From Theory to Practice: Structural Barriers to Effective Clinical Training in Public Sector Teaching Hospitals

Dear Editor,

The transition from preclinical to clinical training is a critical phase in undergraduate medical education. In Pakistan, the MBBS curriculum spans five years, with the first two years primarily focused on basic sciences and the subsequent three years dedicated to clinical training. The third year marks the formal transition to hospital-based learning. While this structure aligns with regulatory frameworks, the shift from theory-based instruction to patient-centered clinical practice is often abrupt and challenging for students.

Early clinical exposure has been shown to enhance student confidence, professional identity formation, and integration of theoretical knowledge into practice.[1] However, limited structured clinical orientation during the preclinical years may reduce preparedness forward-based learning. Strengthening case-based learning (CBL) and problem-based learning (PBL) during early years could help bridge this gap, as integrated curricula are associated with improved clinical reasoning skills.[2]

Beyond curricular design, structural constraints within public sector teaching hospitals may affect the quality of clinical training. Many institutions face high patient loads, limited faculty-to-student ratios, and constrained infrastructure. In such environments, clinicians must balance service delivery with teaching responsibilities. Studies have shown that excessive clinical workload can limit opportunities for direct supervision, feedback, and workplace-based assessment, which are essential components of competency-based medical education.[3] Supervised patient encounters and structured feedback significantly influence students' perceived learning outcomes and skill acquisition.[4]

Infrastructure limitations may further compromise the learning environment. Overcrowded outpatient departments, limited space in operating theaters, and insufficient dedicated teaching areas reduce opportunities for small-group bedside instruction. The World Federation for Medical Education (WFME) emphasizes that medical schools must ensure adequate clinical training resources, including appropriate supervision and infrastructure, to achieve educational standards.[5] Similarly, the Pakistan Medical and Dental Council (PM&DC) underscores the importance of structured clinical teaching, supervision, and competency-based assessment in undergraduate medical education.[6]

Addressing these challenges requires a multi-level approach. First, integrating structured early clinical exposure in the preclinical phase may facilitate smoother transition to ward-based learning. Second, strengthening workplace-based assessment tools such as mini-Clinical Evaluation Exercises (mini-CEX) and Direct Observation of Procedural Skills (DOPS) could enhance supervision and feedback. Third, investment in simulation laboratories may partially offset limitations in patient access while ensuring safe skill acquisition. Finally, improving faculty-to-student ratios and allocating protected teaching time for clinicians are essential to maintain educational standards alongside patient care responsibilities.

Teaching hospitals play a central role in producing competent and ethically responsible physicians. Ensuring adequate supervision, infrastructure, and curricular integration is not only an educational priority but also a healthcare system imperative. Strategic investment in structured clinical education will ultimately enhance both patient care quality and graduate competency.

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