

Abstract

Background

Research has shown the value of integrating point of care ultrasonography into daily practice and has highlighted the poor competency in transthoracic echocardiographic (TTE) skill in anaesthesiology registrars. The aim of this study was to determine the TTE skills of anaesthesiology registrars at Wits using an objective structured clinical examination (OSCE).

Methods

This research study employed a cross-sectional research design. Convenience sampling was used and 28 registrars were enrolled in this study. The OSCE consisted of two practical stations (Stations 1 and 2) and two clinical pathology stations (Stations 3 and 4). Adequate TTE skill was defined as competency in both the practical and clinical stations and an overall pass score of 70% was used.

Results

The overall mean (SD) score obtained for the OSCE was 46.9% (24.3%). When comparing TTE skills of registrars who have completed a cardiac rotation, have completed an accredited course and those who have not, no significant differences were found in obtaining a pass score. Registrars who had completed an accredited TTE course performed significantly better in Stations 3 and 4 ($p=0.005$). Of the registrars 33.9% obtained a pass score for practical stations and 17.9% for the clinical stations with an overall 21.4% achieving a pass score. No significant difference in pass scores was found with the different categories of registrars. There was a strong positive significant correlation between completing more TTEs and the scores obtained ($r=0.540$, $p=0.004$).

Conclusion

Findings from this study suggest that the current skill levels of registrars in performing TTEs is not sufficient to achieve clinical competency and that the training may not be initiated early enough in the registrar program.