

UNIVERSITI TEKNOLOGI MARA

**MEDICATION ADHERENCE
AMONG COMMUNITY-DWELLING
ELDERLY IN SELANGOR**

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Dissertation submitted in partial fulfillment
of the requirements for the degree of
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CONFIRMATION BY PANEL OF EXAMINERS

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I declare that the work in this dissertation 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: Medication adherence is an important factor that influences the therapeutic outcomes. An elderly will generally receive more prescriptions than the other age groups in the population. Due to cognitive impairment in elderly, as well as multiple and complex medication regimens, this leads to the risk of medication nonadherence. Accordingly, this study aimed to determine medication adherence among multi-ethnic community-dwelling elderly in Selangor. Barriers and belief towards medication as well as awareness towards the use of medicine were also assessed. Besides that, this study evaluated the correlation between medication adherence and cognitive functions of the community-dwelling elderly people in Malaysia. The predictors of non-adherence were also determined in this study.

Materials and Methods: A cross-sectional study, involving the elderly prescribed with medicines, was conducted in Selangor from September to December 2016. A 71-item validated questionnaire, including eight items Morisky Medication Adherence Scale (MMAS-8), belief about medicine (BaMQ), Ministry Mental Examination State (MMSE) and Montreal Cognitive Assessment (MoCA), was employed.

Results: One hundred and fifty elderly with a median age of 70 were recruited in this study. Thirty-two percent (n=48) of the respondents received at least five prescribed medications. About 58.7% (n=88) of the elderly reported with low adherence level with a mean score of 4.37 ± 1.46 . More than three quarter (80%, n=121) of the elderly had a problem to differentiate between active ingredient and brand name of a medication. Mean necessity score was significantly higher than mean concern score ($p < 0.001$). The medication adherence score was negatively correlated ($r=-0.220$) with the concerns score ($p=0.007$). Age ($r=0.289$, $p<0.001$) also found to had positive but poor correlation between medication adherence. There was no significant correlation between medication adherence and cognitive functions either using Mini Mental State Examination (MMSE) score or Montreal Cognitive Assessment (MoCA) score. Concern score in belief towards medication and age were identified as the predictors of medication adherence among the community-dwelling elderly in Selangor.

Conclusion: Medication adherence among elderly is a complex process. It is essential to understand the determinants and barriers to medication adherence in order to optimise medication adherence and provide education if necessary.

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