OP 24 Impact of medical adherence on blood glucose control and the factors influencing on medical adherence of type 2 diabetes mellitus patients attending to professorial medical clinic in Teaching Hospital Jaffna

Ozaal AMOM[1], Vasikaran N[1], Kumanan T[2], Kumaran S[1]

[1]Dept. of Community and Family Medicine, Faculty of Medicine, University of Jaffna
[2]Dept. of Medicine, Faculty of Medicine, University of Jaffna.

INTRODUCTION: Despite established diabetic care in health sector, there is increased Diabetes related complications in Jaffna and island.

OBJECTIVES: This study was aimed to see the impact of medical adherence on blood glucose control and the factors influencing on medical adherence of Type 2 Diabetes Mellitus patients attending Professorial medical clinic in Teaching Hospital Jaffna.

METHODS: It was done as a descriptive cross-sectional study on 416 diabetic patients of at least 1 year of follow-up at the clinic employing an interviewer administered questionnaire. A patient was said to have good blood glucose control if the venous fasting blood glucose was less than 110mg/dl. Adherence of the patients was assessed in terms of medication, diet and exercise. Adherent patient was one who had equal or more than 6 points while providing 3, 2 and 1 point respectively for high, medium and low adherences in all medication, diet and exercise. Factors influencing medical adherence were also documented.

RESULTS: The blood glucose control and adherence rates were 34.6% and 41.6% respectively. Adherence rate was in the descending order of medication, diet and exercise. It was found that there was positive correlation between blood glucose control and overall adherence ($P<<0.001$) as well as individual adherence in terms of medication ($P=0.001$), diet ($P<<0.001$) and exercise ($P=0.009$). Blood glucose control also was significantly associated with age categories ($P=0.012$), missed routine blood glucose test ($P<<0.001$), missed doses of drugs ($P=0.017$), multi-drugs for diabetes ($P=0.002$), frequency of home blood glucose testing ($P<0.001$) and knowledge of methods of blood glucose control ($P=0.016$) of the patient.

CONCLUSION: The study confirmed that good medical adherence in medication, diet and exercise is the cornerstone for good blood glucose control and existing rates of blood glucose control and adherence were poor and necessitating a well structured management protocol focusing on medical adherence to reduce burden of diabetes