一原著一

通所型障害者福祉施設の知的障害者における 口腔の健康状態・保健行動および実行機能の質問紙評価

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Evaluation of Executive Function, Oral Health Status and Executive Functionrelated Oral Health Behavior of Persons with Intellectual Disabilities at Commuting Welfare Facilities: A Questionnaire Survey Study

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Abstract

Educational studies showed that weakness of executive function is hindering adaptive behavior of persons with intellectual disabilities (PID). To support the oral health behavior of PIDs, this study investigated executive function, oral health behavior and executive function-based toothbrushing behavior of PID at Commuting Welfare Facilities (CWF) and the applicability of an original questionnaire for executive function-based toothbrushing behavior (EF-TB).

Questionnaire surveys were conducted on 24 PIDs [18 men, 6 women, mean age (SD): 34.4 (12.0)] from 2 CWFs in Niigata Prefecture, as follows: 2 executive function assessments (Dysexecutive Questionnaire (DEX) and Executive Functions Questionnaire (EFQ)), a modified version of the oral health assessment of the Japan Dental Association (OHA-JDA) and the EF-TB.

OHA-JDA, completed by the PID family members, revealed that most participants had a family dentist, received annual dental checkups, brushed their teeth before bedtime, using fluoride toothpaste, and received professional toothbrushing instructions (TBI), but of 24 participants, 95.8% consumed sweet snacks/drinks, only 16.7% used floss/interdental brushes, and 37.5% experienced bleeding during toothbrushing and/or swollen gums; consequently, 75.0% needed to receive TBI.

The averages (standard deviations) of the PID total scores for DEX, EFQ, and EF-TB were 36.13 (14.33), 64.04 (8.29), and 71.13 (21.56), respectively. EF-TB scores showed weakness for toothbrushing behavior based on monitoring, shifting, and planning/working memory, which require support. There were moderate correlations between the total scores of DEX and EFQ ($\rho = -0.423$, and EFQ and EF-TB ($\rho = 0.556$), respectively, which were statistically significant (p<0.05). These results support the applicability of EF-TB in evaluating toothbrushing behavior of the PID based on the executive function.

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