

Special Feature: Commentary

Problem-based learning in medicine: Role of medical students and the attributed benefits

Problem-based learning (PBL) is a teaching–learning method wherein the students are actively involved in their learning process and become accountable for their own learning.^[1]

In this method, clinical scenarios are being used, which not only encourages the recall of already-known facts by the medical student but also motivates them to search about the given problem and then take active efforts to resolve the given problem by working in small groups.^[1,2] All the given clinical scenarios (or problems) are designed in such a way that they resemble the problems encountered in routine clinical practice, and thus prepare the medical students for their future career.^[2]

From the students' perspective, the PBL process has been linked to various encouraging results in comparison with a student who is exposed to the traditional curriculum.

Undergraduate medical students who begin their professional journey to become a doctor gradually understand their roles and responsibilities and the expectations of the general population. We all will agree that a medical student should not only be good in the knowledge domain but have to be better in his/her skills, possess positive attitude and human values and be professional in his/her approach. In fact, in the rapidly expanding field of medicine, medical students over the course of their training should acquire the trait of problem-solving, clinical reasoning and critical thinking and also learn to practice in team for better patient outcomes.^[1,2]

The success of a PBL session and accomplishment of the intended learning objectives is determined by the active participation of the students.^[2,3] It is quite essential that the students understand why PBL is being used and how it will help them to become a better and competent healthcare professional.^[2] Moreover, students should be aware about the group dynamics (e.g., respecting the viewpoints of all members and giving a chance to all the members) and should be willing to learn by collaborating with other members of the group.^[2,4,5] The members of the group should activate their prior knowledge prior to the

formulation of the learning objectives in the given problem, as it helps in better correlation and the acquisition of knowledge.^[1,2] At the same time, the role of the faculty member as a facilitator is also very essential, and thus both the stakeholders (e.g., the student and the teacher) have to understand their part and adhere to the same strictly.^[2,4]

From the students' perspective, the PBL process has been linked to various encouraging results in comparison with a student who is exposed to the traditional curriculum.^[1] The available evidence clearly suggests that PBL graduates have better problem-solving skills, as reflected by their increased retention of knowledge, better integration of basic science subjects into clinical problems and motivation.^[1,3] On the academic front, these students fare well in clinical examinations and get better grades from the assessors. Even though the students trained through PBL might have similar factual knowledge, their clinical performance remains much better and they work more efficiently during their clinical practice.^[2,4]

The method advocates that the students learn the art of working in groups and over a period of time become a reflective practitioner.^[4,5] Moreover, these students acquire the trait of self-directed learner and thereby are more inclined towards practicing evidence-based medicine while dealing with their patients.^[3,4] Further, these students have better interpersonal skills, as demonstrated by improved communication with their patients, and better leadership and team working skills while working as a member of a multidisciplinary team.^[1,5]

The active involvement of a student in the PBL process plays an important role in the making of a reflective practitioner who can work efficiently in teams in his/her future clinical practice. However, both the students and the teachers have to be trained on their responsibilities to enhance the overall effectiveness of the PBL session.

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There are no conflicts of interest.

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