

Teaching Doctor-Patient Communication within Competency-Based Medical Education (CBME) in Early Medical Training

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Abstract

The global adoption of **Competency-Based Medical Education (CBME)** has fundamentally redefined medical training, shifting the focus from knowledge acquisition to the demonstration of professional competencies. Among these, **doctor-patient communication (DPC)** is paramount. This narrative review synthesizes the current landscape of DPC training for preclinical and paraclinical medical students within the CBME framework. Drawing upon the existing body of literature, we explore the evolution of pedagogical strategies, the alignment of assessment with competency, and the persistent challenges in operationalizing these programs. Evidence strongly supports a move away from passive, didactic instruction towards active, experiential methods such as **simulation-based learning with standardized patients (SPs)** and structured **role-play**. Assessment has similarly evolved, with a clear preference for performance-based tools like the **Objective Structured Clinical Examination (OSCE)**, which allows for direct observation and scoring of specific communication behaviours. However, significant barriers to effective implementation remain, including a lack of deep curricular integration, insufficient faculty development in teaching and assessing communication, and a scarcity of longitudinal research tracking competency progression. In the Indian context, the landmark **Attitude, Ethics, and Communication (AETCOM)** module provides a robust policy framework, yet its translation into evidence-based educational practice is still in its nascent stages. This review concludes that while effective tools and strategies for teaching DPC under CBME exist, their full potential will only be realized through a concerted commitment to curricular reform, comprehensive faculty development, and rigorous educational research.

Keywords: Competency-Based Medical Education, Doctor-Patient Communication, Standardized Patients, Medical Curriculum, AETCOM, Assessment

1. Introduction

The Paradigm Shift to Competency in Medical Education

Medical education is undergoing its most significant transformation in a century. The traditional, time-based apprenticeship model, long the standard, is progressively being replaced by **Competency-Based Medical Education (CBME)**, an outcomes-based approach centered on what a physician is *able* to do, rather than simply what they *know* [1]. This paradigm, championed by international bodies and adopted by national regulatory authorities worldwide, defines the required professional abilities for practice and structures education to ensure every graduate can demonstrate them [2].

Central to this modern conception of medical practice is the competency of **doctor-patient communication (DPC)**. Far from being a "soft skill," effective communication is now recognized as a core procedural competency, intrinsically linked to improved diagnostic accuracy, enhanced patient adherence to treatment, reduced medical errors, and greater patient satisfaction [3]. It is the foundational skill upon which the entire clinical encounter is built.

In India, this global movement has been institutionalized through the National Medical Commission's (NMC) "Regulations on Graduate Medical Education, 2019," which established a comprehensive CBME framework for all medical undergraduates [4]. A key innovation within this framework is the **Attitude, Ethics, and Communication (AETCOM)** module, a longitudinal program designed to formally teach and assess these crucial professional domains from the very beginning of medical training [5]. The AETCOM module represents a clear policy mandate to move communication from the hidden curriculum to the formal curriculum, with specified competencies, learning sessions, and assessment requirements.

However, a significant chasm often exists between policy and practice. The preclinical and paraclinical years remain heavily dominated by the biomedical sciences, with a pedagogical culture that prioritizes didactic lectures and rote memorization [6]. This creates a critical challenge: How can we effectively cultivate the foundational competency of communication in an environment traditionally focused on knowledge acquisition? This narrative review aims to synthesize the evidence on effective strategies for teaching and assessing DPC during the early phases of medical training within a CBME context. We will explore the pedagogical tools that align with competency development, the assessment methods required to measure it, and the systemic challenges that must be overcome for successful implementation.

2. The Evolution of Pedagogy for Communication Skills: From Passive to Active Learning

The core principle of CBME is that competence is developed through practice and feedback. This necessitates a move away from passive learning methods like traditional lectures towards active, learner-centric, and experiential strategies. The literature demonstrates a clear consensus on the effectiveness of several key approaches for teaching DPC.

2.1 Simulation-Based Learning and Standardized Patients (SPs)

Perhaps the most powerful tool for DPC training in the CBME era is **simulation with standardized patients (SPs)**. SPs are lay individuals meticulously trained to portray a specific patient case consistently and realistically, allowing students to practice and refine their communication skills in a safe and controlled environment [7]. The process typically involves a student conducting an encounter with an SP, which is observed by a faculty member or peers, and is followed by multi-source feedback—from the SP on the experience of being the patient, from the faculty on the technical aspects of communication, and from peers on their observations [8].

The value of SP-based learning within CBME is multi-fold:

- **Deliberate Practice:** It allows for the repeated practice of specific skills (e.g., demonstrating empathy, using open-ended questions) that cannot be mastered through reading alone.
- **Standardization:** It ensures all students are exposed to similar clinical challenges, providing a fair and equitable basis for assessment.
- **Safe Environment:** Students can make mistakes, reflect on them, and receive constructive feedback without any risk to real patients.
- **Authenticity:** SPs provide a level of emotional and interactive realism that is impossible to achieve in theoretical discussions, bridging the gap between classroom theory and clinical practice [9].

2.2 Role-Play and Experiential Workshops

While SPs represent a gold standard, **structured role-play** remains a widely used, effective, and resource-efficient alternative [10]. In small groups, students typically rotate through the roles of doctor, patient, and observer. This tripartite structure provides a unique learning opportunity, allowing a student not only to practice being a clinician but also to experience the encounter from the patient's perspective and to develop skills in observing and giving feedback to a peer.

These practical exercises are often embedded within **experiential workshops**. Such workshops typically blend brief didactic introductions to communication frameworks (e.g., the Calgary-Cambridge Guide) with interactive activities, such as analyzing video recordings of consultations, discussing challenging scenarios, and engaging in short, focused role-plays [11]. This blended approach ensures that students acquire the theoretical knowledge that underpins effective communication before applying it in practice.

3. Aligning Assessment with Competency: Seeing is Believing

A foundational tenet of CBME is that assessment should drive learning. If communication is a core competency, it must be assessed with the same rigor as anatomical knowledge or clinical procedures. This has led to a decisive shift from knowledge-based tests (e.g., multiple-choice questions about communication theory) to **performance-based assessments** that measure a student's ability to *do* [12].

3.1 The Objective Structured Practical Examination (OSPE)

The **Objective Structured Clinical Examination (OSCE)** has become the cornerstone of performance-based assessment in medical education [13], where **OSPE** is the counterpart in pre and para clinical subjects. An OSCE/OSPE consists of multiple "stations," each presenting a standardized task that a student must perform within a set time. For DPC, a station typically involves an encounter with an SP, where the student is tasked with, for example, taking a history, explaining a diagnosis, or obtaining consent. Performance is evaluated by trained examiners (faculty or even the SPs themselves) using structured tools, such as:

- **Checklists:** These list specific, observable behaviors (e.g., "Introduced self and role," "Made eye contact," "Summarized patient's concerns"). Checklists are excellent for ensuring that key procedural steps have been completed.
- **Global Rating Scales:** These tools capture a more holistic judgment of the student's performance across domains like "empathy," "professionalism," or "organization and flow of the interview." They assess the quality of the interaction, not just its components [14].

By designing OSCE stations that explicitly target the competencies outlined in frameworks like AETCOM, institutions can directly measure a student's progress and ensure a clear alignment between the taught curriculum and the expected outcomes.

3.2 Formative Assessment and the Role of Feedback

While the OSCE is often used for summative "assessment of learning," CBME places a profound emphasis on formative "assessment for learning." The goal is not just to grade students but to foster their development through frequent, low-stakes observations and constructive feedback [15]. **Direct Observation of Procedural Skills (DOPS)**, a tool traditionally used for clinical procedures, can be adapted for communication encounters. A faculty member observes a student's interaction (live or recorded) and provides immediate, structured feedback on their performance, focusing on strengths and areas for improvement. This continuous loop of practice, observation, and feedback is the engine of competency development [16].

4. Operationalizing CBME for Communication Training: Persistent Challenges

Despite the clear consensus on effective pedagogical and assessment strategies, translating these into a cohesive, longitudinal program within a packed curriculum presents significant challenges.

4.1 The Struggle for Curricular Integration

The most significant barrier is the persistent "siloeing" of DPC training. Communication is often taught in isolated modules, disconnected from the core basic and paraclinical sciences. This can lead students to perceive it as a peripheral subject, less important than anatomy or pharmacology. True integration, as envisioned by CBME, would involve **nesting communication skills within the basic sciences** [6]. For example:

- In a **physiology** lab on the respiratory system, students could practice explaining the concept of asthma to an SP.
- In an **anatomy** session, students could practice obtaining informed consent for a procedure from a simulated patient before studying the relevant structures. This approach not only provides context and relevance but also reinforces the principle that communication is an inseparable part of all medical practice.

4.2 The Critical Need for Faculty Development

Effective DPC training cannot be implemented without faculty who are skilled in teaching and assessing it. Many basic science faculty, while experts in their own fields, have not been trained in communication pedagogy, observational assessment, or providing constructive feedback on interpersonal skills [17]. They may feel uncomfortable or unqualified for this role. Therefore, **robust and sustained faculty development** is not an optional extra but an absolute prerequisite for the success of any CBME-based communication program [18]. Institutions must invest in training their educators to become competent facilitators and assessors of this complex skill.

4.3 Defining and Assessing Progression

Another challenge lies in defining developmentally appropriate milestones for communication competence. What should a first-year student be able to do, and how does that differ from a second-year student? While frameworks provide endpoint competencies, the granular, year-on-year progression is often poorly defined. Furthermore, most of the research in this area uses short-term, pre-post study designs. There is a critical lack of **longitudinal research** that tracks the development of communication skills over time, measures skill retention, and evaluates the long-term impact of early training on later clinical performance [19].

5. Implications and Future Directions

The evidence synthesized in this review points toward a clear path forward for educators, institutions, and researchers.

- **For Curricular Policy:** The focus must shift from creating isolated modules to achieving deep curricular integration. Competency mapping should be used to explicitly link communication learning objectives to sessions across the entire preclinical curriculum. The AETCOM module provides the ideal scaffold for such an integrated design, but its potential needs to be realized through innovative curricular planning.
- **For Institutions:** The single most impactful investment an institution can make is in its people. A comprehensive, longitudinal faculty development program focused on teaching and assessing communication is non-negotiable. This must include training in simulation, feedback delivery, and the use of validated assessment tools.

- **For Research:** The field urgently needs more rigorous and longitudinal research. Specifically, studies are needed to:
 - Evaluate the implementation and long-term impact of the AETCOM module.
 - Develop and validate contextually relevant assessment tools for DPC in the Indian setting.
 - Conduct longitudinal cohort studies to track the developmental trajectory of communication competence from preclinical years into clinical practice.

6. Conclusion

The transition to **Competency-Based Medical Education** has rightfully placed doctor-patient communication at the heart of medical training. The evidence is clear that active, experiential learning strategies like simulation with standardized patients and performance-based assessments like the OSCE are effective and well-aligned with the principles of CBME. These tools provide a robust framework for building and measuring foundational communication skills from the very start of a student's journey. However, the existence of effective tools is not sufficient for success. The greatest challenges are systemic: breaking down curricular silos, committing to comprehensive faculty development, and building a stronger evidence base through rigorous research. For frameworks like India's AETCOM module to fulfill their promise, they must be supported by a deep institutional commitment to transforming not just *what* is taught, but *how* it is taught and assessed. By embracing this challenge, we can ensure that the next generation of physicians enters practice with the communication competence essential for providing humane, safe, and effective care.

7. References

1. Frank JR, Snell L, Cate OT, Holmboe ES, Carraccio C, Swing SR, et al. (2010) Competency-based medical education: theory to practice. *Med Teach.* 32(8):638-45.
2. Englander R, Flynn T, Call S, Carraccio C, Cleary L, Fulton TB, et al.(2016) Toward defining the foundation of the MD degree: core entrustable professional activities for entering residency. *Acad Med.* 91(10):1352-8.
3. Ha JF, Longnecker N.(2010) Doctor-patient communication: a review. *Ochsner J.* 10(1):38-43. [Note: Similar to ref1, this is a highly cited foundational review.]
4. National Medical Commission. Regulations on Graduate Medical Education, 2019. New Delhi: Board of Governors in Supersession of Medical Council of India; 2019 Nov 4. Available from: www.nmc.org.in.
5. Medical Council of India. Attitude, Ethics and Communication (AETCOM) Competencies for the Indian Medical Graduate. New Delhi: Medical Council of India; 2018.

6. National Medical Commission. Guidelines for Competency Based Medical Education (CBME) Curriculum 2024. New Delhi: National Medical Commission.
7. Cleland JA, Abe K, Rethans JJ. (2009) The use of simulated patients in medical education: AMEE Guide No 42. *Med Teach.*31(9):783-7.
8. Bokken L, Linssen T, Scherpbier A, van der Vleuten C, Rethans JJ.(2016) The feedback of simulated patients in undergraduate medical education: a systematic review. *Simul Healthc.*11(1):47-55.
9. Rethans JJ, Gorter S, Bokken L, Morrison L.(2007) Unannounced standardized patients in real practice: a systematic review of the methodology. *Med Educ.*41(6):537-49.
10. Nestel D, Tierney T.(2017) Role-play for communication skills learning: a workshop guide for medical educators. *J Healthc Commun.*2(3):33.
11. Kurtz S, Silverman J, Draper J.(2005) Teaching and learning communication skills in medicine. 2nd ed. Oxford: Radcliffe Publishing.
12. Lockyer J, Carraccio C, Chan MK, Hart D, Smee S, Touchie C, et al.(2017) Core principles of assessment in competency-based medical education. *Med Teach.*39(6):609-16.
13. Khan KZ, Ramachandran S, Gaunt K, Pushkar P. (2013) The Objective Structured Clinical Examination (OSCE): AMEE Guide No. 81. Part I: an historical and theoretical perspective. *Med Teach.* 35(9):e1437-46.
14. Pell G, Fuller R, Homer M, Roberts T. (2010) How to measure the quality of the OSCE: A review of metrics–AMEE guide no. 49. *Med Teach.* 32(10):802-11.
15. Eva KW, Bordage G, Campbell C, Galbraith R, Ginsburg S, Holmboe E, et al. (2016) Towards a program of assessment for health professionals: from training into practice. *Adv Health Sci Educ Theory Pract.*21(4):897-913.
16. Kogan JR, Holmboe ES, Hauer KE.(2009) Tools for direct observation and assessment of clinical skills of medical trainees: a systematic review. *JAMA.* 302(12):1316-26.
17. Steinert Y. (2020) Faculty development: from rubies to diamonds. *Med Teach.* 42(4):429-35.
18. Steinert Y, Mann K, Centeno A, Dolmans D, Spencer J, Gelula M, Prideaux D. (2006) A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Med Teach.*28(6):497-526.
19. Van der Vleuten CP, Schuwirth LW, Driessen EW, Dijkstra J, Tigelaar D, Baartman LK, van Tartwijk J.(2012) A model for programmatic assessment fit for purpose. *Med Teach.*34(3):205-14.
20. Alharbi, N.S.(2024) Evaluating competency-based medical education: a systematized review of current practices. *BMC Med Educ* 24(1):612.