

Comparison of Physical Health Parameters of Medical Students and Biological Science Students of the Eastern University, Sri Lanka

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Prevalence of Non-Communicable Diseases (NCD) is increasing. Anthropometric and cardiovascular measurements predict and diagnose NCDs. Anthropometric and cardiovascular indices of Medical Students (MS) and Biological Science students (BS) entered to Eastern University in 2012 were measured. Data were analyzed to find the mean difference using independent t- test. There were 74 MS and 26 BS students. Male: female was 32:42 and 5: 21 in respective group. Age range was 22-26 years. Mean BMI (22.8 ± 3.9) of MS was higher ($p=0.013$) than that (20.5 ± 4.3) of BS. Mean Waist/Hip (W/H) (0.833 ± 0.07) of MS was higher ($p=0.000$) than that (0.77 ± 0.05) of BS. Mean BMI of male (23.8 ± 4.3) was higher ($p=0.004$) than that (21.3 ± 3.8) of females. W/H of male (0.89 ± 0.56) was higher ($p=0.000$) than that (0.78 ± 0.04) of females. Mean Systolic Blood Pressure (SBP) of males (120.9 ± 10.1) was higher ($p=0.000$) than that (105.7 ± 11.0) of females. Mean Diastolic Blood Pressure (DBP) and Pulse Rate (PR) differences were not significant between sexes. Mean W/H of female MS 0.783 ± 0.037 was higher ($p=0.024$) than that (0.759 ± 0.04) of BS. BMI was not different between females of two groups. Female MS had lower ($p=0.000$) SBP (102.4 ± 11.2 mmHg) than that (112.3 ± 7.1 mmHg) of female BS. PR was lower ($p=0.028$) in female MS (78.3 ± 9.0 /min) than that (84.4 ± 12.1 /min) of BS. Male MS had higher ($p=0.012$) W/H (0.902 ± 0.0507) than that (0.836 ± 0.0587) of BS. BMI and cardiovascular parameters were not significantly different. Biological Science students of Eastern University had healthier anthropometric indices than medical students whereas female medical students had healthier cardiovascular parameters than Biological Science students.

Keywords: BMI, waist to hip ratio, undergraduates, NCD risk factors

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