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**Original article**

**Diabetes self-care: A community based cross sectional study from Kollam district, Kerala**

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**Abstract**

**Introduction:** Diet modification, physically activity and regular medications are reported to be positively correlated with glycaemic control and reduction of complications among people with diabetes mellitus. The current study was done to estimate the existing magnitude of noncompliance to diet, exercise, drug compliance and self care and to identify the factors affecting noncompliance among adults with type 2 diabetes mellitus in a rural population in Kollam district, Kerala.

**Materials and Methods**: A community based cross sectional study was conducted at Thrikovivattom Panchayath, Kollam district. Using a cluster sampling technique, 253 people with diabetes mellitus were selected and were interviewed using a structured questionnaire. Univariate and multivariate analysis of factors associated with non-compliance was done and odds ratios with confidence intervals were calculated.

**Results**: Compliance to drugs, exercise, foot care and diet were found among 167(66%), 64(24.1%), 54(21.3%) and 130(51.4%) respectively. In the multivariate analysis, female gender was associated with poor exercise compliance (OR 4.34, 95% CI 2.12- 8.33) and not advised by a doctor regarding diet was associated with poor diet compliance (OR 1.16, 95% CI1.03-1.30). Poor drug compliance was associated with age less than 50 years (OR 2.55, 95% CI 1.36-4.77), lesser duration of diabetes (OR 1.05, 95% CI 1.01-1.09) and not advised by a doctor regarding need for compliance (OR 1.95, 95% CI 1.18-3.88)

**Conclusion**: The self care behavior among people with diabetes in the current study was poor regarding exercise and foot care. A good diabetes self-management behavior change communication program at the primary care level with emphasis on motivating good self-care behaviors is needed.

**Key words:** Compliance, Diabetes Mellitus, Lifestyle modification, Physical activity, Self care