

# Changing the Way We Teach Pathology to Medical Undergraduates: From Classroom Benches to Patient Bedsides

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## Description

Pathology has been taught in a very traditional way since time immemorial to the undergraduate medical students in India with major focus on teaching the pathogenesis of diseases, gross and microscopic morphology and some laboratory tests which are obsolete at present, with very little clinical correlation [1]. Therefore, majority medical graduates end up having little understanding of what investigations to order for which disease and how they should be interpreted, ultimately forfeiting the purpose of undergraduate pathology teaching [2].

The same is the case with assessment in pathology for undergraduate medical students. Assessment till recent past has mostly been subjective, non-structured and with little scope of judging clinical application and higher order analytical skills [3]. Research shows students tend to learn only what is assessed. Therefore, students' learning tends to get restricted to the lower levels of the Miller's pyramid (predominantly 'knows') and lower hierarchical levels of cognitive domain in Bloom's taxonomy (predominantly 'remember', 'understand' and barely 'apply') [4].

There aren't many studies that emphasize the value of integrated, case/problem-based, and Competency-Based Medical Education (CBME) in undergraduate curriculum. The same is required for pathology training. Given the current state of change in Indian medical education with the implementation of CBME by National Medical Commission (NMC) in 2019, it is imperative that this issue be addressed with more aggression. Although, faculty members of various medical colleges have been oriented with the help of various faculty development programs regarding implementation of CBME in different subjects, the actual execution has not been satisfactory. The goal of achieving a skill-based integrated curriculum is yet to be achieved.

The subject of pathology covers a wide variety of disorders and diagnostic tests, a portion of which is taught to undergraduate students in the MBBS program. Therefore, it is preferable that we begin teaching the most useful, and clinically applicable topics with the help of cases and scenarios to make our students understand the subject better. Such Case-Based Learning (CBL) and Problem-Based Learning (PBL) promote a learner-centered exploration of cases which in turn helps the students in developing their logical and analytical skills and also help them acquire the required skills of Attitude, Ethics and Communication (AETCOM) as per the module of NMC.

Assessment at the same time must be more structured, objective, clinical-oriented and should be able to judge the analytical skills of the students. Introduction of seminars, poster/case presentations, quizzes for formative assessments and Objective Structured Practical Examination (OSPE), objective structured viva and problem-

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based questions for summative assessments will help both the students and the faculty in achieving the desired goal.

This kind of comprehensive approach will create competent doctors in the future who are knowledgeable about the subject with skills to apply it whenever necessary. It is high time that we stopped teaching and assessing the antiquated and

pointless tests that are no longer used even at the most remote medical facilities. This shall actually serve the purpose of teaching pathology as the foundation of clinical medicine by bringing the subject of pathology from the classroom benches to the patient bedside.

## References

1. Kar A, Kar T, Dash K, Rout N, Bhuyan P. Undergraduate pathology education: Meeting the challenge ahead. *Int J Clin Med.* 2012;3:83-87.
2. Epstein RM. Assessment in medical education. *N Engl J Med.* 2007;356:387-396.
3. Walsh A, Koppula S, Antao V, Bethune C, Cameron S. Preparing teachers for competency-based medical education: Fundamental teaching activities. *Med Teach.* 2018;40:80-85.
4. Yadav V, Shrimal R, Kumar V, Deshmukh AV. The need of modifying current teaching in pathology practical classes, A study from second professional MBBS student's perspective in North India. *Mustansiriya Med J.* 2022;21:78-83.