Attitudes towards the use of fluorides for oral health among Islamic clerics in Kelantan Province, Malaysia

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Objective: To assess the knowledge, attitudes and practices of Imams (Islamic clerics) concerning fluoride toothpaste and fluoridated water to improve oral health in Kelantan. Basic research design: Cross sectional study of Imams in 65 registered mosques in Pasir Puteh district, Kelantan. Method and participants: Face-to-face interview, using structured questionnaire and some open ended questions. Results: Most of the 83 interviewees (82% participation rate) were unsure whether their toothpaste contained fluoride (64%), only 25% were sure. More than one-third (37%) were using fluoridated piped water. Most (87%) had little knowledge of fluorides and more than two-thirds (69%) had lacked positive attitudes towards its use. Television (54%) was the most common source of information about fluorides, followed by newspapers (9%). The main reasons given among the few who opposed fluoride use were i) fear of dangerous side effects (4%) and ii) uncertainty about the halal status of fluoride (2%). Attitudes were not associated with the use of fluoridated water supply (p=0.999), age (p=0.103), income (p=0.540) and location (p=0.999). Conclusion: Over two-thirds of Imams had little knowledge of and lacked positive attitudes towards fluoride use in toothpaste and piped water supplies.

Key words: Attitude, fluorides, fluoridation, toothpaste, Muslims

Introduction

Despite declining trends since the 1970s, dental caries remains a major public health problem in Malaysia with caries prevalences of 76%, 75% and 42% for 5, 6 and 12-year-olds respectively by national surveys (Ministry of Health, 2005; 2007; 2008). Despite the declining caries trends from the 1970s the overall prevalence still remained high (Ministry of Health, 2008).

The religiously conservative province of Kelantan was chosen for this research because it has the worst caries experience of the Malaysian provinces (HMS, 2006); the highest caries prevalence among 6-year olds and the second highest among 12-year olds (Ministry of Health, 2007). Dental public health strategies for caries prevention have been implemented throughout Malaysia through the community and high risk approaches. However in Kelantan, the national water fluoridation policy suffered from inconsistent implementation and was discontinued locally after 1995 due to political changes when the province's administration became controlled by an opposition Islamic conservative party (Ministry Of Health, 2006). Water fluoridation was not included when the water treatment plant was privatised. This could be a factor leading to higher caries experience in the province.

Recently, religiously conservative Malaysian Muslim sections of the population hesitate to use fluoridated products as evidenced by patients' expressed concerns during consultations, some print media and unofficial networks. A factor in this opposition is the permissible use of fluoride from the Islamic religious perspective, which some consider as haram (i.e. not permissible) because fluoride was deemed a poison. However, reliable Islamic religious documents (Al-Khun, 1991) which provide guidelines and basic Islamic principles, clearly state that foods and drinks are considered halal (lawful) when its source is permissible according to Islamic law, hygienic and not detrimental to a person's health.

Any view that fluoride is haram (unlawful) among the Muslim conservatives could hamper dental public health strategies aimed at reducing caries prevalence. Kelantan is 95% Muslim (Official Site of Kelantan State, 2009) and highly influenced by strict Islamic norms and values. In this province, the Islamic cleric (Imam) is regarded as one of the most influential persons in the Muslim community. They lead mosques, head prayer congregations and guide their people by giving religious lessons, talks and obligatory weekly Friday sermons and so influence the perception and practices of the community.

Therefore, the present study focussed on the knowledge and attitudes of Imams regarding the issues of fluoride and fluoridation in order to understand their perceptions. The findings might inform planning for oral health promotion and integrated disease prevention by the WHO to support local political action, broaden participation and sustain advocacy especially in conservative Muslim societies (Petersen, 2010; WHO, 2008). Furthermore, there is a lack of documented evidence about the perceptions of the Muslim community both in Malaysia and elsewhere. Thus the aim of the present study was to assess the knowledge, attitudes and practices among Imams concerning fluoride toothpaste and fluoridated water to improve oral health in Kelantan.