Validation of Global Ratings in Clinical Performance Assessment

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Abstract : This study aimed to determine the reliability of clinical performance assessments, having been emphasized by ability-based education, and professors overall assessment methods. We addressed the following problems: First, we try to find out whether there is a difference in what we consider to be the main variables affecting the clinical performance test according to the evaluator's working period and the number of evaluation experience. Second, we examined the relationship among the global rating score (G), analytic global rating score (Gc), and the sum of the analytical checklists (C). What are the main factors affecting clinical performance assessments in relation to the numbers of times the evaluator had administered evaluations and the length of their working period service? What is the relationship between overall assessment score and analytic checklist score? How does analytic global rating with 6 components in OSCE and 4 components in sub-domains (Gc) CPX: aseptic practice, precision, systemic approach, proficiency, successfulness, and attitude overall assessment score and task-specific analytic checklist score sum (C) affect the professor's overall global rating assessment score (G)? We studied 75 professors who attended a 2016 Bugyeoung Consortium clinical skills performances test evaluating third and fourth year medical students at the Pusan National University Medical school in South Korea (39 prof. in OSCE, 36 prof. in CPX; all consented to participate in our study). Each evaluator used 3 forms; a task-specific analytic checklist, subsequent analytic global rating scale with sub-6 domains, and overall global scale. After the evaluation, the professors responded to the questionnaire on the important factors of clinical performance assessment. The data were analyzed by frequency analysis, correlation analysis, and hierarchical regression analysis using SPSS 21.0. Their understanding of overall assessment was analyzed by dividing the subjects into groups based on experiences. As a result, they considered 'precision' most important in overall OSCE assessment, and 'precise accuracy physical examination', 'systemic approaches to taking patient history', and 'diagnostic skill capability' in overall CPX assessment. For OSCE, there was no clear difference of opinion about the main factors, but there was for CPX. Analytic global rating scale score, overall rating scale score, and analytic checklist score had meaningful mutual correlations. According to the regression analysis results, task-specific checklist score sum had the greatest effect on overall global rating. professors regarded task-specific analytic checklist total score sum as best reflecting overall OSCE test score, followed by aseptic practice, precision, systemic approach, proficiency, successfulness, and attitude on a subsequent analytic global rating scale. For CPX, subsequent analytic global rating scale score, overall global rating scale score, and task-specific checklist score had meaningful mutual correlations. These findings support explanations for validity of professors' global rating in clinical performance assessment.

Keywords : global rating, clinical performance assessment, medical education, analytic checklist