

“STRUCTURED VIVA AS AN ASSESSMENT TOOL: PERCEPTIONS OF UNDERGRADUATE MEDICAL STUDENTS”

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ABSTRACT

Objective: To document the undergraduate medical students' perceptions regarding the structured viva as an assessment tool.

Study Design: Cross sectional.

Place and Duration of Study: Army Medical College, National University of Sciences & Technology (NUST), Islamabad from April 2013 to April 2014.

Subjects and Methods: Data was collected from fourth year students of a public sector medical college. A structured questionnaire was used to evaluate student's perception regarding relevancy of viva questions to syllabus, level of comfort while being assessed and provision of adequate time to answer, bias or harassment by the mentors, freedom to answer in their own learning styles.

Results: One hundred seventy one, fourth year students gave consent to participate in this study. Almost all of the students were satisfied after being assessed in oral structured viva exam. The results obtained were: relevancy of questions to course: 169 (98%); comfortable environment of viva room: 165 (97%); appropriate time to answer the questions: 162 (94.7%), structured viva: 132 (94.7%); welcomed upon arrival for viva: 147(86%); encouraged by examiner: 144 (84%); facilitated to answer in their own learning style: 137(80%); covered all the topics: 120 (70%); demotivated during viva: 11(6.4%) and bias during viva: 14 (8.1%)

Conclusion: There is substantial need of introducing innovations in the conventional exam strategies being practiced in our medical colleges. Introducing structured viva examination, making the exam environment comfortable and adapting an appreciative inquiry approach while assessing students can greatly help them to overcome exam stress.

Keywords: Education, Educational measurement, Medical Undergraduate.

INTRODUCTION

Medical professional viva examination is one of the most dreaded, crucial and defining moments in the academic journey of an undergraduate medical student. Only those students who fare well are likely to achieve good grades whereas failure to do so leads to adverse academic outcome, emotional trauma and demotivation¹.

In the medical schools, the oral examination or viva is an integral part of assessment. Joughin defined the viva examination as “assessment in

which a student's response to the assessment task is verbal, in the sense of being expressed or conveyed by speech instead of writing”². In fact, viva examination complements the written exam and this is a more feasible way to inquire what is not asked in the written examinations. The face to face interaction with the examiner provides unique opportunity to assess student's depth of knowledge as well as it also reflects the critical thinking and analytical abilities of undergraduate students³.

However latest studies have shown that this traditional mode of examination is riddled with flaws and might not be appropriate for the assessment of student's interactive skills and higher cognitive functions^{4,5}. Inter examiner variability in grading the students, lack of standardization in time allotted to each student

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and the topics covered are among a few. Validity of traditional viva exam is also questionable as the scores obtained by student in the orals do not truly reflect the student's competence and other factors such as student's self confidence, anxiety, concept discussion by student and examiner's impression also affect the oral ratings⁶.

METHODS

This cross sectional, descriptive study was conducted from April 2013 - April 2014, at Army Medical College, National University of Sciences and Technology, Islamabad after departmental and institutional permission. Total 171 undergraduate medical students of both sexes,

Table: Frequency of responses of participants regarding items of structured viva examination.

S.no	Variables	Percentage
1	Relevance of questions to the target course content	98%
2	Comfortable environment of viva room	97%
3	Appropriate time given for answering questions	94.70%
4	Welcomed upon arrival for viva	86%
5	Encouraged by examiners to provide relevant answers	84%
6	Facilitated to answer in their own learning styles	80%
7	Covered almost all the topics	70%
8	Bias during viva	8%
9	Demotivated during viva	6.40%

In order to overcome these biases, structured viva examination has been implemented in various medical universities. This modified format of oral assessment provides an equal opportunity to judge the knowledge and problem solving ability of every student appearing in the exams, and therefore considered better in terms of minimising the bias and reducing the luck factor^{3,7}.

There is a paucity of local research on student's perception of structured oral examination although it has been adopted by many institutions. This study was conducted to document the perception of undergraduate medical students regarding the structured viva examination experience in a public sector undergraduate medical college setting.

appearing in their final exams were included in this study through non-probability consecutive sampling. Written informed consent was obtained from the participants. Students, who did not give the consent to participate, were excluded from the study.

A structured questionnaire was used to obtain the perception of undergraduate medical students regarding the structured viva examination experience which was implemented in their final exams. The structured viva was standardized with respect to time allocation and topics covered for each student. The questionnaire consisted of two parts. First part included the demographic data of students while second part contained the 14 items to get the perceptions of students' experience in regard to structured viva examination. The items in the questionnaire were clarified to all the participants

to develop a uniform understanding among them before they documented their responses. Further queries when asked by any participant, were also clarified.

Statistical analysis was performed by SPSS software version 17. Frequencies were calculated for qualitative responses related to structured viva examination.

RESULTS

One hundred and seventy one undergraduate medical students willingly participated in this study. The mean age of the participants was 22.3 ± 1.1 years. Among these students, 47% were females while 53% were male participants. Almost all of the students said that they were satisfied after being assessed in oral structured viva exam.

The responses of participants regarding the items of structured viva examination are presented in Table.

DISCUSSION

Assessment is a goal oriented process and is considered to be the most important factor that drives student learning^{8,9}. The competent and fair assessment of a large number of medical students with minimum stress are the tough logistics and almost every medical educationist face it. Although researchers had worked hard to find the best way for assessing the undergraduate medical students, still they could not agree on a single tool. Various assessment techniques and methodologies have been adopted in order to improve the reliability and validity of the assessment process¹⁰⁻¹². Structured viva examination is an example. Many institutions are currently restructuring their traditional oral examination to a structured viva format^{1,6,9}.

Most medical educationists agree that when compared to unstructured examination, structured assessment has better reliability and validity as structured viva follows a systematic format of question-answer session and provides

equal opportunity of standardized and fair assessment to every student¹¹⁻¹³.

The main focus of our study was to document the perceptions of undergraduate medical students regarding their experience during structured viva examination. In the current study, 98% students were satisfied with the structured format of the viva examination and they agreed that the questions asked in the exam were relevant to the target course content. Shenwai and Patil also confirmed these findings in their study where 96.77% student showed their satisfaction in regard to structured viva examination³.

Majority of our undergraduate medical students were of the view that structured viva was less stressful (97%), the participants were encouraged (84%) to respond to the viva questions and morale boosting (80%) was of great help.

Kshirsagar¹⁴ and many other researchers had also identified that structuring the conventional viva improves its reliability in predicting success even in the later years of professional education^{5,9,15-17}.

The limitations of this study were that the data were collected from the undergraduate medical students of only one public sector medical college and a questionnaire was used as the only tool to record the students' perspective regarding structured viva examination. Due to these limitations, the results of our study cannot be generalized to other medical colleges or institutes for the implementation of structured viva exam.

CONCLUSION

The results of this study support the perception that structured viva can be a better alternative assessment tool to judge the understanding and knowledge of the undergraduate medical students. Introducing structured viva examination, making the exam

environment comfortable and adapting an appreciative inquiry approach while assessing students can greatly help them to overcome exam stress and achieve better grades.

Conflict of Interest: The authors of this study reported no conflict of interest.

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