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KNOWLEDGE, AWARENESS AND PRACTICE REGARDING FAMILIAL HYPERCHOLESTEROLAEMIA AMONG A GROUP OF PRIMARY CARE DOCTORS IN MALAYSIA

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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

Familial Hypercholesterolaemia (FH) is an autosomal dominant disorder that carries high mortality risk of premature coronary heart disease (CHD). Primary care doctors (PCD) play an important role in FH. However their knowledge, awareness and practice (KAP) regarding FH were not well established. There was no sufficient data on FH KAP among Malaysian PCD, and no validated tool to assess Malaysian PCD`s KAP regarding FH. Therefore, this study was aimed to adapt and validate the FH KAP questionnaire, and to determine the FH KAP among Malaysian PCD, as well as to compare the KAP between Malaysian PCD with postgraduate (PG) qualification and PCD without PG qualification. This study was conducted in 2 phases. Phase 1 was a cross-sectional validation study to adapt and validate the FH KAP questionnaire. This was conducted among PCD with at least 1 year working experience in Malaysian primary care settings. The original 19-item questionnaire was content validated and adapted by 7 experts. Seven items were added, 8 items were modified, and 1 item was moved to demography. The adapted 25-item questionnaire was face validated by 10 PCD. It was then distributed via e-mail for self-administration. Data was collected on their FH KAP as well as demography. A total of 130 PCD completed the questionnaire. The questionnaire validity was tested using known-groups validity. PCD with PG qualification had significantly higher mean and median percentage score of FH KAP than PCD without PG qualification ($p < 0.001$, $p = 0.030$, $p < 0.001$ respectively) suggesting a good validity. The internal consistency reliability was tested using Kuder Richardson formula-20 (KR-20), and the test-retest reliability was tested using Kappa statistics. KR-20 result was 0.79 (moderate reliability). Average Kappa (tested on 26 PCD) was 0.796 (substantial agreement). Phase 2 was a cross-sectional study to determine the FH KAP among Malaysian PCD and to compare the KAP between PCD with PG qualification and PCD without PG qualification. The inclusion and exclusion criteria were similar to Phase 1. The adapted and validated questionnaire was disseminated during primary care courses. Data on KAP as well as demography were descriptively analyzed for proportion and percentage. The KAP was compared between PCD with PG qualification and PCD without PG qualification using independent t-test and Mann Whitney u-test. Chi-Square test was used to compare the proportion of responses between the 2 groups of PCD. A total of 372 PCD completed the validated FH KAP questionnaire. Regarding knowledge, 77.7% correctly defined FH. However, only 8.3% correctly identified the risk of CHD in untreated FH patients. Regarding awareness, only 39% and 19.1% were aware of the NICE FH guideline and other FH guidelines respectively, and only 27.2% were aware of FH diagnostic criteria. Regarding practice, 85.2% considered PCD as the most effective healthcare provider for early FH detection. Only 19.1% stratified FH patients as high risk irrespective of other risk factors. PCD with PG qualification had significantly higher mean and median percentage score of FH knowledge, awareness and practice than PCD without PG qualification ($p < 0.001$, $p = 0.013$, $p < 0.001$ respectively). This study has produced a valid and reliable tool to measure FH KAP among Malaysian PCD. There were substantial gaps in FH KAP identified among Malaysian PCD, and there was a significant difference in FH KAP between PCD with PG qualification and PCD without PG qualification. Therefore, serious effort to educate Malaysian PCD is required, and the development of locally relevant FH guideline and FH training module should be materialized.

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