



Empowering Medical Educators to Foster Evidence-Based Learning in Bangladesh

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In an era of rapid advancements in medical knowledge, technologies, and patient care, it is imperative that medical education evolves to meet these changes. Evidence-Based Learning (EBL) — a teaching approach that integrates the best available research evidence, clinical expertise, and patient preferences — is a critical strategy in transforming medical education globally. In Bangladesh, where medical education faces several challenges such as outdated curricula, limited access to resources, and an over-reliance on traditional teaching methods, adopting evidence-based learning is not merely a necessity but an urgent requirement. This editorial delves into the need for evidence-based learning in Bangladesh's medical education system, highlights the challenges faced by educators, and provides actionable strategies for empowering educators to foster a culture of evidence-based practice.

Keywords: Evidence-Based Learning, Medical Educators Training, Healthcare Education Reform.

Article at a glance:

Study Purpose: The study evaluates how EBL can be implemented in Bangladesh's medical education to address challenges like outdated curricula and lack of trained educators.

Key findings: EBL improves critical thinking and patient care but faces barriers such as limited access to research and untrained educators in Bangladesh.

Newer findings: Recent findings highlight that continuous learning through EBL, along with curriculum reforms and better research access, can enhance medical education in resource-limited settings.

Abbreviations: EBL – Evidence-Based Learning. PBL – Problem-Based Learning.

Medical education has traditionally relied on rote memorization and passive learning, where students absorb theoretical knowledge without necessarily applying it to real-world scenarios. However, this traditional model falls short in preparing students for the complexities of modern healthcare practice, where decision-making is increasingly driven by scientific evidence. Evidence-based learning emphasizes the active involvement of students in the learning process, encouraging them to critically appraise research, interpret clinical

evidence, and make informed decisions. According to the World Health Organization, the adoption of EBL improves not only the decision-making abilities of healthcare professionals but also enhances the quality of patient care.¹ The systematic use of the best available evidence ensures that medical practitioners can base their clinical decisions on reliable, up-to-date information, leading to more effective treatment outcomes. For countries like Bangladesh, where healthcare resources are often scarce, EBL can help optimize care, ensuring that medical professionals

make the most of available resources and avoid unnecessary interventions.² Furthermore, the integration of evidence-based learning within medical curricula prepares students to become lifelong learners. The landscape of medicine is continually evolving, and as new evidence emerges, medical professionals must be equipped to evaluate and integrate this new information into their practice. EBL fosters a culture of continuous learning, which is particularly important in Bangladesh, where healthcare professionals often work in resource-constrained environments and are required to adapt to rapidly changing circumstances. Despite its clear benefits, the implementation of evidence-based learning in Bangladesh's medical education system faces several challenges. These barriers must be addressed systematically to create an environment conducive to EBL.

One of the primary challenges in Bangladesh is the shortage of medical educators who are proficient in evidence-based teaching methodologies. Many current medical educators have been trained in traditional pedagogies that emphasize memorization rather than critical thinking and evidence application. These educators may lack the skills required to teach students how to search for, evaluate, and apply research evidence in clinical practice.³ Moreover, most medical educators in Bangladesh have limited exposure to research training, making it difficult for them to integrate evidence into their teaching effectively. This situation is compounded by the absence of formalized professional development programs for educators that focus on EBL methods. Access to high-quality research is another significant barrier in Bangladesh. Many medical schools do not have adequate resources to subscribe to international medical journals or access online databases such as PubMed, Cochrane Library, and clinical guidelines repositories. As a result, both educators and students often find it difficult to access the latest research evidence. This lack of access stymies the integration of evidence into medical teaching and practice. In many cases, students and educators rely on textbooks that may be outdated or incomplete, missing critical evidence from recent studies. Furthermore, financial constraints prevent many medical institutions from investing in the necessary infrastructure to support research-driven learning, further hindering the promotion of EBL. The medical curriculum in Bangladesh has traditionally been based on an input-output model, where the emphasis is on covering a

vast amount of information within a set time frame. While this approach ensures that students are exposed to a wide range of topics, it does not allow sufficient time for the integration of evidence-based methodologies. Furthermore, the traditional curriculum often focuses more on theoretical knowledge rather than practical application, limiting students' ability to use research evidence in clinical settings.⁴ Moreover, the examination system in Bangladesh places little value on students' ability to critically appraise evidence or apply it in clinical practice. Most assessments continue to focus on the recall of facts rather than testing how students can integrate research into decision-making processes, undermining the development of evidence-based skills.

Despite these barriers, there are several strategies that can be adopted to empower medical educators in Bangladesh to foster evidence-based learning. These strategies will require collaboration between medical institutions, policymakers, and educators, and a commitment to continuous improvement. The first step towards empowering medical educators is to invest in comprehensive professional development programs that focus on evidence-based teaching methodologies. These programs should aim to enhance educators' understanding of research design, critical appraisal, and evidence integration into teaching. By training educators in EBL techniques, medical schools can ensure that they are equipped to teach students how to use research evidence in their clinical decision-making.⁵ Professional development can take the form of workshops, webinars, and collaborative training programs with international experts. Medical educators can also be trained to utilize teaching tools such as case-based learning, where students are presented with real-world scenarios and asked to apply evidence in their decision-making.⁶

To support evidence-based learning, it is essential to improve access to research resources. Medical institutions in Bangladesh can establish partnerships with global organizations to provide access to medical journals, clinical guidelines, and research databases. Initiatives such as the WHO's "Research for Health" program can be instrumental in providing Bangladeshi institutions with access to the latest research findings.⁷ Additionally, universities can invest in creating digital libraries and resource centers that provide students and educators with easy access to research articles, books, and medical

journals. Collaborative efforts with publishers of open-access research can also help expand the availability of high-quality, freely accessible evidence for both educators and students. Curriculum reform is crucial to integrating evidence-based learning into medical education in Bangladesh. The medical curriculum should be revised to emphasize the application of research evidence at all levels of medical training. In the early years, students should be introduced to research methodologies, while in the later years, they should be trained to critically appraise research and apply evidence in clinical settings.⁸ Moreover, medical schools should incorporate interdisciplinary learning opportunities, where students from different healthcare disciplines can collaborate and learn how to apply evidence-based practice in a team-based setting. This approach mirrors real-world healthcare environments where multiple professionals contribute to patient care, making it essential for students to learn how to integrate evidence from different fields of expertise. Establishing communities of practice for medical educators is another strategy to foster evidence-based learning. These communities provide a platform for educators to share resources, discuss challenges, and collaborate on research initiatives related to EBL. By creating such communities, educators can stay up-to-date with the latest evidence and best practices, which they can then incorporate into their teaching.^{9, 10} Furthermore, these communities can encourage collaborative research on the effectiveness of evidence-based teaching strategies and facilitate the exchange of knowledge between medical schools both within Bangladesh and internationally.

Empowering medical educators to foster evidence-based learning in Bangladesh is a critical step towards improving the quality of medical education and healthcare outcomes in the country. By investing in professional development programs, improving access to research resources, reforming the medical curriculum, and establishing evidence-based practice communities, Bangladesh can create a robust educational framework that promotes critical thinking, research engagement, and evidence-based clinical practice. This will ultimately enable medical professionals to provide better care for patients and contribute to the ongoing advancement of medical knowledge in Bangladesh.

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