

Development and validation of a self-reported periodontal disease measure among Jordanians

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Abstract: Background The development of self-reported measures of periodontal disease would be of great benefit to facilitate epidemiological studies of periodontal disease on a larger scale, and to allow for surveillance of the periodontal condition of populations over time. Objectives To develop a culturally adapted self-reported measure of periodontal disease, test its predictive and discriminative validity and establish a cut-off value for this measure to diagnose periodontal disease. Methods A total of 288 Jordanian adults completed the questionnaire assessing self-reported periodontal health (18 questions) and underwent periodontal examination. Of the 18 questions, six were significantly associated with at least one clinical definition of periodontitis and were used to constitute the self-reported periodontal disease measure. Receiver?operating characteristics (ROC) curve analyses were used to examine the overall discriminatory power, sensitivity and specificity, and corresponding cut-off points of the self-reported periodontal disease measure. Results ROC analysis showed that the self-reported periodontal disease measure had an excellent performance to discriminate between those with and without periodontal disease, regardless of the clinical definition used. A score of 2, on a scale of 0 to 6, had the highest sensitivity and specificity to detect periodontal disease when defined by all study criteria. Significant associations were observed between self-reported periodontal disease measures and all clinical definitions in the regression analysis (the odds ratio ranged from 8.31 to 18.96), according to the clinical definition to be predicted. Conclusion Self-reported periodontal disease measures have excellent predictive and discriminative validity when tested against clinical definitions, and severity and extent of periodontal disease.