, and coping strategies, particularly in undergraduate medical students. An original study used a specific analysis method (SEM). Key SEM findings in the study revealed significant pathways demonstrating that coping strategies act as a crucial mediator between indicators of poor mental well-being (stress, anxiety, depression, burnout) and the manifestation of core medical professionalism attributes (professional behavior, empathy), and thus coping methods are connected. It included 234 medical students (Years 1, 3, and 5) from Universiti Sains Malaysia. The study tackled a gap in knowledge: we didn't know enough about how mental health directly affects students' professionalism, the cause-and-effect links between these areas, or how coping strategies might change the impact of mental health problems on professionalism. Specifically,

it investigated whether coping methods act as a bridge between mental health struggles and professional behavior/empathy.

6 Impact of Burnout on Professionalism and Patient Outcomes:

Physician burnout as well impacts patient safety and professionalism, underscoring a systemic issue within the medical profession that requires intervention. Systematic reviews and meta-analyses confirmed that physician burnout significantly harmed both patient safety and professionalism. Physicians experiencing burnout were nearly twice as likely to be involved in patient safety incidents (Odds Ratio [OR] = 1.96). Furthermore, burnout was associated with 2.3 times higher odds of exhibiting low professionalism, including poor communication and non-adherence to guidelines. This link was stronger in residents and early-career physicians (≤5 years post-residency) than in mid- or late-career doctors. Burnout also reduced patient satisfaction, dropping it by more than twofold (OR = 2.28), with this effect drastically amplified when depersonalization was high (OR = 4.50). Additionally, burnout was linked to decreased compassion, increased irritability, and a higher incidence of malpractice lawsuits. Overall, physician burnout significantly increased the risk of patient safety incidents, leaded to a lower quality of care due to compromised professionalism, and resulted in decreased patient satisfaction. In addition, a separate systematic review investigated into medical professionalism education, examining various interventions, their outcomes, and their sustainability. This review comprehensively assessed existing literature on these elements, likely focusing on the effectiveness and longevity of different educational strategies aimed at increasing medical professionalism.

7 Crises Accelerate Change:

Experts identified systemic barriers to professionalism (insurance, discharge failures, pay-for-performance) affecting patients (need autonomy roadmaps), physicians (constrained agency), and learners (need narrative evaluation). The COVID-19 pandemic further exposed systemic flaws, including healthcare maldistribution and marginalization of the poor. But it amplified core values: balancing patient welfare/resource limits, advocating for public health equity, practicing humanism via technology, and demonstrating solidarity. The author urges transforming disruption into "positive game change."

8 Professionalism of Solidarity:

This article examined that reforming traditional professionalism against discrimination and systemic racism through a humanities-based 'professionalism of solidarity' model. This article converged on a new principle called "Medicine as a contract not a bargain with society." Another article highlighted the shortcomings of traditional professionalism by illustrating three failures: inaction on racial disparities in drowning deaths, discriminatory language during patient discharge, and systemic racism contributing to an Indigenous patient's death.

9 Pedagogy Must Be Transformed:

In an analytical study, a notable difference was observed in how medical students from Malaysia and Bangladesh perceive professionalism. The study revealed that nearly two-thirds (64%) of Malaysian medical students defined professionalism as having positive attitudes and behaviors in their work. In contrast, a significantly smaller proportion, only 27%, of medical students in Bangladesh linked their attitude and behavior towards their job with professionalism.

10 Re-Envisioning Medical Professionalism:

The first qualitative study combined "dissonance between professionalization (physician identity development) and professionalism" into the core conflict concept. It summarized the method as "Using a compassion fatigue audio scenario". It examined how they balanced compassion, self-care, duty, and medical expertise, identifying themes like empathy/self-doubt, need for support, education, and the prioritization of professionalization over professionalism.

11 Medical professionalism using express team-based learning:

Another study investigated undergraduate medical students' understanding of Medical Professionalism (MP) using express team-based learning (e-TBL). Recognizing that MP (defined by values, behaviors, attitudes, and

patient safety) varies by cultural, contextual, conceptual, generational factors and other factors. This study explored MP understanding in a cohesive, structured, and interactive manner, noting the absence of a standard teaching method.

Discussion

This systematic review has highlighted current researches on medical professionalism, highlighting its multifaceted definition, the efficacy of educational interventions, and the complexities of its measurement, and has also provided evidence that compassionate medical professionalism is a foundational element of effective healthcare systems. It emphasized that medical professionalism is not just about following rules—it's about the values, behaviors, and attitudes that build trust, support ethical care, and shape our identity as healthcare providers.

Contemporary literatures consistently defined medical professionalism as a comprehensive dedication encompassing altruism, professional competence, compassion, integrity, honor, caring, responsibility, confidentiality, respect, accountability, excellence, communication, maturity, self-directed learning, scholarship, and leadership. The systematic review focused on medical professionalism education, interventions, outcomes, and sustainability.[5] This research showed a thorough examination of the literature pertaining to these topics, similar to what other studies have done.[6,7]

Humanities-based methods, team-based learning, and organized curricula are some of the educational initiatives used to promote medical professionalism.[8] Evidence from past studies showed that students were drawn to TBL's active, collaborative nature, while teachers were drawn to its integrated approach to assisting students in developing professionalism qualities like communication, cooperation, and leadership.[9] There were several challenges in implementing TBL classes. Despite being student-centered, TBL used a sequential educational approach, and a focused, structured facilitator is required to ensure that all tasks are completed in each session.[10] An increasing number of healthcare faculties are implementing TBL. As per TBL "performed best when

all of the components were included in the design elements," according to the literature.[11]

Professionalism in the medical field is essential for quality treatment and trust. Addressing the query, "How is professionalism evaluated across various healthcare fields?" It is difficult to measure professionalism in healthcare, yet it is essential to provide high-quality treatment and confidence. In accordance with JBI and PRISMA-SCR criteria, numerous researchers discovered a variety of legitimate, trustworthy, and different qualitative and quantitative approaches to assessing professionalism.[12] Professionalism must be measured if it is to be perceived as both positive and meaningful. The field of assessing professionalism is constantly changing. This comprehensive review brought together current ideas. Similarly, in other research, the measuring of professionalism has gone from an initial emphasis on the creation and attainment of professional identity, through the identification of areas of deficiency, to the attainment of a set of recognizable positive qualities and behaviors.[13] Four domains—conduct, capability, collaboration, and cost-effective resource utilization—can be used to measure and maintain professionalism.[14]

Using structural equation modeling (SEM), this study sought to investigate the complex links among undergraduate medical students between mental health, medical professionalism, and coping mechanisms.[15] Furthermore, little is known about how coping strategies function as a mediator between traits of medical professionalism (professional demeanor, compassion) and mental health indicators (stress, anxiety, sadness). Based on the SEM analysis's findings, the conversation would go into further detail about the intricate dynamics affecting medical students' personal health, interpersonal connections, and the quality of their patient care, which are similar to those of others researches.[16,17]

Physician fatigue seriously compromised patient safety and professionalism, according to this systematic research. Additionally, burnout was linked to 2.3 times the likelihood of displaying low professionalism, which includes non-adherence to rules and poor communication.[18,19] The relationship between surgeon burnout and 1) patient safety and 2) surgical

professionalism was examined in this review. As evidenced by outcomes like lower physician empathy, the current findings were also in line with earlier systematic studies showing links between increased burnout and lower professionalism.[20,21,22] The impact of burnout on patient safety, organizational support systems, the workplace environment, care quality, and patient satisfaction would be highlighted in this discussion, underscoring the necessity of actions to mitigate this risk that is comparable to other studies.[23]

The COVID-19 epidemic brought to light further systemic problems, such as the unequal distribution of healthcare and the marginalization of the impoverished. However, it strengthened fundamental principles: pushing for public health justice, exercising humanism through technology, exhibiting solidarity, and striking a balance between patient welfare and resource constraints.[24] In order to help patients (who require autonomous roadmaps), doctors (who have limited agency), and students (who require narrative evaluation), experts highlighted systemic barriers to professionalism. According to this study, disturbances should be turned into chances for "positive game change" in the workplace, which are similar to other studies.[25,26]

This study addressed systemic injustices in healthcare by presenting a novel concept of "professionalism of solidarity" based on Paulo Freire's critical consciousness. By highlighting three failures—systemic racism contributing to an Indigenous patient's death, discriminatory language used at patient discharge, and inactivity on racial disparities in drowning deaths—it brought attention to the flaws in traditional professionalism.[27] The paper addressed the need for a new conception of medical professionalism that ignores structural impediments (such as racism and resource inequality) and takes social justice into account while acknowledging systemic injustices in healthcare. According to other study, it backed the replacement of the "social contract" with a contract of harmony and structural competency training that teaches doctors to examine institutional restraints on patient agency.[28]

Bangladeshi students scored considerably higher on professionalism (mean: 177.14) than Malaysian students (175.50; p=0.044) in a comparative study of future medical doctors' professionalism between Malaysia and Bangladesh. Only 27% of Bangladeshi medical students connected professionalism to attitude or behavior, but 64% of Malaysian medical students did so, according to open-ended responses.[29] Bangladeshi medical schools have followed a state-controlled curriculum, potentially fostering uniformity. The low emphasis on role models contradicts prior research highlighting mentorship's importance. Socio-cultural and curricular differences may explain country-based variations that are comparable to other studies.[30]

Re-imagining medical professionalism was emphasized during the Kern National Network Meeting. Systemic obstacles to professional practice were recognized by experts (e.g., insurance constraints, discharge planning failures, pay-for-performance demands). Although there are no implementation techniques, the 2002 Charter principles are still applicable. Tensions between individual and organizational accountability, virtue-based and behavior-based evaluation, and equity and "fair" resource distribution must be resolved via a new paradigm. Using themes like empathy/self-doubt, need for support, education, and the preference for professionalization over professionalism, it looked at how they balanced compassion, self-care, duty, and medical skill.[31,32] In addition to skill milestones, narrative evaluation is necessary for the construction of a professional identity.[33] Polarity thinking, which balances conflicting values, and increased stakeholder engagement—including with patients, legislators, and health systems—are some of the suggested remedies. According to other studies, we propose that we have a unique opportunity to assist trainees in comprehending the importance of their work through professional identity formation (PIF), which is the process by which they acquire competence as well as the capacity to behave, think, and feel like doctors.[34]

Another study used express team-based learning (e-TBL) to examine how medical undergraduate students understood medical professionalism (MP). Understanding how cultural, contextual, philosophical, generational, and other factors influence MP—which is characterized by values, behaviors, and attitudes that

foster professional relationships, trust, and patient safety.[35] Noting the lack of a standardized teaching approach, the goal of this study was to investigate MP knowledge in a coherent, structured, and participatory way. These include using customized instruction, implementing formative assessment using rubrics, integrating cross-curricular connections, and creating an inclusive and engaging classroom atmosphere. According to other studies, the popularity of team-based learning techniques and their ability to improve educational practices are dependent on the theory and knowledge that educational practitioners have embraced in the context of their professional duties.[36]

Conclusion

Medical professionalism is becoming more and more well-known every day. It is especially unclear how coping strategies impact the connection between an individual's mental health and their professional conduct and patient empathy. This discrepancy highlights the need for more research on how students and medical professionals manage stress and how it impacts their professional conduct and empathy.Finally, the following are the medical professional requirements: professional competence; honesty with patients; confidentiality of patients; maintaining appropriate relationships with patients; commitment to improving care access; commitment to improving the quality of care; commitment to fair distribution of scarce resources; commitment to scientific knowledge; commitment to maintaining credibility through managing conflicts of interest; commitment to professional obligations.

Such dedication and the advancement of an action agenda for the medical profession that is global in scope and purpose are the goals of this set of professional duties on medical professionalism. Teaching professionals can benefit from curricula that are tailored to the interests of their students. We envision a world when no one is injured in the medical field and all patients receive safe, considerate care everywhere.

Recommendations

We suggest that governments take into account the following in order to protect and promote medical professionalism:

1.Reform Educational Curricula: Require that all medical education incorporate professionalism and well-being training, including humanities-based methods and organized team-based learning.
2. Integrate Strong Mental Health Support: Put in place all-encompassing well-being initiatives and easily available mental health services for physicians and medical students at every stage of their careers.
3. Address Systemic Drivers of Burnout: Examine and change the administrative strains, pay scales, and healthcare delivery models that lead to physician burnout in order to address the systemic causes of burnout.
4. Promote a "Professionalism of Solidarity": Create and implement regulations that specifically address systematic racism and prejudice in the healthcare industry, increasing advocacy for vulnerable groups and ensuring equal treatment.
5. Invest in Continuous Measurement: Encourage the research, development and application of proven techniques for frequently assessing and tracking professionalism and associated variables in healthcare settings.

Policymakers may create an environment where medical professionalism flourishes by giving priority to these areas, which will increase patient safety, care quality, and greater trust in the healthcare system.

Authors' contributions:

1) Alam MS - conceived of the research, prepared the first draft, and Revising of the manuscript, 2) Tusar NN, and 3) Rahman M - conducted the initial data analysis, 4) Khan NA – Art & Graphix of figures, and data analysis, 5) Barman N, 6) Tapu TT, 7) Talukder MAS, and 8) Rahman MM - carried out the study, discussed the meanings of findings, and prepared the manuscript for submission, 9) Miah MA – Revising and prepared the manuscript for submission.
All authors read and approved the final manuscript.

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The authors declare that they have no competing interests.

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This study received ethical approval from IRB, Centre for Medical Education, Mohakhali, Dhaka.

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