

## **OP 17 Diabetes mellitus in Jaffna District**

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**INTRODUCTION & OBJECTIVES:** The aim of the study was to assess the prevalence, socio-demographic and risk factors of diabetes mellitus (DM) among adults in Jaffna District.

**METHODS:** Multi stage stratified cluster sampling was used to select the subjects. Anthropometric and overnight fasting blood samples were collected. Interviewer administered questionnaire was employed. Fasting blood glucose was analyzed by the enzymatic colorimetric assay. WHO criterion was used to diagnose the diabetes.

**RESULTS:** In this study, a total of 544 subjects were selected and responding rate was 95.3% (n=511). Of them, 224 (43.8%) were males. The overall prevalence of DM was 16.4% (95% CI: 13.3-19.9), and was 19.6% (95% CI: 14.6-25.4) in males and 13.9% (95% CI: 10.1-18.5) in females. Of the total diabetic subjects, 27.4% were previously undiagnosed and was higher in females (37.5%) than in males (18.2%) and further it was in the age group of 35-49 years (42.9%). The prevalence of pre-diabetes was 2.5%. Dysglycaemia includes both diabetes and pre-diabetes and was 19% among the study subjects. Males (23.7%) had higher risk of getting dysglycaemia than the females ( $p=0.019$ , 15.3%). There was a positive trend in the association of DM with the categories of age ( $p<0.001$ ). Diabetes mellitus was not associated with any socio-economic factors ( $p>0.05$ ). Odd ratio for development of DM among the smokers was significantly higher when compared to non-smokers ( $p=0.032$ ). Consumption of alcohol was not a risk factor for the development of DM ( $p=0.274$ ). Physical activity has no significant association with DM ( $p>0.05$ ). Having family history of DM was significantly associated with DM (OR=2.954;  $p<0.001$ ).

**CONCLUSION:** One out of five persons has problem in glucose homeostasis. Prevalence of diabetes is high in the Jaffna community. Males have high risk of getting dysglycaemia. Age, family history and smoking are risk factors for diabetes.