Measuring the rate of therapeutic adherence among out-patients with T2DM in Egypt

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Background and objective: The promotion of therapeutic adherence is considered as an integral component of pharmaceutical care practice and patient healthcare. It has been shown that despite effective methods of treatment, 50% of diabetic patients fail to achieve satisfactory glycemic control, which leads to accelerated development of complications and increased mortality. Clinical experience indicates that no improvement of metabolic control is possible without patients’ adherence to medications. This study sought to examine the rate of medication adherence and different factors affecting it among type 2 diabetic patients in Egypt.

Methods: A total of 226 type 2 diabetic patients who fulfilled the inclusion criteria were recruited in the current study. Adherence to the treatment was evaluated during patients' hospitalization in the out-patient clinics of Internal Medicine Department at University of Mansoura, Egypt. The medication adherence has been assessed during a personal interview with each patient using a multiple-choice graded questionnaire.

Results: In the study population, the adherence rates to medication, dietary/exercise and appointment were observed to be suboptimal. The most important social factors that were significantly affecting adherence rate to the prescribed oral hypoglycemic agent(s) included marital status (P<0.01), family support (P<0.01) and socio-economical level (P<0.01). Other patient factors that were significantly affecting therapeutic adherence were patient knowledge about the disease (P<0.01), patients’ beliefs and motivation about prescribed drugs (P<0.01), and regularity of patients’ self monitoring of blood glucose level (P<0.01). Among drug factors which found to affect significantly the rate of medication adherence are the number of drugs taken (P<0.05), complexity of drug regimen (P<0.01), and the presence of drug side effects (P<0.01). Economical factor played an equally important role. Direct and indirect care costs in relation to patients’ income were significantly affecting the rate of adherence to medication (P<0.01).

Conclusions: An improvement with the adherence to oral hypoglycemic agent(s) may be achieved through continuing patient education about diabetes, improvement of patients’ economical levels as well as a reduction in the cost of medication. Pharmaceutical companies have to be involved and pharmacists have to be payed for helping chronically ill patients to take their medicines correctly for improving clinical outcomes.

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