Validity Of Mothers' Caries Screening Of Their Preschool Children And Its Relationship To Sociodemographic Backgrounds

Syarifah Haizan Sayed Kamar\textsuperscript{a} | Nasruddin Jaafar\textsuperscript{b}

\textsuperscript{a}Department of Paediatric Dentistry, Orthodontics and Dental Public Health, Kulliyyah of Dentistry, IIUM | \textsuperscript{b}Department of Community Oral Health & Clinical Prevention, Faculty of Dentistry, University Malaya

Introduction: Mothers can be trained to screen caries in their children. The aim of this study is to assess the validity of mothers' caries screening of their preschool children. Materials and Methods: 81 volunteer mothers of four- and five-year-old preschool children, from four kindergartens in Pahang were included this study. All mothers were trained by a dentist to detect caries in preschoolers based on a simplified caries detection guideline by WHO (1997) in a three-hour course. Subsequently, all mothers screened their own children caries status at the workshop and 24 hour later, at home. The validity of the results was determined by comparing mothers’ to dentist’s findings; and calculating their sensitivity, specificity, positive predictive and negative predictive values at child and tooth levels. Results: Caries prevalence among the children was 88.9%, with mean dmft of 7.10 (sd 5.07). At the workshop, mothers' screening sensitivity, specificity, positive predictive and negative predictive values at child level were 93.1%, 66.7%, 95.7%, 54.5%; and at tooth level were 76.6%, 94.0%, 90.4% and 87.8%, respectively. 24 hours post-workshop screening’s sensitivity, specificity, positive predictive and negative predictive values at tooth level were 76.1%, 93.7%, 90.7% and 87.9% respectively. The reliability of 24 hours post- workshop screening at tooth level was almost perfect (kappa=0.84). No significant relationship was reported between validity of screening and mothers' age, educational status, household income and area of residence. Conclusion(s): The validity of mothers' screening in this sample was adequate in identifying caries in their preschool children, regardless of their sociodemographic backgrounds.

KEYWORDS: validity, screening, caries, preschoolers, mothers