

INTRODUCTION OF CASE-BASED LEARNING FOR TEACHING MEDICINE IN PHASE 2ND M.B.B.S. STUDENTS

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ABSTRACT

Objectives: The objective of this study was to assess and compare case-based learning (CBL) with traditional teaching among phase 2 MBBS students.

Methods: This study is designed as an educational interventional cross-over trial with a quantitative approach to compare two distinct clinical teaching methods at the government medical college, Pali. The primary aim is to assess the impact of CBL on the educational experiences of 2nd-year MBBS students.

Results: The analysis confirms that CBL significantly improves students' understanding and satisfaction compared to traditional teaching, offering a more effective and engaging learning experience.

Conclusion: The study recommends CBL for 2nd-year medical students, as it is preferred for its engaging and effective approach to understanding and applying medical concepts.

Keywords: Medical education, Teaching approaches, Teaching-learning methods, Case-based learning.

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INTRODUCTION

The field of medical education is dynamic and always changing to meet the needs of modern health-care delivery. The last year of medical school is the pinnacle of the educational experience, where theoretical knowledge meets practical clinical experiences [1-3]. One of the main components of medical education is clinical teaching, which provides a special setting for students to interact with patients and see how their knowledge is put to use. The mainstay of traditional clinical education is the taking of history and performing physical examinations; theoretical topics make up the majority of talks. As a teaching-learning health activity, ward rounds are complex duties requiring medical knowledge and clinical competence in addition to communication, clinical technical, patient management, and teamwork skills [4-6].

In medical education, the second phase of MBBS is a critical stage where students delve deeper into clinical knowledge and application. Introducing case-based learning (CBL) in phase 2nd M.B.B.S. aims to address the limitations of traditional teaching methods in preparing students for real-world medical practice [7].

CBL involves using real-life cases to promote active learning, critical thinking, and practical application of knowledge [8]. Implementing CBL in this phase can enhance the learning experience and better prepare students for the complexities of health care. The objective of this study was to assess and compare CBL with traditional teaching among phase 2 MBBS students.

METHODS

This study is designed as an educational interventional cross-over trial with a quantitative approach to compare two distinct clinical teaching methods at the government medical college, Pali. The primary aim is to assess the impact of CBL on the educational experiences of 2nd-year

MBBS students. The study encompasses two teaching methods: The traditional teaching method and the case-based teaching method. The traditional teaching method involves students attending two sessions, each focusing on different sets of medicine topics. In contrast, the case-based teaching method involves two sessions that use interactive case studies to cover additional topics. The study targets the 2nd-year MBBS students from the 2021 batch, who are currently undergoing clinical rotational postings in the general medicine department. The study is set to span a total of 56 days, divided into two rounds of 28 days each.

Sample size

The sample size comprises 110 medical students, divided into two groups of 55 each. Group A starts with traditional teaching, while Group B begins with case-based teaching. After a 4-day washout period, the groups switch methods, with Group A transitioning to case-based teaching and Group B to traditional teaching. This crossover design allows for the evaluation of both teaching methods by each group. Consent was obtained from all participating students, who provided written informed consent ensuring their voluntary participation and the confidentiality of their responses. The study includes specific phases: in the initial phase, each group of 55 students underwent 28 days of clinical rotations with two distinct teaching methods over a period of 24 days, followed by a 4-day washout period. Subsequently, the methods were interchanged for the final 12 days of the rotation, concluding the first phase.

Data collection

Data collection involved feedback questionnaires using a 5-point Likert scale, administered after exposure to each teaching method. These questionnaires assessed students' perceptions and satisfaction with the teaching methods. Inclusion criteria encompassed 2nd-year MBBS students from the 2021 batch assigned to the medicine department from November 2023 to December 2023. Exclusion criteria included students who were frequently absent or did not provide consent.

