

ESTIMATION OF ATHEROGENIC INDEX OF PLASMA AMONG MEDICAL STUDENTS

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Introduction - cardiovascular disease (CVD) has become a global public health concern. A precise and quick recognition of susceptible individuals to develop CVD is imperative to reduce its burden. Atherogenic index of plasma (AIP) is a logarithmically transformed ratio of molar concentrations of triglycerides to HDL-cholesterol, being affordable, specific, and useful tool to predict cardiovascular events.

Purpose- studying the distribution of atherogenic index of plasma in young medical student cohort

Material and methods - a cross-sectional study was performed including 440 healthy students (18-30y). Anthropometric and clinical measurements were acquired from all enrolled individuals. Also, a blood sample of each participant was obtained to complete biochemical analyses (triglycerides, total cholesterol, LDL cholesterol, and HDL cholesterol. Finally, atherogenic index of plasma was estimated.

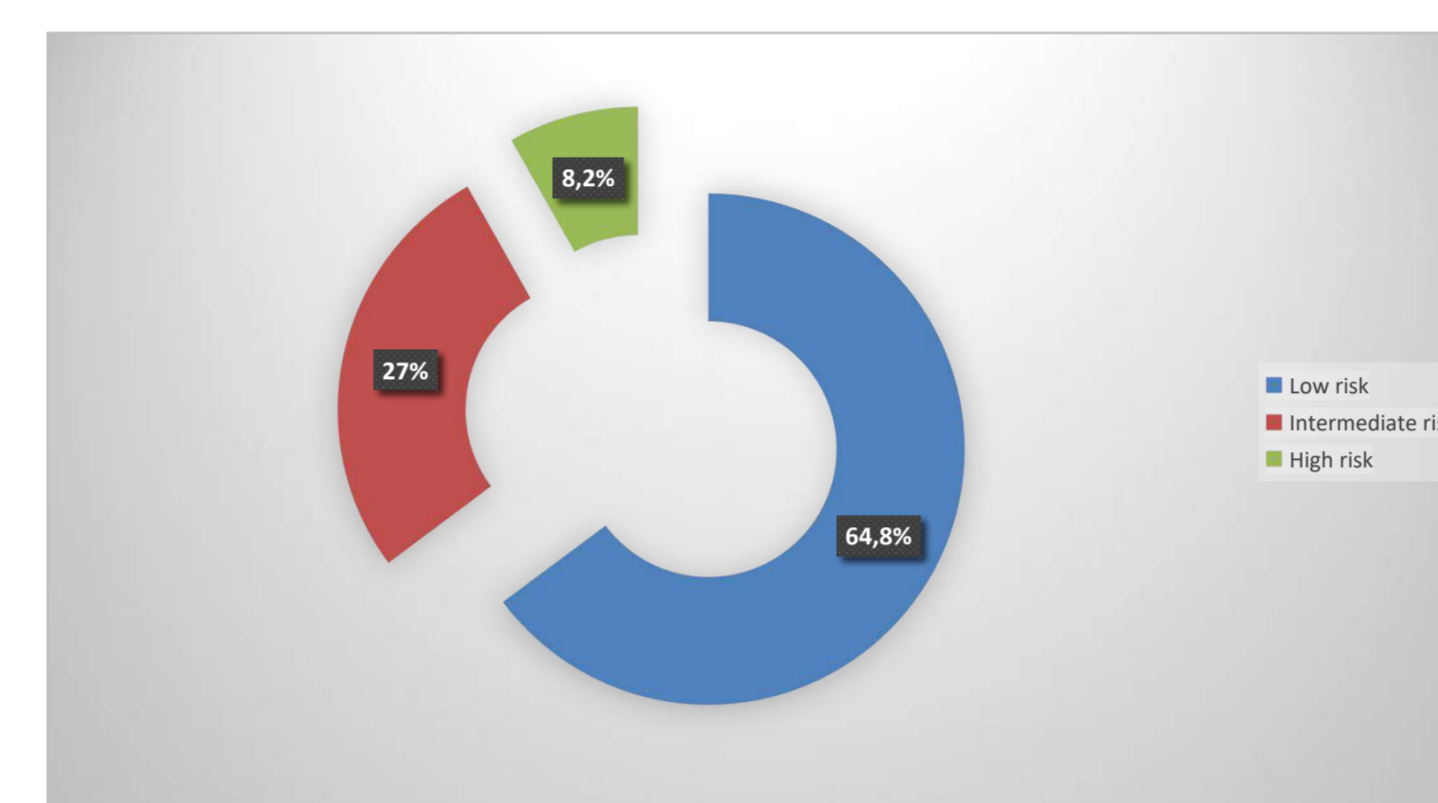


Fig. 1. The distribution of atherogenic index of plasma among young medical students

Results - the mean AIP was significantly higher in young males 0.08 ± 0.1 , than in females (0.05 ± 0.1 , $p=0.016$). According to AIP category, 285 (64.8%) were in low risk group, 119 (27%) - intermediate risk and 36 (8.2%) presented high risk of developing CVD. Out of 34.3% centrally obese participants, 32.5% were at intermediate or high risk.

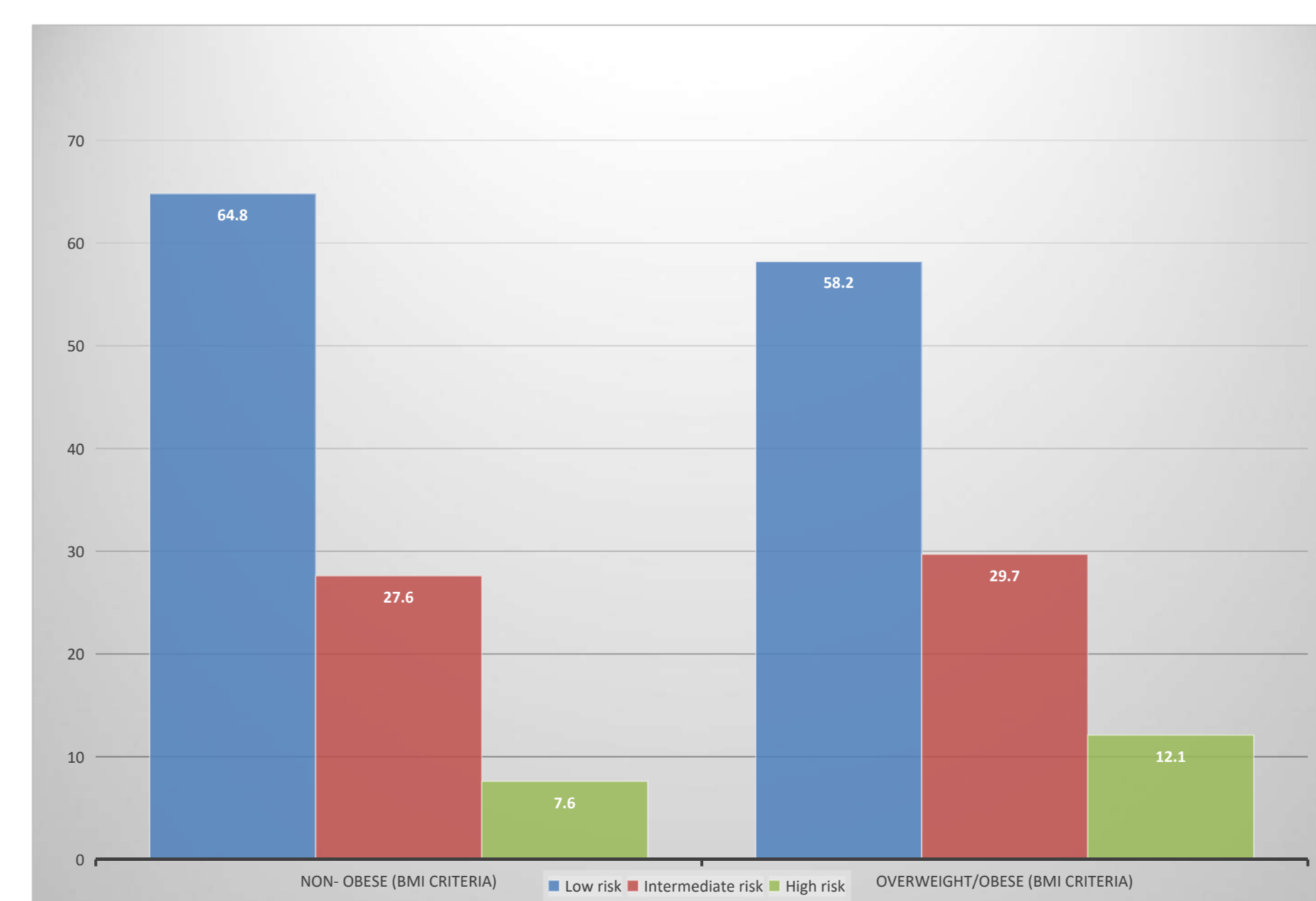


Fig. 2. The distribution of atherogenic index of plasma by BMI stratification (%)

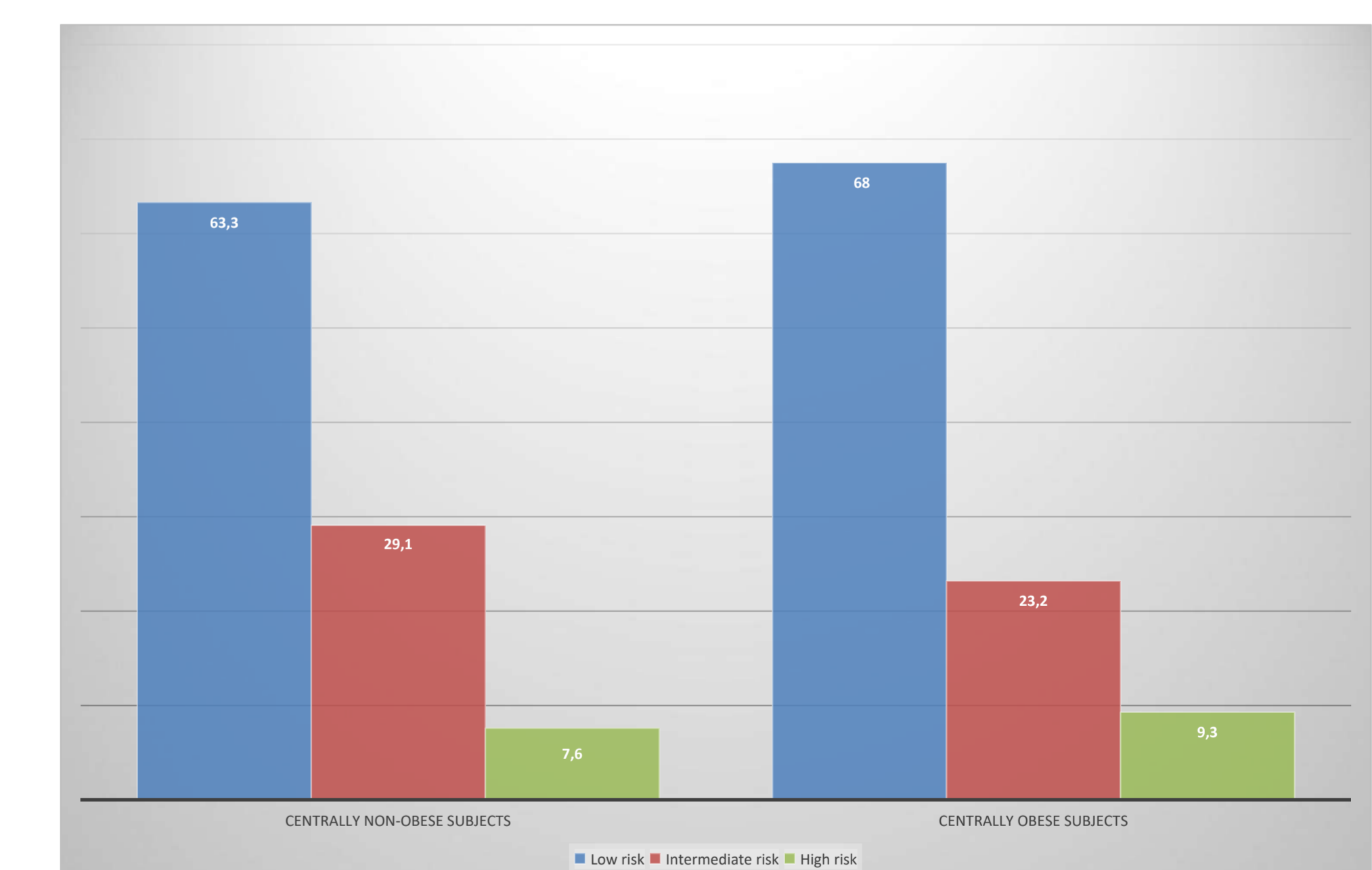


Fig. 3. The distribution of atherogenic index of plasma by waist circumference stratification (%)

Conclusions - the documented rate of students in intermediate and high risk group is alarming. Further studies are needed to assess the correlation between the atherogenic index of plasma and cardiovascular risk factors in asymptomatic young students, in order to be used as a regular monitoring index of CVD.