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ORIGINAL ARTICLE

OSPE- AN UNBIASED TOOL FOR EVALUATION OF STUDENTS – OUR STUDY

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ABSTRACT: BACKGROUND: Evaluation of students at any level is done with an idea of assessing their ability to interpret data, solve problems, teach and communicate. Any attempt to do this in the old fashioned random method will lead to several variations without giving students their due in a fair and deserving manner. One of such disparity is inter and intra examiner variability which is not stressed while conducting examinations especially practical and viva voce. Our study shows how OSPE eliminates this little noted but major disparity to a great extent. **MATERIAL AND METHODS:** The study was conducted in the Hematology Laboratory, Department of Physiology, Gandhi Medical College, over a period of 2 days. 60 first year physiology students were given the task of performing hemoglobin estimation by Sahli-Adam method. Each student was given 10 minutes at the procedure station to complete his experiment, following which he was subjected to practical viva examination at the response station. First he was evaluated by two different examiners separately by traditional method and awarded marks. Then he was subjected to OSPE by both examiners separately where in each examiner asked questions from a preformed questionnaire with the questions carrying fixed marks. **RESULTS:** The data was fed in excel sheet and the standard deviations and p values calculated. In 59 students there was no disparity when OSPE was followed while there was inter examiner disparity in all 60 students when traditional method was followed in evaluation. **CONCLUSION:** OSPE is objective and evaluates students in a structured manner and is a standardized and excellent procedure for excluding several disparities, one of them being inter examiner variability, apparently a minor factor, but a major where fair and uniformity of evaluation is taken into consideration.

KEYWORDS: OSPE, Inter-examiner variability, Evaluation of students.

INTRODUCTION: Evaluation of students aims at judging incentive to learn, modification of learning activities, success or failure and most importantly be fair and unbiased. Traditional practical examination pattern wherein students are assessed randomly is seen to have certain disparities related to evaluation of students. One of them is related to cognitive activity of examiner and sociocultural environments in which examinations occur. This leads to inconsistencies in assessing students because sometimes examiners may themselves be unaware of uniqueness of their capacity to assess and award marks. This is not to find fault with examiners but to identify the complex and intuitive nature of assessment and awarding of marks.[1] more so when multiple examiners are involved in evaluating the students this factor becomes important, in other words inter examiner variability, which should be eliminated. Objective structured practical examination has high validity (Measures what it is supposed to measure), high reliability (Accuracy and consistency), high objectivity (Greater degree of concordance between multiple examiners).it also effectively includes summative (Certifying) and formative (Diagnostic) aspects of evaluation.[2,3,4,5] it mainly stresses on psychomotor ability of the student.

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AIM AND OBJECTIVE: To prove that objective structured practical examination (OSPE) scores over Traditional Practical Examination pattern involving multiple examiners in completely eliminating inter-examiner variability.

MATERIALS AND METHODS: The study was conducted over a period of 2 days, in Hematology Laboratory, Department of Physiology, Gandhi Medical College, Secunderabad. 60 first year physiology students were given the task of Hemoglobin estimation by Sahli-Adam's method. There was a procedure station where the student was given 10 minutes time to do the procedure .There was a response station where two Assistant Professors conducted viva examination related to the experiment separately without a prepared questionnaire .Then both the examiners were given a copy of the same previously structured question paper and asked to conduct viva examination of same students and award marks .The questionnaire contained twenty questions each carrying fixed marks in such a way that Cronbach's alpha for testing internal consistency was significant (>0.7).[6]

RESULTS: In 59 students there was no disparity between the examiners' evaluation while assessing by OSPE method, while there was inter examiner variability in the marks awarded in all the 60 students when Traditional methods were followed. Mean Standard Deviations of examiners 1 and 2 when traditional methods were compared, were 2.533±1.46 and 6.92±1.74 respectively and p value was significant <0.0001 while that of OSPEs were 6.85±1.49 and 6.83±1.52 and p value was not significant 0.47, also in case of examiner 2 values of traditional and OSPE did not show much difference indicating unbiased evaluation. (Dia.1)

DISCUSSION: Evaluation of students is an organized and systemic process which effectively determines the extent to which they have obtained certain objectives in a fair manner. It should be qualitative and quantitative with minimum bias and variation in all aspects related to it in order to give deserving students their due. It includes measurement and value judgement.to some extent theory examinations can be judged qualitatively and quantitatively as there is evidence of student's performance .problem arises with oral examinations in practical or otherwise which needs special charting of evaluation to be un biased and fair .our study has been done to prove that OSPE is superior method to any other method to a certain extent in excluding inter examiner variation and is in concordance with study of Harden et al.[7] It mainly concentrates on a student's ability to interpret data, solve problem, teach and communicate and is a uniform and fair method of assessment of the student.

CONCLUSION: OSPE eliminates the inter examiner variability in the assessment of students and brings about uniformity in evaluation when compared to Traditional method and is an excellent tool for unbiased evaluation .but in framing a OSPE a few guidelines have to be kept in mind like objective being assessed, clarity of language, time required, what the question assesses, what needs to be supplemented, like charts, graphs etc.

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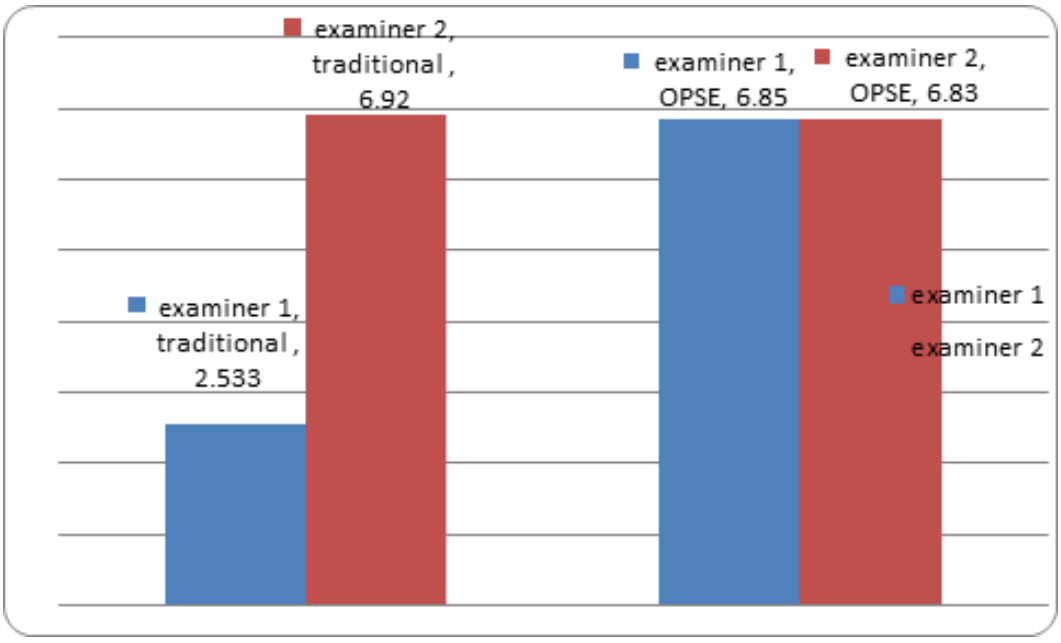

Dia. 1

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