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Editorial

Integrated Teaching: A Transformative Approach to Shaping Future Physicians

The word "integration" comes from the Latin word "integer," which refers to synchronizing several tasks to guarantee efficient and harmonious operation. The human body serves as a good example of this idea because it has several systems that work together in unison. In education, integration refers to the structured organization of teaching content to connect or unify subjects that are often taught separately across different courses or departments[1].

Integrated medical courses merge scientific knowledge with clinical training, organizing content by topic rather than by discipline. For example, when studying the digestive system, students simultaneously explore its physiology, biochemistry, anatomy, and clinical skills as a unified whole. An integrated medical curriculum prepares graduates to integrate their knowledge, allowing them to view the bigger picture and approach patient care or healthcare planning with a thorough and holistic perspective.

Since the Flexner era, medical education has traditionally involved teaching students basic and biomedical sciences first, followed by clinical sciences. However, this sequence does not reflect how patients present in real life. A common critique of this approach is that it can make it difficult for students to connect basic and biomedical sciences to clinical practice. Instead, it is often considered better to encourage students to think like doctors from their first day in medical school[2].

Curriculum integration often involves adopting the SPICES model, which emphasizes six key strategies: student-centred learning (S) to empower learners, problem-based learning (P) to enhance critical thinking, integrated teaching (I) for interdisciplinary connections, community-based education (C) to foster real-world application, elective programs (E) for personalized learning, and a systemic approach (S) for cohesive and structured curriculum design[3].

Integrated medicine courses combine hands-on learning with early patient interaction, fostering comprehensive, patient-centred care. They serve as a balanced option for those undecided between traditional and problem-based curriculum. Graduates gain versatile skills, opening diverse career paths, including clinical practice and research. Emphasizing evidence-based practice, these programs equip students to critically evaluate and apply scientific research to clinical decision-making[4].

Dayna Laur highlights the importance of this teaching-learning approach, stating, "Integrated studies seek to establish connections between disciplines that might otherwise appear unrelated to students. Actively seeking ways to combine standards and content is essential for creating genuinely authentic experiences, as content in the real world does not exist in isolation[5].

Implementing integrated teaching in medical education faces several challenges. Faculty members, although experts in their fields, often lack training in teaching methods, which can hinder the adoption of newer, more interactive approaches like competency-based medical education (CBME) or problem-based learning (PBL); while traditional didactic lectures are well-established, teachers may be reluctant to move away from them[6,7,8,9].

The successful implementation of the Integrated Learning (IL) program in medical education involves several strategies. These include a thorough need analysis and infrastructure improvement, coordinated national policies, and faculty training on the new Competency-Based Medical Education (CBME) framework. Key approaches also involve selecting relevant integrated topics, appropriate time allocation, and continuous assessment with feedback from both students and faculty. To ensure sustainability, the curriculum emphasizes reducing factual overload, adopting problem-based learning (PBL), and incorporating service-based learning to broaden students' healthcare perspectives. Self-directed learning, group discussions, and a system-based approach are central to the IL model, integrating basic sciences and clinical disciplines for holistic patient care learning[10,11,12].

Integration aims to focus more on fundamental principles and concepts that can be applied to analyse problems and create innovative solutions. This method plays a vital role in medical education by linking basic science education with clinical and professional practice, enhancing the relevance and significance of the material for students. Many curriculum reforms

prioritize vertical integration, combining basic and clinical sciences, introducing early clinical experiences, fostering collaborations between clinicians and scientists, and incorporating scientific concepts into the later phases of the program.

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