

Prevalence of Metabolic Syndrome and its Components Among University Students at the University of Peradeniya, Sri Lanka

D.M.P.U.K.Ralapanawa^{1*}, H.M.R.K.G.Nandasena², S.U.B.Tennakoon³,
L. A. N. U. De Silva¹, B. R. De Silva¹

¹Department of Medicine, Faculty of Medicine, ²Department of Nursing, Faculty of Allied Health Sciences, ³Department of Community Medicine, Faculty of Medicine, University of Peradeniya, Peradeniya, 20400, Sri Lanka

** udayapralapanawa@yahoo.com*

Metabolic syndrome (MetS) is a complex disorder characterized by a cluster of risk factors that increase the likelihood of developing non-communicable diseases. The prevalence of MetS is rising globally, particularly in developing countries like Sri Lanka. University students are a unique group with distinct characteristics and lifestyle habits that may contribute to the development of MetS. This descriptive cross sectional study aimed to assess the prevalence and predictors of MetS among university students at the University of Peradeniya, Sri Lanka. 1371 students were included, and data on socio-demographic characteristics, behavioral risk factors, physical measurements, and blood samples were collected. Bivariate analysis was conducted to identify significant predictors. The prevalence of MetS was found to be 3%. High triglyceride levels were observed in 14.6% of students, low HDL level in 4.7%, high fasting blood sugar in 0.2%, high waist circumference in 6.3%, and high blood pressure in 7.9%. Sex and total cholesterol levels were identified as significant predictors of MetS. It was observed that 4.9% of males and 2.2% of females were diagnosed with MetS. There was also a significant association between age and MetS, with individuals with MetS having a higher mean age compared to those without MetS. None of the students met the recommended daily intake of fruits and vegetables, indicating the need for improved dietary habits. Consumption of fruits and vegetables was found to be a protective factor against MetS, while consumption of rice and meat was associated with an increased risk of the syndrome. Accordingly this study highlights the importance of early detection and intervention for MetS among university students in Sri Lanka. The prevalence of MetS in this population was relatively low but still significant. The findings emphasize the need for targeted interventions to promote healthier lifestyle habits, particularly in terms of diet and physical activity.

Keywords: Metabolic Syndrome, University Students, Risk factors

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