

Impact of pharmacist-led multimedia counselling on diabetic knowledge and medication adherence among type 2 diabetes mellitus (T2DM) patients at Klinik Kesihatan Ampangan, Seremban

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ABSTRACT

Introduction: In Malaysia, the prevalence of T2DM increased from 11.2% in 2011 to 13.4% in 2015 and 18.3% in 2019. The prevalence of T2DM in Negeri Sembilan state showed the highest rate. The objective of the study is to evaluate the impact of pharmacist-led multimedia counselling on knowledge and medication adherence among T2DM patients. **Methods:** A quasi-experimental study of 84 T2DM patients were allocated into intervention and control group. 42 subjects of the intervention group had received multimedia and verbal conventional counselling from the pharmacist and 42 subjects of the control group had received verbal conventional pharmacist counselling only. A validated questionnaire was used to assess knowledge regarding T2DM and medication adherence both at baseline and at final follow-up. **Results:** The chi-square test showed no significant difference in sociodemographic characteristics that affect medication adherence and knowledge of T2DM patients. In the Wilcoxon Signed Rank Test, there is an increment of mean knowledge scores post-study (8.1) compared to pre-study (5.52) which is statistically significant ($p < 0.001$). The increment in mean MyMAAT scores in post-study is (1.98) ($p = 0.083$) compared to pre-study (1.15) ($p = 0.180$) but not statistically significant. Mann Whitney test showed a mean difference of 2.69 between both groups and is statistically significant ($p < 0.001$) Mean MyMAAT score difference is 1.42 between both groups but not statistically significant ($p = 0.138$). **Conclusion:** It was found that a combination of pharmacists-led multimedia counselling and verbal counselling is more effective compared to conventional counselling alone in improving patient's knowledge and medication adherence.