

Objective Structured Clinical Examination (OSCE) the Royal Thai College of Obstetricians and Gynaecologists (RTCOC) Board Examination

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Abstract : *Objective to assess the reliability of OSCE used for assessment of clinical competence for specialists in obstetrics and gynaecology. Design : A descriptive study. Subjects : OSCE used in the Royal Thai College of Obstetricians and Gynaecologists (RTCOC) board examination, academic year 1992, 1993 and 1994. Methods : Computerized data analyses of scores of OSCE by using SPSS program under window operation. Results : The reliability (Cronbach alpha) of OSCE year 1992, 1993 and 1994 were 0.75, 0.63 and 0.54 respectively. Conclusion : A moderate reliability of OSCE was obtained during the past 3 years of RTCOC board examination. This is comparable with the reliability of OSCE for medical licensure in North America. (Thai J Obstet Gynaecol 1995;7:131-133)*

Key words : OSCE, RTCOC, board examination

The eligibility for the RTCOC board examination included one clinical research, six cases report, 150 items of MCQ, 4 items of MEQ, 2 items of Essay, 20 stations of OSCE and oral examination. The RTCOC has introduced OSCE into the Board Certification Committee since 1990. It was virtually intended to substitute a "long case and short case examination" which was heavily criticized as an unfair and unreliable assessment.

Evidently, after the past five years, OSCE was well accepted by most members of the RTCOC to be a standard procedure to assess clinical performance and competence for a specialist in Obstetrics and Gynaecology. Nevertheless, psychometric characteristics of those OSCEs have never been described. The purpose of this study was to assess the reliability of OSCE used in the RTCOC board examination.

Materials and Methods

Although the RTCOG has already organised OSCEs for five years, the details of data for full analyses was available only three years in 1992, 1993 and 1994. There were 19 stations in 1992 OSCE and 20 stations in 1993 and 1994 OSCEs. There were 85, 88 and 84 candidates for Obstetrics and Gynaecology board certification in 1992, 1993 and 1994 respectively. The stations of each OSCE were classified into six categories to assess history taking skill, physical examination skill communication skill, technical skill, interpretation skill and problem solving skill. The technical skill was emphasized on operative obstetrics (4 stations) and operative gynaecology (2 stations). There were 10 stations of obstetrics, 10 stations of gynaecology and 2 rest stations in most OSCEs. Both obstetric stations and gynaecological stations comprised of 60-70% of process assessment and 30-40% of product assessment. All of these were 5 minute station OSCEs.

Standardized rating scale was used to assess the processes while the product assessment scored by structured answer sets. The scores of each OSCE were fully analysed year by year. The standardized item reliability (Cronbach alpha) was processed by a SPSS program under window operation at the Department of Medical Education, Bhumibol Adulyadej Hospital, Royal Thai Air Force, Bangkok.

Results

The reliability (Cronbach alpha) was 0.75, 0.63 and 0.54 for OSCE year 1992, 1993 and 1994, respectively. Most candidates criticized the RTCOG-OSCE as a stressful examination. Evidently, 5-8% of the examinees failed. The overall expenses to organize each OSCE was approximately 50,000 bath.

Discussion

Most medical educators criticized the long case examination as an unobjective and unreliable procedure to assess clinical competence.^(1,2) Consequently, an OSCE which was firstly published in 1979 by Harden and Gleeson⁽³⁾ has substituted for a long case examination. Although OSCEs have been implemented in medical schools worldwide including Thailand, they are only involved in an undergraduate level.⁽⁴⁾ Not until recently that the National Board of Medical Examiner (NBME) of U.S.A. and the Medical Council of Canada (MCC) have announced an OSCE as a standard procedure to assess clinical competence of candidates for Medical Licensure.^(5,6) In Thailand, the RTCOG was the first who considered OSCE as a part of specialist examination. At the beginning, concerns have been expressed about the feasibility, reliability and worth of OSCE. After 5 years of hard work, the Board Certification Committee of the RTCOG

was confident in the success of OSCEs.

Achieving a high reliability of an OSCE was possible but difficult because of the time strain. For example, the reliability (Cronbach alpha) of 0.78 and 0.84 would be obtained if the test length of 6 minutes OSCE were 4.0 and 6.0 hours, respectively.⁽⁷⁾ But in fact 4-6 hour OSCE was absolutely not practical for both organizers and examiners. The RTCOG usually organized a 22-24 five minutes stations which have shown a moderate reliability of 0.54-0.75. Regretably, the reliability of the OSCE year 1990 and 1991 could not be calculated due to loss of data. However, the obtained reliability was comparable with OSCEs for medical licensure in North America.⁽⁴⁾

Conclusion

The Board Certification Committee of the RTCOG was confident in the success of OSCEs to assess clinical competence of specialists in Obstetrics and Gynaecology. A moderate reliability (Cronbach alpha) or 0.54-0.75 was obtained. This was comparable with the reliability of postgraduate OSCEs in North America.

Acknowledgment

We would like to thank Dr. Pratharn Chinayon, Chairman of the

Board Certification Committee and Dr. Suvachai Inthraprasert, Secretary general of the Board Certification Committee for their valuable suggestion in this study.

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