

## Oral hygiene practices and periodontal disease status assessment among diabetic patients from three selected public medical primary care clinics in Kuantan, Malaysia

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**Introduction:** Evidences on the bilateral relationship between diabetes mellitus (DM) and periodontal diseases (PD) have been growing. Oral hygiene practice (OHP) is one of major determinants for PD. Thus, the aim of this study was to assess periodontal disease status and oral hygiene practices of DM-patients from public medical primary care clinics (PMPCCs).

**Methods:** A medical-dental research team conducted an active PD-screening among 193 DM-patients using both self-reported questions (SRQs) and basic periodontal examination (BPE) by professionals at 3-PMPCCs in Kuantan in 2015. OHP was categorized into two groups; acceptable OHP (two/three-time tooth-brushing/day using with/without mouth-wash/flossing) and need to improve OHP (one-time tooth brushing/day using with/without mouth-wash/flossing). HbA1C  $\leq$  6.5% was used as cut-off for glycaemic control achievement. A cross-analysis was done to infer the influences of demographic-background and OHP on PD-status and relationship between PD-status and glycaemic control achievement. **Results:** Out of 193 DM-patients, 72.5% (140/193) were PD-screening positive in self-reporting while 54.9% (106/193) had PD in professional screening. OHP of majority (86%) were acceptable. Only 14% (27/193) achieved glycaemic-control status. Influence of demographic and OHP on PD-status (by BPE) and relationship between PD and glycaemic control achievement did not found out. There were no age and race difference in OHP; however, acceptable OHP was significantly higher ( $p < 0.05$ ) in female than male DM-patients (94% vs 77.4%). **Conclusions:** High prevalence of PD indicated to promote oral health education/care among DM-patients from PMPCCs. In-detailed OHP/PD assessment and other influencing factors on glycaemic-control achievement should be considered to get more valid results in further study.

**KEYWORDS:** DM-Patients, Periodontal Disease screening, Oral Hygiene Practices, Medical Primary Care