ORIGINAL ARTICLE

Perception of Medical Students on Structured Viva Examination in an Integrated Undergraduate Curriculum at Ziauddin University

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ABSTRACT

Introduction: Exponential growth of knowledge in the biomedical field has forced the medical educators for a change from traditional to integrated curriculum and conventional assessment techniques to newer structured techniques.

Objective: Survey of medical students' views about the Structured Viva Examination (SVE) in an integrated curriculum.

Methods: Feedback forms of Structured Viva Examination (SVE) were given to 144 students of first and second year MBBS (2008), after they completed their professional examination. SVE feedback form was categorized in the domains of agree, disagree and neutral with five different statements.

Results: Out of 144 students 140 responded. One hundred and thirteen out of hundred and forty (80.71%) students agreed that the language of the cases was simple and easy to understand. One hundred and ten (78.57%) stated that the reading time of cases was adequate. One hundred and seven (76.42%) agreed that the time was adequately spaced between SVE stations. Hundred and one (72.14%) agreed that the examination was relevant with course content, while one hundred and two (72.85%) agreed that PBL in modules helped in interpreting such cases in their annual examinations.

Conclusion: Educators need to explore newer assessment methods for better understanding of the health sciences with relevance to common disease.

Key words: Knowledge, conventional, professional examination, Structured Viva Examination.

INTRODUCTION

Educational assessment is process of documenting, usually in measurable terms, knowledge, skills, attitudes and beliefs. [1-3] Assessment can focus on the individual learner, the learning community (class, workshop, or other organized group of learners), the institution, or the educational system as a whole. [4]

Assessment (either summative or formative) is often categorized as either objective or subjective. Objective assessment is a form of questioning which has a single correct answer. Subjective assessment is a form of questioning which may have more than one correct answers (or more than one way of expressing the correct answer)

Vivas have been used to assess such programs as doctoral degrees,[5,6] clinical dentistry[7] medical studies[8] and various university degrees including natural sciences, engineering and the social sciences.[9]

In fact, all assessments are created with inherent biases built into decisions about relevant subject matter and content, as well as cultural (class, ethnic, and gender) biases. [10,11]

The Objective Structured Viva Examination (OSVE) is a new concept in the assessment of basic health sciences in our country, used for evaluation of preclinical subjects. Conventional techniques for assessing the knowledge of undergraduate medical students are widely acknowledged as being unsatisfactory. Viva examination is subjective,

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un structured and non valid in most of the medical schools in Pakistan. Ziauddin Medical college introduced (OSVE) for undergraduate MBBS students of years one and two (2008), to maintain the objectivity and validity of the viva examination .The examination comprised of nine scenarios from three different modules. Each scenario was integrated and accompanied by nine structured questions for viva along with keys. The viva was conducted by anatomy, physiology and biochemistry departments in an integrated manner. The Objective of the present study is to survey medical students regarding Structured Viva Examination.

METHOD

Recruitment and Procedure

Feedback forms were given to 144 first and second year (2008) MBBS students of Ziauddin Medical College after they completed their professional examination Feedback form consisted of five items and student's feedbacks were categorized in the domain of Agree, Neutral and Disagree.

The questionnaire was developed by a team of an educationist and biostatistician. The questions were based on general surveys routinely used for evaluating courses and assessment techniques. The questionnaire underwent reviews for relevance and clarity. (A copy of a questionnaire is available on request).

RESULTS

Table 1 shows the response of 140 out of 144 students. One hundred and thirteen out of hundred and forty (80.71%) students agreed that the language of the cases was simple and easy to understand. One hundred and ten (78.57%) stated that the reading time of problems was adequate. One hundred and seven (76.42%) agreed that the time was adequately spaced between SVE stations. Hundred and one (72.14%) agreed that the examination was relevant with course content, while one hundred and two (72.85%) agreed that PBL in modules helped in interpreting the cases in their annual examinations. The results of first and second years are shown in Figures 1 and 2 respectively which also comply with the combined results of the two.

Table1 :

Statements	Agree	Neutral	Disagree
1)Reading time of problems was adequate	110 (78.57%)	20 (14.28%)	10 (7.14%)
2)Examination was relevant with course objectives	101 (72.14%)	29 (20.71%)	10 (7.14%)
3)PBL helped in interpreting the cases	102 (72.85%)	26 (18.57%)	12 (8.57%)
4)Time adequately spaced between SVE stations	107 (76.42%)	24 (17.14%)	9 (6.42%)
5)Language of the cases was simple and easy to understand	113 (80.71%)	20 (14.28%)	7 (5.00%)

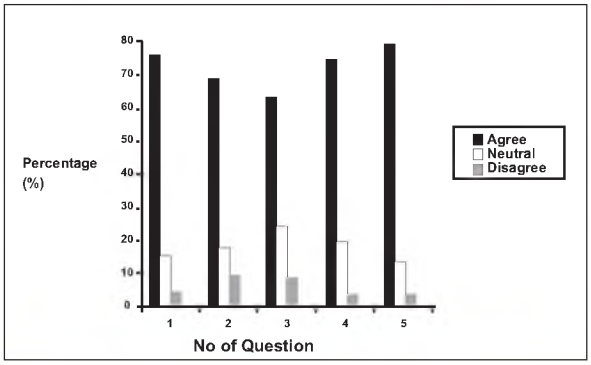

Figure – 1 : Feed back by Students (First Year)

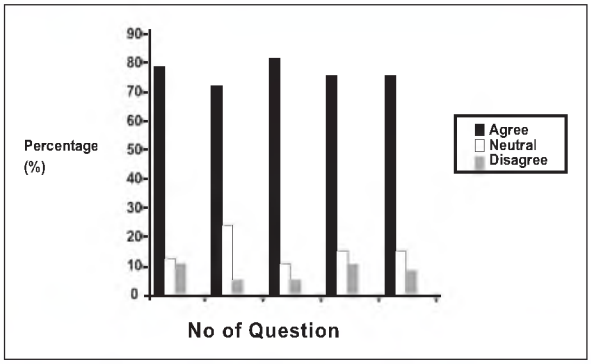

Figure – 2 : Feed back by Students (Second Year)

DISCUSSION

Whilst students' views about the specific assessment tools may sometimes be at variance but overall they welcome the introduction of methods that provide meaningful assessment feedback. An OSVE may be an acceptable alternative to traditional methods of examination and is superior in certain aspects in an integrated PBL based curriculum.

Constructivism has provided a completely new view on how students learn best and the change from trait-oriented to competency- or role-oriented thinking has given rise to a whole range of new approaches in assessment. Certain methods of learning, such as problem-based learning (PBL), and assessment, however, are often seen as almost synonymous with the underlying concepts. It is generally acknowledged that assessment drives learning; however, students study more thoughtfully when they anticipate certain examination formats.[12] Any change in the format can shift their focus to clinical rather than theoretical issues. [13]

All methods of assessment have strengths and intrinsic flaws . The use of multiple observations and several different assessment methods over time can partially compensate for flaws in any one method.[14] Van der Vleuten describes five criteria for determining the usefulness of a particular method of assessment: reliability (the degree to which the measurement is accurate and reproducible), validity (whether the assessment measures what it claims to measure), impact on future learning and practice, acceptability to learners and faculty, and costs (to the individual trainee, the institution, and society at large). [15]

Various domains of competence should be assessed in an integrated, coherent, and longitudinal fashion using multiple methods and provision of frequent and constructive feedback.[16] Educators should be mindful of the impact of assessment on learning,[17] the potential unintended effects of assessment, the limitations of each method (including cost),[18-20] and the prevailing culture of the program or institution in which the assessment is occurring.

CONCLUSION

Integrated curriculum has led to better understanding of the health sciences. Educators need to explore newer assessment methods for better understanding of the health sciences with relevance to common disease.

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REFERENCES

1. Entwistle, N. J. Approaches to learning and perceptions of the learning environment. Introduction to the special issue. Higher Education 1991; 22:201-204.

2. Marton, F, & Säljö, R. Approaches to learning. In Marton, F, Hounsell, D, & Entwistle N, editors. The experience of learning; implications for teaching and studying in higher education 2nd ed. Edinburg: Scottish Academic Press; 1997, p.39-59.

3. Ramsden, P. The context of learning in academic departments. In: Marton F, Hounsell D, Entwistle N, editors. The experience of learning: implications for teaching and studying in higher education. 2nd ed. Edinburg: Scottish Academic Press; 1997. p. 198-217.

4. Paul B, Wiliam D. "Inside the Black Box: Raising Standards through Classroom Assessment." Phi Delta Kappan 1998; 80:139 – 148.

5. Jackson, C., Back to Basics: a consideration of the purposes of the PhD viva. Assessment & Evaluation in Higher Education 2001; 26:355-366.

6. Morely L., Leonard D., David, M. Variations in vivas: quality and equality in British PhD assessment. Studies in Higher Education 2002; 27:263-73.

7. Yip H.K., Smales R.J., Newsome PRh., Chu FCS., Chow T.W. Competency-based education in a clinical course in conservative dentistry. Br Dent J 2001; 191:517-22.

8. Bashook, P. Assessing clinical judgment using standardized oral examinations. The Annual Meeting of the American Educational Research Association, New Orleans, LA, 2000. 24-28.

9. Kehm BM. Oral Examinations at German Universities. Assessment in Education: Principles, Policy and Practice 2001; 8:25-31.

10. Epstein RM, Hundert EM,. Defining and assessing professional competence. JAMA 2002; 287:226-35

11. Epstein RM, Assessment in medical education. N Engl J Med. 2007; 356:387-96.

12. Hakstian AR. The effects of type of examination anticipated on test preparation and performance. J Educ Res 1971; 64:319-24.

13. Newble DI, Jaeger K, The effect of assessments and examinations on the learning of medical students. Med Educ 1983; 17:165-71.

14. Schuwirth LW, van der Vleuten CP. Changing education, changing assessment, changing research? Med Educ 2004; 38:805-12.

15. Van Der Vleuten CPM, The assessment of professional competence: developments, research and practical implications. Adv Health Sci Educ 1996; 1:41-67.

16. Wass V, Van der Vleuten C, Shatzer J, Jones R, Assessment of clinical competence. Lancet 2001; 357:945-49.

17. Segers, M., & Dochy, F. New assessment forms in Problem- based Learning: the value- added of the students' perspective. Studies in Higher Education 2001; 26:327-43

18. Earl LM. Assessment as Learning: Using Classroom Assessment to Maximise Student Learning. Thousand Oak, Corwin Press 2003.

19. Educational assessment". Academic Exchange Quarterly 2009.

20. Joint Information Systems Committee (JISC). "What Do We Mean by e-Assessment?" JISC InfoNet, [Accessed on January 29, 2009]. Available from: (http://www.jiscinfonet.ac.uk/InfoKits/effective-use-of-VLEs/e-assessment/assess-overview).