

## **An assessment of knowledge, practices and associated factors related to drug compliance in patients with type 2 diabetes mellitus attending Diabetes and Endocrinology unit of Teaching Hospital Karapitiya**

Rajapakshe PD<sup>1</sup>, Karunanayaka ADSS<sup>1</sup>, Imendra KG<sup>1</sup>

<sup>1</sup>*B.Sc. Nursing Degree Programme, Faculty of Medicine, University of Ruhuna, Sri Lanka.*

### **Introduction**

Drug compliance is the main determinant in controlling type 2 diabetes mellitus among many therapeutic measures. Optimum knowledge and practices harmonise with good drug compliance. This study was designed to assess knowledge, practices and factors associated with drug compliance in patients with type 2 diabetes mellitus attending Diabetes and Endocrinology Unit, Teaching Hospital Karapitiya.

### **Methods**

A descriptive cross-sectional survey was conducted where 377 patients were interviewed using a structured, peer reviewed, interviewer administered questionnaire. Eight closed ended questions were used to generate a score out of eight to assess drug compliance. Fourteen questions were used to measure patients' knowledge to generate a score out of fourteen.

### **Results**

Out of 377 patients, 214 (56.8%) were male. The IQR for drug compliance score of patients was 5.5 (median = 3). The IQR for knowledge score of patients was 6 (median = 7). Majority of patients (n=301, 80%) used only oral drugs while others (n=76, 20%) used insulin. Most of the patients (n=295, 78.2%) engaged in physical exercises. Patients used medications for diabetes un-prescribed (n=81, 21.5%), in lower dosage (n=126, 33.4%), outside the prescribed time (n=120, 31.8%) and replaced medications with other substances (n=134, 35.5%). Number of co-morbidities in patient ( $r = -0.133$ ,  $n = 377$ ,  $P < 0.01$ ) and knowledge regarding diabetes ( $r = 0.406$ ,  $n = 377$ ,  $P < 0.01$ ) correlated with drug compliance significantly. No significant association was found between drug compliance and gender or use of illicit liquor.

### **Conclusions**

Drug compliance and knowledge of it were unsatisfactory and some patient practices were sub optimal in the studied sample. Patient education programmes and regular evaluations are crucial to enhance drug compliance in patients with Type 2 diabetes mellitus.