

Oral health and khat chewing: reviewing and addressing the gaps

R.E Croucher, S.Kassim and S.S.Islam

Barts and The London School of Medicine and Dentistry (QMUL)

(r.e.croucher@qmul.ac.uk, S.Salam@qmul.ac.uk, S.S.Islam@qmul.ac.uk)

Background: khat leaves are chewed amongst UK Yemeni, Somali and Ethiopian communities. Khat is classified as a stimulant which creates psychological and minor, if any, physical dependency. The literature suggests several adverse effects of khat chewing on oral health, including periodontal disease, oral cancer and temporomandibular joint disorders. No studies have investigated oral health determinants in UK Yemeni khat chewers.

Objectives: (1) to identify and assess the quality of the literature reporting the relationship of oral health with khat chewing, (2) to report the results of a study of the determinants of oral health amongst UK Yemeni khat chewers.

Methods: (1) a search strategy was adapted to retrieve the articles relevant to oral health and khat chewing. Assessment of the studies was conducted using recognized criteria (Altman, 1999). (2) face to face structured interviews, validated with voluntarily saliva sample were conducted amongst 204 Yemeni male khat chewers; age 18 and older residents in Sheffield-UK selected at random visits to places of khat sale. Data collected was analysed using simple descriptive, univariate and logistic regression analyses.

Results: (1) twenty papers were identified and assessed. Poor study design and methodological inadequacies were identified. (2) among the 204 Yemeni male adult khat chewers 29% self reported oral problems. In univariate analysis, being older, with large family size, unemployed, low level of completed education, living in non crowded housing, having a mother who was a chewer, starting khat chewing in Yemen, with the preference of Arabic language for reading, having low social participation, being dependent on khat and with high composite of khat chewing behaviour were found to be significantly associated with self reported oral problems. After controlling for these factors in the multivariate analysis, a low level of completed education was found to be significantly associated with self reported oral problems ($P \leq 0.045$; OR, 2.27; 95%CI=1.02 -5.04). **Conclusions:** (a) the quality of the literature linking oral health with khat chewing was poor. (b) a low level of completed education predicted self reported oral problems.