

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT AND VALIDATION OF
KNOWLEDGE, ATTITUDE AND AVOIDANCE
PRACTICES TOWARDS ENVIRONMENTAL
TOBACCO SMOKE QUESTIONNAIRE (KAP-
ETSQ) FOR NON- SMOKING PREGNANT
WOMEN IN MALAYSIA**

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Thesis submitted in partial fulfillment
of the requirements for the degree of
**Master of Medicine
(Family Medicine)**

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.


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ABSTRACT

Background and aim: Exposure to environmental tobacco smoke (ETS) has been proven to be associated with various adverse health effects towards pregnancy. Data from Malaysia Global Adult Tobacco Survey showed that 32.8% of non-smoking women were exposed to ETS and many of them were in reproductive-age group. Knowledge, attitude and avoidance practices (KAP) studies on ETS exposure were limited among non-smoking pregnant women in Malaysia. There was also a lack of standardized and validated questionnaire on ETS exposure in the Malay language. Hence, the aim of this study was to develop and validate the Knowledge, Attitudes and avoidance Practices towards ETS Questionnaire (KAP-ETSQ) among non-smoking pregnant woman in Malaysia.

Methods: The KAP-ETSQ was developed based on literature reviews and expert panel discussion. It was initially developed in English language. The KAP-ETSQ then underwent a forward and backward translation process to produce the KAP-ETSQ Malay version. Content and face validation were done. Construct validity was tested using exploratory factor analysis and reliability analysis was done using internal consistency and test-retest reliability testing. This study was conducted among non-smoking pregnant women aged more than 18 years old attending antenatal clinic at government health clinic in Shah Alam.

Results: KAP-ETSQ consisted of three main domains; knowledge, attitude and avoidance practice towards ETS. The initial questionnaire contained 12 items in knowledge domain. Attitude domain comprises two sub-domains; feeling and belief towards ETS with a total of 9 items. Practice domain contains 11 items within three sub-domains; control of exposure towards ETS, entering a situation where ETS present and reduction of exposure towards ETS. For the knowledge domain, the Kuder-Richardson reliability coefficient was 0.753 and Kappa values ranged between 0.4-0.84, which showed moderate to almost perfect agreement. For attitude domain, 2 items were removed from feeling sub-domain as correlation coefficient were less than 0.3 and 1 item was removed from belief sub-domain as the factor loading was less than 0.4. In the final analysis, all items loaded into a single attitude domain with the minimum factor loading of the item was 0.56. The Cronbach's alpha for the attitude domain was 0.82. For practice domain, the three sub-domains of practices domains were maintained, and all the items loaded into their respective factors without any cross loading. The individual factor loadings were more than 0.5. The Cronbach's alpha for the practice domain was 0.758. The intraclass correlation (ICC) for attitude and practice items lies in between 0.63 to 0.93 which indicate the stability of the items

Conclusion: The final set of KAP-ETSQ consisted of 12 items for knowledge domain, 6 items for attitude domain and 11 items for practice domain. A KAP-ETSQ questionnaire was shown to be reliable, valid and stable over time to be used among non-smoking pregnant women.

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