Paper: Life Course Approach in Assessment of ECC in 2-Year-Old Children (2nd Meeting of IADR Pan Asian Pacific Federation (PAPF) and the 1st Meeting of IADR Asia/Pacific Region (APR) (Sept. 22-24, 2009))



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5 Life Course Approach in Assessment of ECC in 2-Year-Old Children

Location: Function Room Xiang Fan (3rd Floor) (Shangri-La Hotel)

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Objectives: To explore the relationships between early childhood caries (ECC) and relevant biological, behavioral, and socio-economic experiences in the life course of the children.

Methods: A case-control study of 2 years old children was undertaken with an oral health examination and questionnaire investigation. The questionnaire collected socioeconomic and behavioral information at two time points of the participant's life (at birth and 2-year-old). Clinical examinations were performed using standardized criteria. Caries experience was recorded at the level of cavitation and the level of oral hygiene was assessed using the Visible Plaque Index (VPI). Microbiology examination collected information on colony-forming units (CFU) of streptococcus mutans. The outcome was whether the child had early childhood caries (ECC). Unconditional bivariate and multiple logistic regression analysis were performed.

Results: The study included 378 children. At age 2 years, 109 children had ECC (case) while 269 had not (control). The mean dmft of the cases was 3.62±3.12 and 100% of the score was made up of untreated decayed teeth. Mother's occupation, unemployed at the child's birth v.s employers/Professional [OR=3.982; 95%CI=1.146-13.822], Mother's schooling <12 years at child's birth v.s =12 years [OR=1.758; 95%CI=1.098-2.815], Breastfeeding duration=1years v.s no breastfeeding [OR=2.918; 95%CI=1.166-7.301], VPI >60% and 41%-60% and 41%-60% are considered as a second constant of the constant v.s 0-20%[OR=5.231, 95%CI=1.840-14.871; OR=2.514, 95%CI=1.097-5.765], Streptococcus mutans=10⁵CFU/ml v.s 0 CFU/ml [OR=3.867; 95%CI=1.608-9.301] were independent risk factors for ECC through their life course.

Conclusion: The results of this study support the hypothesis linking social, biological and behavioral exposures and development of ECC during the life course of 2-year-old children.

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