EDITORIAL:

Rethinking Viva-Voce: Towards Structured Assessments in Medical Education

Shamshad Ahmad[1], Deepika Agrawal[2], Pragya Kumar[3]

Introduction

Imagine a nervous medical student, hands trembling, as they step into the examination room for their viva voce. Their mind races, not just with the material they have studied, but with the fear of facing unpredictable and subjective questions from an examiner whose mood and biases could significantly influence their performance. This scenario is all too familiar in medical education, where traditional viva voce has long been a cornerstone of practical assessment.

It is time to rethink the traditional viva voce. This antiquated method of assessment should be replaced with a more structured and standardized approaches to ensure fairness, reduce bias, and better evaluate students' competencies. Structured viva voce offers a promising alternative that aligns with the evolving needs of medical education.

Current Role of Viva Voce in Medical Education

Theory exams evaluate the cognitive domain of medical students, focusing on their knowledge, understanding, and recall of factual information. By using various structured questions, these exams test the depth and breadth of students' knowledge in medical sciences. This ensures a solid foundational understanding of medicine's theoretical aspects, essential for future clinical practice. Theory exams typically include multiple-choice questions, essays, and problem-solving scenarios that require applying theoretical knowledge to specific situations.[1]

Practical exams assess the psychomotor and affective domains of medical students. They involve demonstrating practical skills like clinical examinations, procedures, and using medical instruments. These exams also evaluate students' attitudes, communication skills, and professionalism. Practical assessments, often conducted through Objective Structured Clinical Examinations (OSCEs), provide hands-on opportunities for students to apply theoretical knowledge in real-world scenarios by rotating through stations and performing tasks under observation.[2]

The viva voce, or oral exam, complements theory and practical exams by providing a holistic assessment of students' capabilities. It involves face-to-face interaction where the examiner probes the student's understanding, reasoning, and critical thinking skills. Viva voce aims to assess cognitive abilities and the student's ability to articulate knowledge, think quickly, and engage in professional dialogue. However, its effectiveness is questioned due to subjectivity, variability, and examiner bias.[3]

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1. Associate Professor, Department of Community and Family Medicine, All India Institute of Medical Sciences Patna, Patna -801505, **Email:** drshamshadahmad@aiimspatna.org, Contact: +91-7980084450

2. Senior Resident, Department of Community and Family Medicine, All India Institute of Medical Sciences Patna, Patna, Bihar - 801505; **Email:** deepika8292@gmail.com, Contact: +91-7978908362

3. Professor, Department of Community and Family Medicine, All India Institute of Medical Sciences Patna, Patna, Bihar, Pin code: 801505, **Email:** drpragyak@aiimspatna.org

Corresponding Author: Dr Deepika Agrawal, Senior Resident, Department of Community and Family Medicine, All India Institute of Medical Sciences Patna - 801505; **Email:** deepika8292@gmail.com, Contact: +91-7978908362

Limitations of Traditional Viva-Voce

Traditional viva voce exams face criticism for high subjectivity and examiner bias due to the lack of standardized questions, resulting in variability and unfair assessments influenced by examiners' biases and moods. Studies highlight that this leads to inconsistent evaluations, underscoring the need for structured formats.[4]The traditional format also induces significant stress and anxiety among students, negatively impacting performance. Research shows many students experience heightened anxiety during viva voce exams, affecting their ability to think clearly.[3,5] Additionally, inconsistent evaluation standards and scoring further undermine the reliability and validity of these assessments. Pilot studies comparing traditional and structured viva voce found that the latter provides more consistent and fair evaluations, reducing subjective biases. [6,7]

Benefits of Structured Viva-Voce

Structured viva voce provides a uniform assessment framework with predetermined questions and standardized scoring, ensuring all students are evaluated consistently. This reduces variability and minimizes examiner bias and subjectivity, significantly improving the reliability and validity of assessments.[8]By adhering to standardized questions and scoring rubrics, structured viva voce reduces examiner bias and ensures fair evaluation. Research shows that this method is perceived as fairer by both students and faculty, providing a transparent and objective assessment environment.[2] Structured viva voce can better target specific competencies by aligning questions with learning objectives and desired outcomes. This approach covers all critical curriculum areas, evaluating clinical reasoning, problem-solving abilities, and communication skills comprehensively.[7] Further, structured viva voce provides more constructive feedback. With a standardized scoring system and detailed criteria, examiners can give specific, actionable feedback, helping students identify strengths and areas for improvement. This formative assessment aids students in enhancing their performance before final evaluations.[9]

Case Studies

Several institutions have successfully implemented structured viva voce (SVV) as a more objective and standardized assessment method compared to traditional viva voce (TVV). At Rajiv Gandhi Medical College in India, a study involving second-year MBBS students assessed the effectiveness of objectively structured viva voce (OSVV) versus TVV. Students preferred OSVV for its fairness, relevance, and reduced subjectivity, despite no significant difference in marks.[10] Alazhari University in Sudan used the Video-Projected Structured Clinical Examination (ViPSCE) to assess surgical knowledge and problem-solving skills. Students preferred ViPSCE over TVV for its structured format, reduced time, and perceived fairness.[11] At Shalamar Medical and Dental College in Lahore, first and second-year MBBS students found structured viva voce fairer and more effective in highlighting strengths and weaknesses compared to traditional methods.[9] The transition from TVV to SVV has shown significant improvements in student performance and satisfaction. Traditional viva voce is criticized for subjectivity, examiner bias, and inconsistency, influenced by the examiner's mood and personal biases.[4] In contrast, SVV reduces these issues by providing a standardized framework with predefined questions and scoring rubrics, leading to more consistent and objective assessments.[7]

Traditional viva voce can cause significant anxiety and stress among students due to its unpredictable nature and potential for examiner bias. Conversely, students report higher satisfaction with SVV due to its transparency, fairness, and reduced anxiety.[2] Educational outcomes also favor SVV, which provides a comprehensive and objective evaluation of students' competencies, ensuring that all critical curriculum areas are assessed systematically.[12]

Recommendations for Implementation

Transitioning from traditional to structured viva voce requires careful planning and execution. Here is a practical guide to facilitate this transition.

First, conduct an assessment needs analysis to evaluate the current viva voce process and identify gaps and areas for improvement. Define the objectives and outcomes expected from the structured viva voce format. Next, focus on the development of structured questions by creating a bank of questions covering various difficulty levels and learning domains. Ensure these questions are validated by subject experts for content accuracy and relevance.[13]

Standardization of scoring rubrics is also crucial. Develop detailed scoring rubrics to provide clear guidelines for examiners on how to assess student responses, ensuring that rubrics are consistent and fair to minimize subjective bias.[2] Implementing a pilot testing program to test the structured viva voce format with a small group of students is another important step. Collect feedback from both students and examiners to identify any issues or areas for refinement. [2]

Training programs for examiners are essential to ensure they are well-prepared to conduct structured viva voce effectively. Conduct workshops to familiarize examiners with the new structured format, including question types and scoring rubrics, and provide hands-on practice with mock viva sessions to help them gain confidence in using the structured approach.[3]

Pilot programs for testing and refining the structured viva voce format. Start with a small group of students and examiners to pilot the structured viva voce, collecting detailed feedback on the process, including any logistical or technical challenges.[7] Analyze data from the pilot program to evaluate the effectiveness and reliability of the structured format, and use this data to make necessary adjustments and improvements before wider implementation. [2]

Proper student preparation is essential to ensure students are well-equipped to succeed in structured viva voce. Provide students with detailed information about the structured viva voce format, including types of questions and assessment criteria, through orientation sessions to familiarize them with the new process.9Organize practice sessions and mock viva exams to help students build confidence and reduce anxiety, offering resources such as sample questions, study guides, and feedback sessions to aid in their preparation.[3]

Finally, implement a robust feedback mechanism to provide students with constructive feedback on their performance. Use this feedback to guide students on areas for improvement and enhance their learning experience.[14] By following these steps, institutions can effectively transition to structured viva voce, providing a fairer, more reliable, and less stressful assessment experience for students.

Replacing traditional viva voce with a structured format in medical education is essential. Structured viva voce offers fairer, more reliable assessments by reducing examiner bias, standardizing criteria, and minimizing student anxiety. Strong evidence supports its benefits, ensuring comprehensive evaluations of students' knowledge and skills. Educators and policymakers must implement structured viva voce to enhance assessment quality and fairness. Key steps include examiner training, developing standardized questions, and conducting pilot programs. This transition will better prepare students for healthcare roles. Future assessment strategies should prioritize continuous improvement and innovation. Structured viva voce is a step toward robust evaluations. Integrating technology, evidence-based practices, and feedback mechanisms will foster critical thinking and professional growth, leading to better healthcare outcomes. Embracing these methods ensures medical education remains relevant and effective.

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We invite you to share your views on viva voce assessments. Please scan the QR code below to submit your responses to the following questions. Your feedback is valuable to us!

1. **Which format of viva voce do you believe is more effective in fairly assessing medical students' knowledge and skills?** *Traditional Viva Voce / Structured Viva Voce / Both are equally effective/Neither is effective.*

2. **How confident are you that structured viva voce can reduce examiner bias compared to traditional viva voce?** Very Confident / *Somewhat Confident / Neutral / Somewhat Doubtful / Very Doubtful*

3. **Would you support the implementation of structured viva voce in your institution or field?** *Strongly Support / Support / Neutral / Oppose /Strongly Oppose.*
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Structured vs. Traditional Viva Voce: Your Opinion
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