Effectiveness of a workplace oral health promotion intervention program on oral health status for employees in Taiwan

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Background: Workplace oral health promotion (WOHP) program is not common in Taiwan. The aim of this study was to develop a WOHP program and evaluate its effectiveness on the differences of oral health knowledge, attitude and oral health status of workers between baseline and follow-up.

Methods: We used a pre/post-test study design. Overall, 86 managers and 302 employees were recruited from six workplaces in the WOHP program. The WOHP program consisted of 2-hour group education session in oral health with a brochure and additional one-hour session related to benefits of oral health program in workplace for managers. The curriculum included oral health-related knowledge, dental hygiene techniques and demonstrations. Pre- and post- oral examinations were implemented by dentists. After the oral examination, participants received a 10-min personal oral health instruction by a trained oral health educator. The data were collected using self-report questionnaires.

Results: After intervention, the average score of oral health knowledge and attitudes of the participants increased from 13.11 to 14.65 (p <0.001) and from 51.76 to 52.80 (p = 0.005), respectively. The average number of filled teeth increased from 6.07 to 7.07 (p <0.001). After intervention, the community periodontal index, plaque index, and plaque control record reduced from 2.01 to 1.81 (p = 0.009), from 1.02 to 0.85 (p = 0.002), and from 0.66 to 0.49 (p <0.001), respectively.

Conclusion: Knowledge, attitude and oral health status was significantly improved after WOHP intervention, suggesting the WOHP program in Taiwan was an effective intervention model for employees.

Keywords: Oral Health, Health Promotion and Education