

ANALYSIS OF METABOLIC RISK FACTORS AMONG MILITARY RESPONDENTS

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Objective of the Study: The aim of the study is to explore the significance of metabolic risk factors in the spread of non-communicable diseases (NCDs) among military personnel.

Materials and Methods: The analysis was conducted based on the results of 10317 military respondents, including those serving in the Armed Forces of the Republic of Uzbekistan and retired personnel from the Central Military Hospital Polyclinic of the Military Medical Academy, Tashkent city, Tashkent, and Syrdarya regions. All patients underwent comprehensive biochemical lipid spectrum tests using standard reagent kits. Data from 10317 military respondents visiting military medical rooms between 2022 and 2024 were analyzed. The respondents' ages ranged from 18 to 70 years, with an average age of 52.02 ± 18.65 years. The study was conducted in accordance with the norms and principles of the Helsinki Declaration, and all military respondents were informed about the study and signed written consent forms.

Results and Discussion: Among military respondents who visited the rehabilitation room, 8.42% (n=868) were diagnosed with diabetes based on blood glucose levels. In order to ensure accurate and transparent glucose testing, all military respondents received pre-test instructions, and the laboratory tests were conducted in a fasting state. Venous blood samples were collected from respondents and analyzed using equipment. The results indicated that the average age of respondents with identified hyperglycemia was 54.59 ± 18.31 years, and the average blood glucose level was 7.32 mmol/L. When analyzing blood glucose levels across age groups, significant differences were observed, with the highest prevalence of type 2 diabetes found among military respondents aged 46-70 and above. A total of 39.66% (n=4092) exhibited hypercholesterolemia. The average age of respondents with hypercholesterolemia was 48.59 ± 22.31 years, and the average total cholesterol level was 6.52 mmol/L. A noticeable difference in cholesterol levels was found between age groups, with hypercholesterolemia being more prevalent among respondents aged 46-70 and above. Additionally, arterial hypertension was observed in 10.76% (n=1110) of military respondents, consisting of 8.70% (n=895) male and 2.10% (n=215) female respondents. Borderline hypertension was the most commonly identified condition among respondents, with a significant difference observed ($p < 0.001$).

Conclusion: A difference in the prevalence of risk factors such as stress and improper nutrition was observed between male and female military respondents. In the male group, the significant outcomes were attributed to irregular working hours and heavy workloads, which made it difficult to maintain a rational eating schedule during working hours. Both age groups



exhibited irregular eating patterns during youth, and older respondents showed that the main components of their diet were calorie-dense and unbalanced, as confirmed by our study.