An objective structured practical examination to test students in experimental physiology.

Sandila MP¹, Ahad A, Khani ZK.

Abstract

OBJECTIVE:

To develop a competency based discriminatory assessment method for physiology practical examination.

METHOD:

Results from 1st professional M.B.B.S. Part I and II of three batches were taken and students performance in traditional and objective structured practical examination (OSPE) were compared. The course objective for practical examination of all three batches were same. However, Batch II appeared in the conventional examination, while Batches III and IV were examined by OSPE.

RESULTS:

The mean score of Batch II was 68 +/- 6, of Batch III 53 +/- 13 and Batch IV 50 +/- 16. Batch II had thus an overall higher score as compared to Batches III and IV. The comparison of mean scores using ANOVA showed a significant (P < .001) difference between scores of Batch II as compared to Batches III and IV. Tukey's pair wise comparison of the batches showed a significant difference between batches II and III (95% CI for difference: 9.1, 20.5 with P < 0.001) and batches II and IV (95% CI for difference: 12.2, 23.6 with P < 0.001). However, no significant difference was found between batches III and IV (95% CI for difference: -2.6, 8.8 with P = 0.27). The result also showed that Batch II with conventional method of examination had a lesser spread around the mean (scores ranging from 52 to 81) as compared to Batch III (25 to 80) and Batch IV (14 to 90).

CONCLUSION:

OSPE is an effective tool to discriminate between good and poor performers in physiology practical examination.