

RESEARCH ARTICLE

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# BASED ON THE SURVEY RESULTS, AN ASSESSMENT OF MILITARY PERSONNEL RESPONDENTS' AWARENESS OF HEALTH ISSUES (KNOWLEDGE, PROACTIVITY, AND COMPETENCE) WAS CONDUCTED

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## Abstract

The daily routine of military personnel, which reflects military discipline, includes specific features related to eating habits, conditions, and increased professional workloads. Along with stress and psychological strain, the prevalence of harmful habits among military personnel is notably higher compared to the general population [2.13]. This, in turn, creates conditions for the development of decompensation in individuals suffering from any chronic non-communicable diseases, exacerbating existing pathology.

**Keywords** Non-communicable Diseases, Military Personnel, Risk Factors, Alcohol, Poor Nutrition.

## INTRODUCTION

In the military structures of countries around the world, alongside combat-professional training, the provision of medical care for military personnel plays a key role in maintaining their health [1.3]. Medical preventive measures aimed at monitoring the health status of personnel, studying the conditions of military service and the life of soldiers, timely identification and prevention of factors negatively affecting their health, providing medical assistance [4.5], and restoring work

capacity and combat effectiveness are of great importance. In assessing the place and effectiveness of the comprehensive diagnosis of non-communicable diseases (NCDs) in military personnel, it becomes increasingly important to consider military conditions[7.8]. Factors such as medical-military, psychological, physical, and military-professional influences contribute to the development of NCDs, especially regarding the increased risk of cardiovascular, gastrointestinal,

and endocrine system complications[2.12].

The analysis was carried out on military personnel serving in the 10317 Central Military Hospital Polyclinic of the Armed Forces Medical Academy of the Republic of Uzbekistan, located in Tashkent city and the Tashkent region, as well as military retirees from the reserve. All patients underwent a comprehensive biochemical lipid profile test using standard reagent kits.

Data from 10317 military respondents who visited the military medical facilities were analyzed for the period of 2022-2024. The ages of the military personnel ranged from 18 to 70 years, with an average age of  $52.02 \pm 18.65$  years. The research was conducted in accordance with the principles and guidelines of the Helsinki Declaration, and all military respondents were informed about the study and provided written consent for participation.

The male military respondents included 8182 individuals (79.30%), with an average age of  $47.37 \pm 20.51$  years, while the female military respondents comprised 2135 individuals (20.70%), with an average age of  $42.15 \pm 10.38$  years. During the analysis, a second stratification variant was applied, and all patients were divided into two groups according to the WHO classification: youth (ages 18 to 44) and middle-aged, elderly, and senior (ages 45 and older).

Subsequently, a third stratification variant was implemented, in which all patients were divided into two age groups: those aged 30 years and younger, and those older than 30 years. A scientific study was conducted to compare the frequency of behavioral patterns, the emergence of metabolic risk factors, and the prevalence of chronic non-communicable diseases (NCDs) between these age groups.

During the research process, an electronic

questionnaire was filled out in all military units of Tashkent city and Tashkent region. The medical questionnaire recorded the following information: social status, education, place of residence, psycho-emotional status, the presence of chronic diseases, and the existence of risk factors for non-chronic diseases.

To identify behavioral risk factors, information was collected from military personnel respondents regarding alcohol consumption, smoking, physical activity, and diet. The nature of alcohol consumption was assessed based on the respondents' choices (frequently, occasionally, rarely, or never), as well as the strength of the alcoholic beverages consumed (strong or low-alcohol drinks). Information about smoking was collected, including the age at which respondents started smoking and the number of cigarettes smoked per day. Physical activity was assessed based on its nature and intensity (regular, occasional, sedentary, and types of physical activity), while dietary habits (regular or irregular) and the main components of their diet were also evaluated through interviews and questionnaires. The issue of reducing the spread of non-communicable diseases is largely related to the population's health literacy, which involves studying the level of awareness in different population groups through modern research methods. In this regard, from a scientific and methodological perspective, the goal is to develop a methodology for assessing medical literacy and analyzing the results of these studies.

In this study, a questionnaire consisting of four blocks was used, each divided thematically. The electronic questionnaire was administered through an online survey to military respondents serving in Tashkent city and Tashkent region. The advantage of using an online panel is that numerous military respondents, ready to fill out

surveys of varying complexity and content, can directly access the questionnaire. The use of the online panel ensures that respondents can complete the surveys, providing high-quality and unaltered data.

**Block 1:** General characteristics of the respondents.

**Block 2:** Questions regarding the main socio-demographic and socio-economic characteristics of the respondents.

**Block 3:** Questions about the medical literacy of the respondents.

This block contained questions aimed at assessing the medical literacy of military personnel. The questions addressed topics related to obtaining medical assistance, treating and preventing diseases, and understanding and evaluating information related to health promotion, determining how easy or difficult these processes are for the respondents.

**Block 4:** Questions regarding awareness of government measures aimed at promoting a

healthy lifestyle.

This block explored the level of awareness among military personnel regarding the state's efforts to promote a healthy lifestyle, as well as their opinions on whether these efforts are sufficiently carried out. It also gathered information on the number and duration of cigarettes smoked, alcohol consumption, the frequency of vegetable and fruit intake in the diet, sports participation, and questions about healthy eating habits. The study used a two-stage survey based on the WHO European Health Assessment Tool to determine the medical literacy (ML) of the population. The respondents were divided into age groups: 18-20, 25-35, 36-45, 46-50, 51-65, 70 and above. During the study, the level of medical literacy concerning maintaining a healthy lifestyle, preventing non-communicable diseases, and adhering to medical recommendations was analyzed. Respondents' medical literacy was categorized into four groups: excellent, sufficient, problematic, and inadequate, based on their responses.

Table№1

**Foundations of Health Literacy in Population Health**

General Health Literacy			Methods (Skills) for Processing Health-Related Information			
			Searching for Information	Understanding Information	Evaluating Information	Utilizing Information
Dimensions of Health Literacy in	1	Disease Treatment	Health Information	Health Information	Health Information	Health Information

the Population			Retrieval Literacy	Comprehension Literacy	Evaluation Literacy	Application Literacy
	2	Prevention of Non- Communicable Diseases (NCDs)	Health Literacy in Finding Information on NCD Risk Factors	Health Literacy in Understanding Information on NCD Risk Factors	Health Literacy in Evaluating Information on NCD Risk Factors	Health Literacy in Applying Information on NCD Risk Factors
	3	Health Promotion	Health Literacy in Finding Information on Health Promotion	Health Literacy in Understanding Information on Health Promotion	Health Literacy in Evaluating Information on Health Promotion	Health Literacy in Applying Information on Health Promotion

Table №2

Age-based Stratification of Military Respondents Who Attended Medical Examinations

Age of Group Members	Total Respondents n (%)	Female n (%)	Male n (%)
Soldiers Aged 18-20	571 (5,53%)	16 (0,15%)	555 (5,38%)
Soldiers and Sergeants Aged 25- 35	1365 (13,23%)	520 (5,04%)	845 (8,20%)
Junior Officers Aged 36-45	3236 (31,36%)	1089 (10,55%)	2147 (20,80%)

<b>Senior Officers Aged 46-50</b>	2866 (27,80%)	719 (6,97%)	2147 (20,81%)
<b>Retired Reserve Officers Aged 51-65</b>	789 (7,65%)	274 (2,66%)	515 (5,0%)
<b>Retired Reserve Officers Aged 70 and Above</b>	698 (6,77%)	152 (1,47%)	546 (5,29%)

All patients were divided into 6 age groups, and the ratio of men and women in each group was compared with the overall cohort of the study (TableNº2).

**Table Nº3**

**Second Stratification Option of Respondents Based on Age Groups for Medical Examination**

<b>Age of Group Members</b>	<b>Total Respondents n (%)</b>	<b>Female n (%)</b>	<b>Male n (%)</b>
<b>Junior Officers Aged 49 and Below</b>	6214 (60,23%)	1569 (15,20%)	4645 (45,0%)
<b>Officers Aged 49 and Above</b>	4103 (37,77%)	1201 (11,64%)	2902 (28,13%)

**TableNº4**

**Third Stratification Option of Respondents Based on Age Groups for Medical Examination**

<b>Age of Group Members</b>	<b>Total Respondents n (%)</b>	<b>Female n (%)</b>	<b>Male n (%)</b>
<b>Aged 30 and Below</b>	3852 (37,33%)	1365 (13,23%)	2487 (24,10%)
<b>Aged 30 and Above</b>	6465 (62,70%)	1405 (13,61%)	5060 (49,04%)

**Thus**, at the time of the study, the first stratification group added to the survey among military personnel was between 36-45 the second stratification group of military personnel was more than 49 years old, and in the third stratification group of military personnel was more than 30 years old.

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