

# **AN EXAMINATION OF SELF-CARE PRACTICES AMONG DIABETES MELLITUS PATIENTS IN DIABETIC CLINIC AT THE TEACHING HOSPITAL, PERADENIYA**

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## **INTRODUCTION**

Diabetes mellitus is a metabolic disorder which can be controlled through medical treatment and life style modification (WHO 1999). Most of the diabetic patients are treated as out patients, and therefore, they manage the disease at home through self care practices. Self care practices are the personal and medical care performed by the patient usually in collaboration with, and after instruction, by a health care professional to manage their own condition (Dorland's Medical Dictionary, 2007). Looking at the meanings of these definitions together, it is clear that self care practices among diabetic patients play a vital role in successful management of diabetes by reducing the development of complications including heart disease, eye disease, kidney disease and nerve damage.

Health care providers conduct educational interventions for diabetic patients to improve their knowledge and self care practices. Although there were many educational interventions conducted for diabetic patients by the Diabetic Education Centre with diabetic educator nurses in each hospital, and the Foot Examination Centre, recurrent admissions with complications are increasing. Thus the implementation of self-care practices of patients is questionable. Consequently with the intention of understanding why more diabetic patients get admitted to hospitals with complications, this study examined the self care practices among diabetic patients. The general objective is to examine the self care practices used by diabetic mellitus patients who attend the diabetic clinic in the Peradeniya Teaching Hospital. Further, the study was guided by the following specific objectives: identify current self care practices used by diabetic mellitus patients, discuss the barriers faced by diabetic mellitus patients relating to their self care practices and identify the learning needs of diabetic patients.

## **METHODOLOGY**

This is a descriptive study. The target population was diabetes mellitus patients who were diagnosed as diabetic at least for five years duration, above 40 years of age regardless of gender and ethnicity. The study was conducted in the diabetic clinic at the Teaching Hospital, Peradeniya. Women who were pregnant or had gestational diabetes and patients who were taking steroids as lifelong treatment were excluded from the study. A sample size of 200 subjects was selected using Purposive Sampling method. All participants had opportunity to voluntarily participate in the study and they had the freedom to refuse or withdraw from the study at any time. Written informed consent was obtained from all participants. Before the data collection, permission was obtained from the director of the hospital. Ethical approval was obtained from the ethical review committee of the Faculty of Medicine, Peradeniya. A self-administered questionnaire was used as the tool of data collection. All together 40 items were included in the questionnaire under the specific objectives. First part included demographic data; Second part was designed to measure diabetic self care practices on physical exercises, diet, medication, foot care and knowledge of complications. Barriers to adherence of care were assessed in the third section. Fourth section was developed to identify the learning needs of the diabetes mellitus patients. A questionnaire was developed in their respective mother tongue. Questions were orally explained to subjects who had low literacy levels. Content validity of the questionnaire was assured by referring to text books and taking opinions from subject experts. Finally, necessary modifications were done with the supervisor. Reliability of the questionnaire was assured by pre -testing with a few participants

who were not included in the study, but who met the inclusion criteria of the study. Data analysis was done with descriptive statistics and Microsoft Excel software.

## RESULTS AND DISCUSSION

A total 186 diabetic patients participated in the study (response rate 93%) of whom 71.92% were female and 27.15% male. Majority of the respondents (88.25%) were from rural areas.

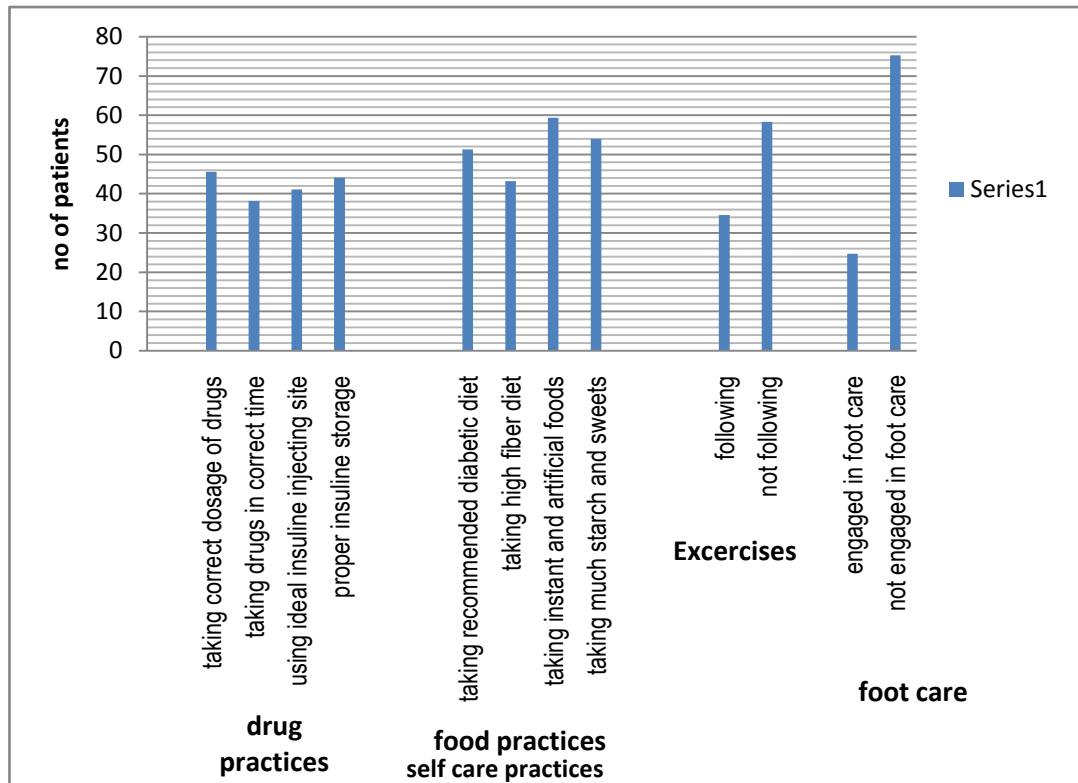
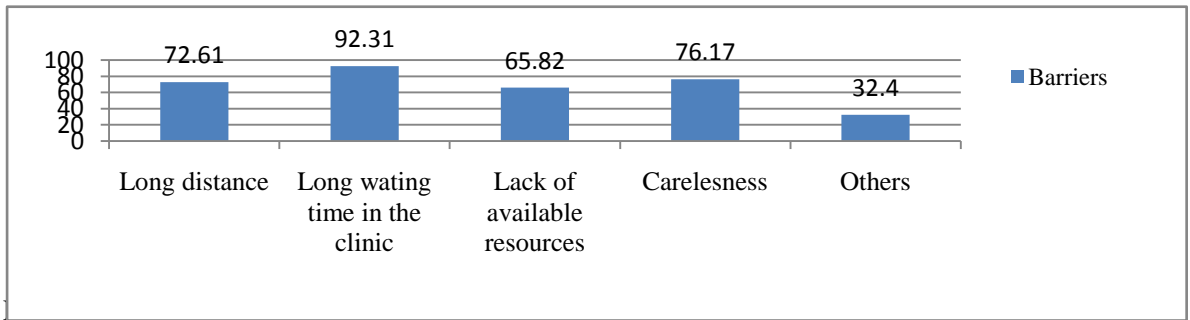


Figure I. Current self care practices.

Among the participants 59.73%, showed poor drug practices, 56.7% poor dietary practices, and 34.56% followed recommended exercise. Large proportions of them (75.3%) were not engaged in foot care (Fig. 1). According to the present study, most patients were on oral hypoglycemic drugs and diet control. Nevertheless the patients had poor practice in relation to their drug. In the literature, most studies did not observe the knowledge of drug practice among diabetic patients. The present study showed that there was no significant difference relating to dietary practices among participants, similar to the study by Padma *et al.* (2010). Study findings further revealed that although patients had knowledge about their dietary practices, they did not adhere to diet regime accordingly.

In this study, very few patients engaged in physical exercise regularly. This could be due to most participants being females who could be less active than males specially in regular exercise programmes because of household and children activities ( Ayele *et al.*, 2012) and( Khattab *et al.*, 2008). The present study revealed that many patients were not aware of early identification and prevention of diabetic complications. Further, more there were significant difference between the patients who engaged in foot care and those who did not. This was also highlighted by All (2011). In contrast Nwasuruba *et al* (2007) found that most patients who had better knowledge engaged in foot care.



Participants who had faced long waiting time at the clinics were 92.31%; 72.61% travelled long distance to reach the clinics and carelessness was a barrier for 76.17% patients (Fig. II). According to the study, more than half of the participants faced barriers relating to self-care practices. Most participants faced many barriers when attending the clinic. According to the study, some of them had to travel long distances to reach the clinic while others experienced long waiting time at clinics. Some patients experienced financial constraints when getting prescribed investigations done from the private sector due to lack of laboratory facilities in hospitals and some patients encountered poor family support. According to the study, carelessness is another barrier for lack of self care practice among diabetic patients. The studies of All (2011) and Ayele *et al.* (2012) were also highlighted similar findings.

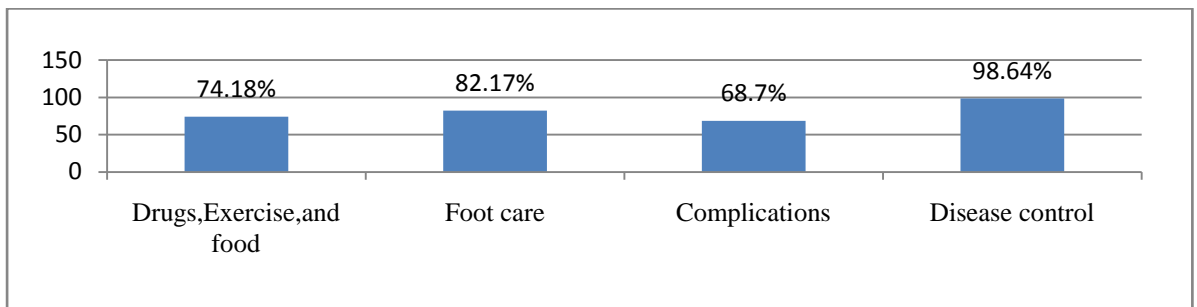


Figure III. Represents the identified areas of learning needs

Of the sample 82.17% needed to learn more about the disease and 98.64% of them preferred to know more about how to control the disease (Fig. III). The study findings revealed that the more frequently identified area of learning need is how to control the disease. A lesser number of participants wanted to know about complications. The previous studies have consistently reported that education has a significant effect on patients with diabetes and self care practices. (Ayele *et al.* 2012, Yeong, 2009).

## CONCLUSIONS/RECOMMENDATIONS

The findings of the study have illustrated that there is a clear deficiency in self care practices; drug practices, dietary practices, physical exercises, foot care practices and identification and prevention of complications among patients with diabetes. Yet, a majority of the participants preferred to learn more about how to control of the disease. When exploring barriers for self care, most of the participants reported that they faced barriers when attending the clinic.

Despite receiving education and recognizing the importance of self care practices of diabetes, the participants still had difficulties in putting their knowledge into practice. Ultimately it can be concluded that if the patients are provided with knowledge to suit their level of understanding it might be easy to convince them to follow desired self care practices. Therefore educational programmes have to be implemented based on the patient's learning needs and then self care skills would be a great benefit for them.

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