

Metabolic control in type 2 diabetes correlates weakly with patient adherence to oral hypoglycaemic treatment.

ABSTRACT

Introduction: Patient adherence to treatment is viewed as essential to good metabolic control in diabetes. Our primary objective was to determine if self-reported patient adherence correlated strongly with metabolic control. Our secondary objective was to determine the natural grouping of factors which influence adherence. **Materials and Methods:** Data were collected using a questionnaire set with 5-point Likert scales. Primary analysis was done using Spearman's correlation coefficient between self-reported composite adherence scores and HbA1c. Secondary analysis was done using exploratory factor analysis. **Results:** The primary analysis suggests that patient adherence to the treatment regime is weakly correlated to metabolic control. Calculated Spearman's rho was 0.197, with a two-tailed P value of 0.027. The secondary analysis demonstrates the natural clustering of factors that influence patient adherence to treatment. A 6-factor solution was found to account for most of the variance in the data. We also found that feelings of frustration, anxiety, and depression were associated with a lack of knowledge about diabetes treatment. In addition, belief in traditional medicine correlated strongly with ethnicity. **Conclusion:** A good treatment regime for type 2 diabetes mellitus influences metabolic outcome far more than patient adherence.

Keyword: Factor analysis; Patient non-adherence; Spearman rank correlation coefficient; Traditional medicine.