**Effects of oral health literacy program on promoting oral health behaviors and oral health status among Thai adults with type 2 diabetes mellitus.**

*Supasin Deeraksa1,2,5, Wipada Jitpreeda2, Suwit Udompanich3,Benja Muktabhant3,5, Rajda Chaichit4,5*

*1Doctor of Public Health program, Faculty of Public Health, Khon Kaen University, Thailand. 2Department of Dental Public Health, Thakhuntho Hospital, Kalasin Provincial Public Health Office, Thailand.3Department of Public Health Administration, Health Promotion and Nutrition, Faculty of Public Health, Khon Kaen University, Thailand.4Department of Preventive Dentistry, Faculty of Dentistry, Khon Kaen University, Thailand.  5Research Group Grant of Preventing and Controlling in Diabetes Mellitus in the Northeast Region, Khon Kaen University, Thailand.*

**ABSTRACT**

**Background**: Oral health is the sixth complication in diabetic patients. It is a high prevalence and has multiple negative impacts on their health. Low oral health literacy is associated with worse health and less understanding of prevention, maintenance, and self-care instruction and advice.

**Aims:** To examine the effects of an oral health literacy program on promoting oral health behaviors and oral health status among adults with type 2 diabetes mellitus in Thakhuntho district, Kalasin, Thailand.

**Methods**: The quasi-experimental study was using a pretest-posttest design on 80 diabetic patients (40 in the experimental group and 40 in the comparison group). The implementation consisted of different activities, which include a lecture about diabetic and oral health, group discussion, and walk rally. Four instruments were used in this study, including demographic data, functional oral health literacy skill (Thai REALD-30), oral health behaviors as well as a plaque index and a gingivitis index measurement. Data were analyzed using frequencies, percentage, mean, and standard deviation. The differential data analysis between groups was independent t-test with a statistically significant level of 0.05.

**Results**: After participating in the oral health literacy program, the mean scores of oral health behaviors, plaque levels, and gingivitis levels in the experimental group were significantly higher than the comparison group (p-value<0.001). However, the functional oral health literacy skill using Thai REALD-30 was not statistically significant after participant in the program.

**Conclusions**: This study is important to improve the functional oral health literacy and oral health behaviors on their oral health in type 2 diabetic patients. Therefore, the development program of oral health literacy that can help to understand community context, lifestyles diabetes patients, and health care service in the setting area.

**Keywords:***Oral health behaviors, Oral health literacy, Oral health status, Type 2 Diabetes Mellitus.*