UNIVERSITI TEKNOLOGI MARA

PHARMACIST-INITIATED INTERVENTIONAL PROGRAM TO IMPROVE MEDICATION ADHERENCE OF ELDERLY PATIENTS WITH TYPE 2 DIABETIC MELLITUS

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ABSTRACT

The prevalence of type 2 diabetes mellitus (T2DM) among the elderly in Saudi Arabia, King Saud hospital, Unaizah city, has tremendously increased in the last decades. The increase is attributed to the lack of intervention measures to address patient's health need. This study assessed the impact of the intervention programme to improve patient's adherence among T2DM in Saudi Arabia. This was a prospective, randomized and interventional study conducted on T2DM Saudi Arabian patients and patients' follow-up for eight months. A total of 102 volunteer elderly patients and nine volunteer outpatient pharmacists, who met the inclusion criteria were randomly selected to participate in this study. The training program was carried out for five days with a total of 10 contact hours to provide pharmacists with knowledge on medication therapy adherence and diabetic counselling for patients. Pre- and post-knowledge of pharmacists' on T2DM were evaluated using Michigan Diabetic Knowledge test (MDKT) before and after training program. Morisky Medication Adherence Scale-8 (MMAS-8) was used to evaluate the adherence of the elderly with T2DM. Fourteen items in Michigan Diabetes Knowledge Test (DKT) specifically for T2DM were used to evaluate the knowledge of the patients. Diabetes Medication Satisfaction (DiabMedSat) was used to evaluate patient's medication satisfaction. The HbA1c of the patients was measured using lab result. Data were analysed by the statistical package for the social sciences (SPSS v20). 73.5% of patients were male and 96% were married. 22.5% of patients hold secondary certificates and 32.4% of patients have more than one disease. 88.9% of pharmacists were male and 22.2% have more than eleven years of working experience. 88.9% of pharmacists have bachelor degree in pharmacy. This study revealed that the intervention training program had significantly improved the pharmacists' knowledge at significance level of $p=0.001$. The intervention programme had significantly improved patient's adherence to medication ($p=0.025$). Furthermore, patient's satisfaction with medication condition had significantly improved ($p=0.021$). Patient's knowledge and HbA1c had improved after the interventions with $p=0.001$ and $p=0.001$, respectively. This study reflects the importance of intervention training programme on the pharmacist's knowledge as well as the patient's medication adherence, knowledge and satisfaction.

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