



Title	Health behaviours, TNF-alpha and periodontal status in type-2 diabetics
Author(s)	Movva, LR; Leung, WK; Corbet, EF; Siu, SC; Kawamura, M
Citation	The 19th Annual Scientific Meeting of the International Association for Dental Research (Southeast Asia Division), Koh Samui, Thailand, 3-6 September 2004. In Journal of Dental Research, 2004, v. 83 Sp Iss B
Issued Date	2004
URL	http://hdl.handle.net/10722/53686
Rights	Creative Commons: Attribution 3.0 Hong Kong License

Health behaviours, TNF-alpha and periodontal status in type-2 diabetics

[L.R. MOVVA](#)¹, W.K. LEUNG¹, E.F. CORBET¹, S.C. SIU², and M. KAWAMURA³, ¹University of Hong Kong, Hong Kong SAR, China, ²Tung Wah Eastern Hospital, Hong Kong SAR, China, ³Hiroshima University, Hiroshima, Japan

Objectives: To assess the associations between health behaviours, metabolic control, serum TNF-alpha and periodontal status in Chinese type 2 diabetics. Methods: 208, nonsmoking type 2 diabetic patients aged 40-70 years (51% female) attending an outpatient diabetic clinic were examined. All patients filled in structured questionnaires and were clinically examined. Glycated hemoglobin (HbA1c) and serum TNF-alpha were measured using commercial kits from blood drawn on the day of examination. Results: General health behaviour was significantly associated with diet behaviour ($r=0.174$) and distress ($r=0.197$). Diet behaviour of females was better than males ($p<0.001$). Perceived fatigue was negatively associated with oral health behaviour ($r=-0.160$). Distress was lower in the younger age group 40-50 compared to 51-70 ($p<0.01$). Mean serum TNF-alpha level was 0.65pg/ml and this was not associated with any variable. The prevalence of severe periodontal disease was 70.6%. Oral hygiene status was significantly associated with mean PPD ($r=0.36$) and mean PAL ($r=0.327$). HbA1c levels were significantly associated with mean PPD ($r=0.202$) and mean PAL ($r=0.180$). Subjects with a longer history of diabetes (>5 years) had significantly deeper mean PPD ($p<0.04$), higher mean PAL ($p<0.01$) and more missing anterior teeth ($p<0.025$). Conclusion: In this group of type-2 diabetics the severity of periodontal disease was found to be associated with oral hygiene, metabolic control and duration of diabetes. Serum TNF-alpha and health behaviours did not seem to be associated with periodontal disease status.

[Periodontal Research - Diagnosis / Epidemiology](#)

[The Preliminary Program for Annual Scientific Meeting, 19th International Association for Dental Research-Southeast Asia Division and 13th Southeast Asia Association for Dental Education \(September 3-6, 2004\)](#)