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Prevalence of Metabolic Syndrome among Adults aged 20 to 69 Years in Kopay
Divisional Secretariat Division

Vinitharan, V.¹, Balakumar, S.¹, Sivarathy, A.¹, Arasasratnam, V.¹ and Muhunthan, K.²

¹ *Department of Biochemistry, Faculty of Medicine, University of Jaffna, Sri Lanka*

² *Department of Obstetrics & Gynecology, Faculty of Medicine, University of Jaffna, Sri Lanka*

The aim of this study was to estimate the prevalence of metabolic syndrome among adults aged 20-69 years in Kopay DS division of Jaffna district and to identify the individual risk factors of metabolic syndrome. A total of 395 subjects aged 20-69 years were included in this study from 14 GS divisions of Kopay DS division. Anthropometric and blood pressure measurements and overnight fasting blood samples were obtained from all subjects. Clinical data, details about lifestyle, socio demographic and socio economic factors were obtained using an interviewer administered questionnaire. International Diabetic Federation (IDF) guidelines were used to identify metabolic syndrome. Prevalence of metabolic syndrome and individual risk factors were analyzed by sex and age group. The gender distribution of samples was 33.9% males and 66.1% females, with a mean age in males of 53.34 years (SD=12.39) and in females of 50.10 years (SD = 12.31). Metabolic syndrome was present in 109 (27.59%) subjects and the prevalence in males and females were 14.93% and 34.10%, respectively and the difference was significant ($p < 0.05$). The prevalence of metabolic syndrome in females was more than double when compared with males. Among the subjects studied those in the age group of 50-59 and 60-69 showed high prevalence of 35.45% and 30.17% respectively. Distribution of prevalence of metabolic syndrome for age showed linear increase up to 59 years ($p < 0.05$). Prevalence of central obesity was 43.04% in general population and was higher in females (54.41%) than in males (20.9%). High blood pressure was found in 24.81% and showed a linear increase with age. Hypertriglyceridemia was observed in 26.32% of the subjects and 33.58% of the males and 22.60% of the females showed the elevated levels of triglycerides. Hypertriglyceridemia was significantly increased in the people of more than 40 years of age. Females showed higher prevalence of low HDL levels. Decreased HDL level was observed in all age group. (80.75% of total prevalence, 66.41% in males, 88.12% in females). Prevalence of impaired fasting blood sugar (FBS) was observed among 24.81% of the total population, and it was 28.35% among males and 22.98% among females. Subjects in the age group range of 60-69 showed significantly high levels of impaired glucose levels.

Keywords: IDF criteria, metabolic syndrome, Central obesity, Hypertriglyceridemia, HDL, Fasting blood sugar