

## **Diabetes mellitus and cardio vascular disease among undergraduates of University of Peradeniya**

**B.C.G Mendis<sup>1,2</sup>, A. Dangolla<sup>3\*</sup>, H.R.N.P.K. Handagama<sup>4</sup>, R.M.C. Jayathilake<sup>1,2</sup>,  
R.M.H.W. Rathnayake<sup>1,2</sup>, Y.R.I.A. Gunarathne<sup>1,2</sup>, A.K. Baddewithana<sup>1</sup>,  
T.G.N.S. Gunarathne<sup>1,2</sup> and B.M.C. Rathnayake<sup>1,2</sup>**

<sup>1</sup>Faculty of Allied Health Sciences, University of Peradeniya, Sri Lanka,

<sup>2</sup>Postgraduate Institute of Science, University of Peradeniya, Sri Lanka

<sup>3</sup>Faculty of Veterinary Medicine and Animal Science, University of Peradeniya, Sri Lanka, <sup>4</sup>Faculty of Arts, University of Peradeniya, Sri Lanka

\*adangolla@gmail.com

Diabetes mellitus (DM) and cardiovascular diseases (CVD) are becoming common conditions worldwide, from which Sri Lanka is no exception. Some of the risk factors for DM and CVD are modifiable. If such modifiable risk factors are identified and eliminated early, the incidence of DM and CVD can be reduced. Therefore, this study was planned to estimate the prevalence of cardio- metabolic risk factors among undergraduates of the University of Peradeniya.

In this study 116 students from the Faculty of Allied Health Sciences (AHS), 169 from Faculty of Arts (ART) and 114 from Faculty of Veterinary Medicine and Animal Science (VET) voluntarily participated. All participants visited a mobile health clinic, after a 12-hour fasting period. They, after giving written consent, filled a questionnaire after which their height, weight, waist circumference (WC) and blood pressure (BP) were measured. Venous blood samples were collected and fasting blood glucose (FBG) level and lipid profile were measured using commercially available test kits. Their Body Mass Index (BMI), WC, BP and laboratory test results were interpreted according to the established standard criteria.

Though DM (ART- 1.2%) and impaired fasting glycaemia (AHS- 1.7%, ART- 2.3%) appear to be low among this group, a substantial proportion showed low or borderline high density lipoprotein (AHS- 80.2%, ART- 80.4% and VET- 89.5%) with high or borderline total cholesterol (AHS-20.7%, ART- 29.7% and VET- 20.2%), low density lipoprotein (AHS- 25%, ART- 27.6% and VET- 27.2%) and triglyceride level (AHS-16.4%, ART- 6.1% and VET- 14.0%) values.

Since the potential risk factors such as stress (AHS-81.9%, ART- 76.3% and VET- 70.2%), lack of exercise (AHS-74.1%, ART- 68.6% and VET- 50%) and first degree family history for cardio- metabolic diseases (%) with the presence of other risk factors such as being overweight (AHS-11.2%, ART- 10% and VET- 15.8%), obesity (AHS-2.6%, ART- 1.8% and VET- 2.6%) and abdominal obesity (AHS-6.9%, ART- 3% and VET- 1.8%) could lead to cardio- metabolic diseases in these undergraduates if any preventive action is not adopted soon.

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