
A clinic-based pharmacy counselling service to improve medication adherence among diabetes out-patients

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The burden of diabetes is increasing with the rising prevalence of the disease and its complications. Medication adherence is a significant factor in the management of diabetes. Pharmacists' role in the improvement of medication adherence is well-studied in the world. Despite the high and rising prevalence of diabetes in Sri Lanka, this is the first study to evaluate a pharmacy counselling service in a Sri Lankan diabetes population.

To assess how a clinic-based pharmacy counselling service may affect patient medication adherence.

400 consecutive patients with diabetes mellitus attending outpatient medical clinics at Colombo North Teaching Hospital were randomized into either intervention group (IG) or control group (CG). Patients in the IG received pharmacist counselling (verbal and written) for four consecutive monthly visits in addition to standard care at the clinic, while patients in the CG received standard care only. Adherence for both groups was measured at baseline and post intervention using ©Morisky Medication Adherence Scale (8-Items).

Mean age of the participants was 61.79 ± 9.06 and 67% were female. The IG had a median score of 4 out of 8 (IQR 5-3) at baseline which increased to 7 (IQR 8-6) after intervention. The median score of the CG was not significantly changed; 5 (IQR 7-4) at baseline and 5 (IQR 7-6.5) after intervention period. Patients in the IG had a statistically significant improvement in adherence compared to the CG, using the Mann-Whitney U test ($P < 0.005$). The IG had a 74.15% improvement in adherence whereas the CG had an improvement of 1.78%.

Pharmacist counselling in outpatient clinics can improve medication adherence of the patients with diabetes.

Key words: *Pharmacy counselling, medication adherence, diabetes*

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