

REPUBLIC OF AZERBAIJAN

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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

HEALTH STATUS OF CITIZENS OF THE CONSCRIPTION AGE GROUP IN LANKARAN-ASTARA ECONOMIC DISTRICT OF THE REPUBLIC OF AZERBAIJAN

Speciality: 3212.01- Health care and its organization

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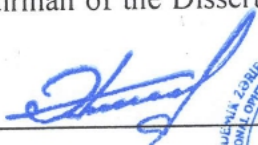
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INTRODUCTION

Relevance and development of the topic. The modern socio-economic development of Azerbaijan requires providing the power structures of the country with physically healthy young people. For this purpose, it is necessary to strengthen health of children before military registration at a planned pace. The leading experience of the world demonstrates the scientific basis approach to the adequate organization of treatment-remedial measures based on the monitoring of children's health starting from an early age.^{1;2;3;4;5;6;7;8} Child and adolescent health is closely related to each other and is formed on the basis of a single state program. Dispensary is an effective way of timely and adequate implementation of health measures. During the Soviet era, the dispensation of children and adolescents was carried

¹ Антоненков, Ю.Е. Этапы рассмотрения организации медицинского обеспечения подготовки к военной службе в Воронежской области по призыву к контролю // Известия Сочинского государственного университета, - 2013. № 2 (25), - с. 19 – 25.

² Антонова, Е.В. Здоровье российских подростков 15 – 17 лет: состояние, тенденции и научное обоснование программы его сохранения и укрепления: / Автореф. дисс. доктора мед. наук./ - Москва, 2011. - 50 с.

³ Хидиятулина, Р.К. Комплексная оценка состояния здоровья и организации медицинского обеспечения подготовки юношей к военной службе в Республике Башкортостан:/ Автореф. дисс. канд. мед. наук./ - Москва, 2011. - 22 с.

⁴ Adejumo, O.A. Contemporary issues on the epidemiology and antiretroviral adherence of HIV – infected adolescents in sub – Saharan Africa: a narrative review / O.A.Adejumo, K.M.Maler, P.Ryscavage [et al.] // Journal of the International AIDS Society, - 2015. 18, 20049 .

⁵ Arain, M. Maturation of the adolescent brain / M.Arain, M.Haqul, L.Johal [et al.] // Neuropsychiatric Disease and Treatment, - 2013. 9, - p. 449 – 461.

⁶ Hargreaves, D.I., Viner, R.M. Adolescent inpatient activity 1999 – 2010: analysis of English Hospital episode statistics data // Arch. Dis. Child, - 2014. 99, - p.830 – 833.

⁷ Lee, L. The status of adolescent medicine: Building a global adolescent Norkforce / L.Lee, K.K Upadhya., P.Matson [et al.] // Int. J. Adolesc Med Health, - 2016. 28 (3), - p. 233 – 243.

⁸ Mason – Jones, F.J. A systematic review of the role of school – based healthcare in adolescent sexual, reproductive and mental health / F.J.Mason – Jones, C.Crisp, M.Momberg [et al.] // Systematic Reviews, - 2012. 1(49).

out in Azerbaijan, in the transitional period (1991-2000), the weakness of the material and technical base of health care and the management mechanism caused the dispensation work to be stopped. The further development of the country created real conditions for the application of the dispensation-serization method, and it became necessary to copy this work. A strong legal basis for the organization of dispensary care for children and adolescents has been created in Azerbaijan in the last 5 years:

- “Law No. 591 - IVQ dated March 5, 2013 of the Republic of Azerbaijan "On Compulsory Dispensation of Children";
- “Decree No. 861 of the President of the Republic of Azerbaijan dated April 10, 2013 on the implementation of the Law No. 591 of the Republic of Azerbaijan dated March 5, 2013 - IVQ "On Compulsory Dispensation of Children";
- Order No. 91 of the Cabinet of Ministers of the Republic of Azerbaijan dated April 18, 2013;
- Order No. 150 of the President of the Republic of Azerbaijan dated December 10, 2013;
- Compulsory medical check-up of children State Program on compulsory medical check-up of children;
- Resolution No. 109 of the Cabinet of Ministers of the Republic of Azerbaijan dated April 23, 2014 and others.

Such a strong legal base is not common in the world experience. Therefore, there is a high probability that dispensation work will be effective in Azerbaijan. Therefore, it is of scientific-practical and theoretical importance to evaluate the results of the application of the dispensary-zation method in the strengthening of military service preparation of minors against the background of a strong legal base in Azerbaijan.

The object and subject of the research. 14-17-year-old boys, and the subject of the health status study of those children.

The purpose of the study: to evaluate the role of dispensation of adolescent boys before initial military registration and military conscription in improving their health status (in the example of Lankaran economic region).

Tasks of the study:

- Evaluation the organizational features and quality characteristics of dispensary observation of adolescent boys before military registration in Lankaran economic region;
- The level of disability of 14-17-year-old boys in Lankaran economic region: to reveal the nosological structure of the causes and the quality characteristics of the certification of the disabled;
- Determination the prevalence and risk factors of chronic diseases among teenagers before military service;
- Studying the characteristics of physical development of adolescent boys during the initial military registration and before military conscription.

Research methods:

- anamnestic
- request
- expert assessment
- medical statistics

Provisions submitted to the defense:

- characteristics and quality characteristics of the organization of dispensary observation of adolescent boys before initial military registration are different in the regions and their optimization is necessary.
- The disability level of 14-17-year-old boys is high, the nosological structure of its causes is wide, and the quality characteristics of the certification of disabled people are not optimal.
- the prevalence of chronic diseases among teenagers before military service is high and the risk factors are controlled.
- the levels of physical development of teenage boys during the initial military registration and before the military conscription are not optimal, mainly the problem of excess body mass is a priority.

Scientific novelty of research results. For the first time, the results of the regional model of dispensary observation of adolescents in a social environment with a strong legal basis have been determined.

Common and different characteristics of the level and nosological causes of juvenile disability at the regional level were revealed. The difference between the regions according to the level of the risk of disability of teenagers has been proven. The prevalence level and nosological structure of chronic diseases among teenagers were determined, and their differences between regions were revealed. The characteristics of physical development in the regions of the region before military service were discovered, and the possibility of the effect of dispensary observation on physical development was determined. Theoretical and practical significance of research results.

The results of the study are useful for justifying and organizing priority measures in the health system to improve the dispensary observation of children and adolescents. The obtained results make it possible to plan the treatment of diseases and physical development disorders of adolescent boys. The discovered risk factors of chronic diseases and disharmonious physical development allow planning of primary preventive measures.

In addition to the application of the obtained results in the primary health care system, it can stimulate the development of the dispensary concept.

Approbation and application of the dissertation. The main results of the dissertation work were reported at the international correspondence scientific-practical conference (Moscow, 2023), scientific-practical conferences dedicated to A. Aliyev's birthday (Baku: - 2020 and 2021). The preliminary discussion of the dissertation was held at the inter-departmental meeting of ASATID named after A. Aliyev "Organization and management of healthcare with pedagogy, psychology and foreign language course", "Therapy", "Pharmacy") was carried out at the meeting (protocol No.06, 14 february, 2024). The approval of the dissertation was reported and discussed at the scientific seminar of the FD 1.03 Dissertation Council operating under the National Ophthalmology Center named after Academician Zarifa Aliyeva (16 may 2024; protocol No.05).

The main results of the research were presented in 5 journal articles, including one in Russia (journals listed in the EAC of the Russian Federation), 1 It was given in "Azerbaijan Medical Journal"

included in the Scopus summarizing system in Azerbaijan and in the materials of three conferences. The journals in which the articles are published are the journals recommended by the Higher Attestation Commission.

The name of the institution where the dissertation work was performed. Azerbaijan State Advanced Training Institute for Doctors named after A. Aliyev.

The total volume of the dissertation by symbols, indicating the volume of the separate structural units of the dissertation. The dissertation consists of an introduction (- 6614 marks), a literature review (Chapter I - 45352 marks), research materials and methods (Chapter II - 13127 marks), 4 chapters reflecting the conclusion of personal observations (Chapter III - -32305 marks, Chapter IV - 25092 marks, Chapter V – 30096 marks, Chapter VI – 12463 marks), consists of a discussion of the obtained results (– 23338 marks), conclusions (– 2745 marks), practical recommendations (– 1410 marks) and a list of used literature. The list of used literature includes 17 Azerbaijani, 74 Russian, and 112 English sources. The dissertation is enriched with 30 tables and 17 graphs. The total volume of the dissertation with marks (excluding blanks, tables, graphics and list of references) – consists of 191542 marks.

MATERIALS AND METHODS OF THE RESEARCH

The following materials related to the issues planned to be solved in the study were used:

- Official statistical data on the number of teenage boys living in the regions, their place of residence, preventive examination coverage, detected hearing, vision and speech impairments, scoliosis and stunting, the number of disabled teenagers, causes of disability.

Organization of a complex examination of teenagers, our personal information on their observation before military registration, during military registration and before military conscription.

Official statistical data were studied by the method of randomization, and the data of our personal observation was studied by the method of purposeful selection.

In 2016, 192, 241, 189, 117, 240, and 240 teenagers who were initially registered in the military commissariat of Astara, Lankaran, Lerik, Yardimli, Masalli, and Jalilabad were selected for personal observation.

In order to study the disability of adolescent boys, primary disability was assessed for the years 2011-2015 based on the official statistical information on the officially registered cases of disability in the country and Lankaran economic regions. During this period, the dynamics of the level of disability per 10,000 people was investigated by means of mechanical and mathematical smoothing (the method of least squares), and the main trend was determined according to the highest level of approximation. For this, the Excel program was used on the computer, linear logarithmic, quadratic, exponential, polynomial regression equations were tested and a more reliable option was selected. In order to assess the inter-district difference, a 5-year chromological average was calculated based on the level of primary disability in calendar years and was calculated with the criterion of the integrity of the inter-district difference.

The criteria of the World Health Organization were used to detect defects in the examination of the disabled:

- Justification of necessary variants of functional disorders of the body during certification (mental, sensory, speech, movement disorders, etc.);
- Indication of the life activities limitation degrees (the patient's use of training and knowledge, self-service, household activity, communication, etc.).

ORGANIZATIONAL CHARACTERISTICS AND QUALITY CHARACTERISTICS OF DISPENSARY OBSERVATION OF ADOLESCENT BOYS IN LANKARAN-ASTARA ECONOMIC DISTRICT UP TO PRIMARY ENROLLMENT

The minimum and maximum levels of doctors-specialists special weights regarding the survey and vision defects in the preventive examinations before the initial military registration are pediatrics ($84.6 \pm 3.3\%$ in Yardimli, $96.3 \pm 1.2\%$ in Jalilabad: $p < 0.05$), ophthalmology ($63.5 \pm 3.5\%$ in Astara, $85.7 \pm 2.5\%$ in Lerik; $p < 0.01$),

neurology ($88.4 \pm 2.1\%$ in Lankaran, $98.7 \pm 0.7\%$ in Jalilabad, $p < 0.05$), stomatology ($69.2 \pm 4.3\%$ in Yardimli, $85.2 \pm 2.6\%$ in Lerik) confirms the null hypothesis ($p < 0.05$). Thus, the frequency of survey and vision defects in preventive examinations varies depending on the specialties of doctors and the regions where teenagers are living. The frequency of these defects varies between $4.2 \pm 1.5\%$ and $31.3 \pm 3.0\%$, depending on the region where teenagers are living and the specialty of the doctor conducting the examination. 2.1% in Astara and $21.3 \pm 2.6\%$ in Jalilabad; $p < 0.05$), surgery ($10.3 \pm 2.8\%$ in Yardimli and $22.5 \pm 2.7\%$ in Jalilabad), ophthalmology ($4, 2 \pm 1.5$ in Lerik and $12.5 \pm 2.1\%$ in Jalilabad), otorhinolaryngology ($6.4 \pm 1.8\%$ in Lerik and $17.1 \pm 2.4\%$ in Jalilabad), dentistry ($14.8 \pm 2.6\%$ in Lerik and $31.3 \pm 3.0\%$ in Jalilabad) are statistically honestly different from each other according to their specialties. In all regions, deviations from examination standards are relatively common in the dentistry profile.

The maximum and minimum frequencies of defects in the justification of the diagnosis are in pediatrics ($32.8 \pm 3.4\%$ in Lerik and $46.7 \pm 3.2\%$ in Jalilabad), surgery ($17.4 \pm 2.4\%$ in Lankaran and $26.7 \pm 2, 8\%$ in Jalilabad), ophthalmology (5.0 ± 1.4 in Lankaran and $11.3 \pm 2.0\%$ in Jalilabad), neurology ($11.2 \pm 2.0\%$ in Lankaran and $24.2 \pm 2.8\%$ in Jalilabad), otorhinolaryngology ($13.3 \pm 2.2\%$ in Lankaran and $26.7 \pm 2.8\%$ in Jalilabad), dentistry ($4.6 \pm 1.4\%$ in Lankaran and $10.0 \pm 1.9\%$ in Jalilabad) are statistically different from each other. Defects in the justification of diagnoses in all regions were registered mostly in the field of pediatrics.

The intensity of the diseases detected by the pediatrician for the first time in the districts of Lankaran-Astara economic region according to 100 examined is 6.8 ± 2.3 (95% confidence interval 2.2 - 11.4) and 15.8 ± 2.4 (95% reliability interval changed in the range of 11.0 - 20.6), a relatively small level of detection was recorded in Yardimli, and a relatively high level of detection was recorded in Jalilabad. According to this indicator, the inter-regional difference is statistically honest ($P < 0.05$). In a pairwise comparison with regions, Astara (10.9 ± 2.2 per 100 examined), Masalli (respectively 14.6 ± 2.3) and Jalilabad (15.8 ± 2.4) were the most affected by the intensity of diseases detected for the first time during the pediatrician's preventive

examination and Lankaran (13.3 ± 2.2) did not statistically differ from each other, but Yardimli and Jalilabad, Yardimli and Masalli, Yardimli and Lankaran, Lerik and Jalilabad, Lerik and Masalli, Lerik and Lankaran they are statistically different from each other ($P < 0.05$).

The intensity of the diseases detected by the doctor-surgeon for the first time during preventive examinations is low ($\leq 5.0 \pm 1.4$ per 100 examined), the indicator is relatively small in Yardimli (1.7 ± 1.2) and Lerik (2.1 ± 1.0), a relatively large level was observed in Jalilabad (5.0 ± 1.4) and Masalli (4.6 ± 1.4). According to this indicator, a statistically honest difference between the compared regions is not proven ($P > 0.05$).

The intensity of chronic diseases initially detected by an ophthalmologist during preventive examinations is relatively high ($\geq 9.5 \pm 2.1$ per 100 examined), the indicator is relatively high in Jalilabad (20.8 ± 2.6 ; 95% confidence interval 15.6 – 26.0 per 100 people), the lowest level was recorded in Lerik (9.5 ± 2.1 ; 95% confidence interval 5.3 – 13.7 per 100 people).

According to the intensity of diseases detected by an ophthalmologist for the first time during a preventive examination (per 100 examined), the difference between regions is Lerik (9.5 ± 2.1) and Masalli (17.8 ± 2.5), Lerik and Jalilabad (20.8 ± 2.6), Yardimli and Jalilabad (12.8 ± 3.1 and 20.8 ± 2.6 , respectively) are statistically honest ($P < 0.05$).

During the preventive examination of teenagers, the doctor neuropathologist discovered for the first time among 100 examined: 4.2 ± 1.5 diseases in Astara, 4.2 ± 1.3 in Lankaran, 3.7 ± 1.4 in Lerik, 3.4 ± 1.7 in Yardimli, 13.3 ± 2.2 in Masalli and 14.6 ± 2.3 in Jalilabad. As it can be seen, the level of detection of diseases is low in Astara, Lankaran, Lerik and Yardimli, and relatively high in Masalli and Jalilabad. According to the level of the indicator, Astara, Lankaran, Lerik and Yardimli, Masalli and Jalilabad are selected with a statistically honest difference.

7.8 ± 1.9 (95% confidence interval 4.0 - 11.6) in Astara, 10.0 ± 1.9 (95% confidence interval 6.2 - 13.8) in 100 adolescents during the preventive examination by an otorhinolaryngologist, 11.6 ± 2.3 (95% confidence interval 7.0 – 16.2) in Lerik, 10.3 ± 2.8 (95% confidence

interval 4.7 – 15.9) in Yardimli, $10 \pm 1,9$ in Masalli (95% confidence interval 6.2 – 13.8) and 11.3 ± 2.0 (95% confidence interval 9.3 - 15.3) in Jalilabad detected chronic disease for the first time. According to this indicator, regions do not statistically differ from each other ($P > 0.05$).

Although the number of chronic diseases detected by the pediatrician during preventive examination is relatively high ($\geq 20.1 \pm 2.9 \leq 42.5 \pm 3.2$ per 100 people), the number of curative and health-enhancing appointments is very low ($\leq 6.8 \pm 2, 9$ per 100 patients with chronic diseases).

The level of curative and healing prescriptions for patients with chronic diseases is close to each other in the regions ($p > 0.05$) and was, respectively (per 100 chronic diseases): 5.2 ± 2.9 (95% confidence interval 0 - 11.0) in Astara, 6.8 ± 2.9 (95% confidence interval 1.0 – 12.6) in Lankaran, 5.3 ± 3.6 (95% confidence interval 0 – 12.5) in Lerik, $3.5 \pm 3,4$ (95% confidence interval 0 – 10.3) in Yardimli, 4.5 ± 2.2 (95% confidence interval 0.1 – 9.9) in Masalli, 5.9 ± 2.3 (95% confidence interval 1,3 – 10,5) in Jalilabad.

The number of treatment of chronic diseases and health appointments of patients in the preventive examination of adolescents before initial military registration is also very low for the otorhinolaryngologist (≤ 4.2 per 100 diseases). According to the level of the indicator, the regions do not statistically differ from each other ($p > 0.05$).

The number of appointments (per 100 chronic diseases) was: 4.2 ± 2.9 (95% confidence interval 0 – 10.0) in Astara, 4.2 ± 2.4 (95% confidence interval 0 – 9.0) in Lankaran, 2.9 ± 2.0 (95% confidence interval 0 – 6.9) in Lerik, 2.5 ± 2.5 (95% confidence interval 0 – 7.5) in Yardimli, 2.6 ± 1.8 (95 % confidence interval 0 – 6.2) in Masalli, 3.6 ± 2.0 (95% confidence interval 0 – 7.6) in Jalilabad.

During the preventive examination, the doctor-dentist, like other doctors, gave a small number of curative appointments to the patients, therefore the districts of the Lankaran region did not statistically differ from each other, the level of the indicator per 100 diseases was: 3.5 ± 1.5 (95% confidence interval 0.5 – 6.5) in Astara, 4.4 ± 1.5 (95% confidence interval 1.4 – 7.4) in Lankaran, 4.7 ± 1.7 (95% confidence

interval 1.3 – 8, 1) in Lerik, 6.4 ± 2.5 (95% confidence interval 1.4 – 11.4) in Yardimli, 5.3 ± 1.5 (95% confidence interval 2.3 – 8.3) in Masalli, 5, 6 ± 1.6 (95% confidence interval 2.4 – 8.8) in Jalilabad.

The number of treatment and curative appointments for chronic diseases detected by the doctor-psychiatrist during the preventive examination did not statistically differ from each other in the regions and was 20.0 ± 17.8 (95% confidence interval 0 - 55.6) per 100 diseases in Astara, 14.3 ± 13.2 (95% confidence interval 0 - 40.7) in Lankaran, "0" in Lerik and Yardimli, 12.5 ± 11.2 (95% confidence interval 0 - 34.9) in Masalli, 11.1 ± 10.5 (95% confidence interval 0 – 32.1) in Jalilabad.

DISABILITY LEVEL OF 14-17-YEAR-OLD BOYS IN LANKARAN-ASTARA ECONOMIC REGION, NOSOLOGY STRUCTURE OF ITS CAUSES AND QUALITY CHARACTERISTICS OF DISABILITIES CERTIFICATION

In Lankaran region, the initial disability level of the 14-17-year-old children population varied chaotically in 2011-2015 and constituted accordingly: 27.4 in 2011, 10.8 in 2012, 42.1 in 2013, 25, 5 in 2014 and 28.6 in 2015. Although the 5-year chronological level of initial disability is high in Lankaran (26.9 ± 4.9), it does not differ statistically from the corresponding indicators of the country and Astara region (19.4 ± 0.5 and 17.4 ± 2.6).

The mechanical smoothing of the initial disability level of 14-17-year-old boys in Lankaran (19.1; 26.5; 33.8 and 27.1) shows that the main trend is curvilinear.

The main trend of the primary disability level of 14-17-year-old boys in Lankaran in 2011-2015 is a curve with 2 decreases and 1 increase peak, its description with 100% accuracy is expressed by the fourth-order polynomial regression equation.

The initial disability level of 14-17-year-old boys in Lerik region was 19.0 in 2011-2015, respectively; 10.8; 6.8; 24.4 and 10.5, it changed mainly chaotically. The 5-year chronological average level of the indicator ($14.3 \pm 3.2\%$) was statistically lower in Lerik compared to Lankaran region (26.9 ± 4.9).

The level of primary disability of 14-17-year-old boys in Lerik region changed in a curvilinear trend in 2011-2015, one decrease and one increase peak were observed, the dynamics can be described with 100% accuracy by the 4th degree polynomial regression equation.

In 2011-2015, the initial disability level of 14-17-year-old boys in Yardimli changes with a clearly noticeable growth dynamics and was: 10.4; 13.4; 28.3; 23.8 and 24.2. The 5-year chronological average level of the indicator is 20.0 ± 3.4 and does not statistically differ from the corresponding indicator of Astara, Lankaran, Lerik regions. It shows linear dynamics in mechanical smoothing (11.9; 20.9; 26.1; 24.0).

Thus, the probability of primary disability of 14-17-year-old boys in Yardimli district is characterized by a dynamic increase, its trend can be described by both linear and polynomial regression equations, but the accuracy of the linear representation is relatively low (61%), the accuracy of the polynomial regression equation is 79-100% contane.

The level of disability of 14-17-year-old boys in Masalli region was 28.4 in 2011-2015, respectively; 24.0; 13.9; 23.8 and 25.0, it changed chaotically, the chronological average level of the indicator (23.2 ± 2.4) was statistically higher compared to Lerik, and statistically different compared to other regions. Mechanical smoothing of the level of disability (26.7; 19.4; 18.9; 24.4) does not allow distinguishing the main trend, because the dynamic decrease continues until 2014, and then the indicator increases.

Thus, in 2011-2015, the probability of disability of 4-17-year-old boys in Masalli region changes with the dynamics characterized by a decrease peak, its 100% accurate description can be expressed by the fourth-order polynomial regression equation.

In Jalilabad, in 2011-2015, the initial disability level of 14-17-year-old boys remained mostly stable, except for 2014, 15.1, respectively; 15.1; 12.2; It was 34.7 and 18.5. Mechanical smoothing (15.1; 13.7; 23.5; 26.6) shows an increasing trend. The 5-year chronological average level of the indicator (19.1 ± 4.0) does not statistically differ from the corresponding indicator of other regions.

In Jalilabad region, the level of disability of 14-17-year-old boys shows a tendency to increase, the main trend can be expressed by highly accurate polynomial regression equations.

Thus, the share and rating of diseases among the causes of disability of 14-17-year-old boys has been basically stable, the first two places are occupied by nervous system diseases and mental disorders. The rating of other diseases varies slightly.

According to the recommendations of the World Health Organization, the degree of limitation of life activity should be determined during the certification. This aspect was not satisfactorily evaluated in the medical and social expertise of teenagers in Lankaran economic district. Thus, information on the limitation of activity in the field of training and knowledge utilization was determined only for a small number of teenagers, according to this indicator, the difference between regions is not statistically honest: $7.7 \pm 3.7\%$ in Astarada, $7.1 \pm 2.8\%$ In Lankaran, $6.2 \pm 3.5\%$ in Lerik, $6.5 \pm 3.6\%$ in Yardimli, $9.8 \pm 3.1\%$ in Masalli and $10.2 \pm 3.1\%$ in Jalilabad ($p > 0.05$).

One of the most important indicators for medical social expertise is the interpersonal communication situation in adolescents. The information about the limitation of this activity is $13.5 \pm 4.7\%$ in Astara, $13.1 \pm 3.7\%$ in Lankaran, $10.4 \pm 4.4\%$ in Lerik, $8.7 \pm 4.1\%$ in Yardimli, $15.2 \pm 4.1\%$ in Masalli. 3.7%, in Jalilabad $16.3 \pm 3.7\%$ were recorded in the documents of teenagers.

Thus, the preparation of 14-17-year-old adolescents for medical-social expertise is at a low level, in most cases, the functional state of the body and the limitation of life activity have not been satisfactorily evaluated.

CHRONIC ILLNESSES AMONG ADOLESCENTS PRIOR TO PREVALENCE AND RISK FACTORS

After initial military registration (for 15-year-old boys), the observation of adolescents should be purposefully organized in ambulatory polyclinic institutions. The main purpose of these measures is to prepare healthy young people for military conscription (up to the age of 18). Among the chronic diseases of young people living in all regions, diseases of the digestive organs occupy the first

place. It is clear that this class (according to XBT - 10) includes pathologies of all organs of the digestive system starting from the oral cavity.

The prevalence of diseases of the digestive organs varied between $521.4 \pm 46.2\%$ and $704.2 \pm 29.5\%$, statistically significantly different from each other ($p < 0.01$). A pairwise comparison of republican subordinate regions of Lankaran economic region shows that the frequency of chronic diseases of digestive organs found in adolescents is higher in Astara ($630.2 \pm 34.8\%$), Lankaran ($663.9 \pm 30.4\%$), Lerik ($624.3 \pm 35.2\%$) and Masalli ($630.2 \pm 34.8\%$) prevalence level difference is not statistically honest. Although the frequency of chronic diseases of digestive organs of adolescents in these four regions is different compared to Yardimli region, where the level of the indicator is relatively low ($581.2 \pm 45.6\%$), there is no reason to reject the null hypothesis ($P > 0.05$). The prevalence of diseases of the digestive organs among teenagers living in all 5 districts (Astara, Lankaran, Lerik, Yardimli and Masalli) ($\leq 663.9 \pm 30.4\%$) is higher than the corresponding indicator among young people living in Jalilabad district ($725.0 \pm 29.8\%$) is statistically less honest ($P < 0.05$). Thus, the level of prevalence of chronic diseases of the digestive organs among teenagers is relatively high in Jalilabad among the republic subordinate regions in the Lankaran economic region.

Among the chronic diseases of teenagers before military service, respiratory diseases take the second place. This class, as is well known, also includes diseases of the nose, throat and larynx. The frequency of respiratory diseases in Lankaran economic region is between $521.4 \pm 46.2\%$ and $704.2 \pm 29.5\%$, the difference of the lower levels of the indicator is statistically honest ($P < 0.01$). The comparison of the subordinate regions of the republic with each other shows that the prevalence of chronic diseases of the respiratory organs in adolescents is in Astara ($567.7 \pm 35.8\%$), Lerik ($592.6 \pm 35.7\%$), Yardimli ($521.4 \pm 46.2\%$) and Masalli ($587.5 \pm 31.8\%$) are not statistically different from each other ($P > 0.05$). The level of this indicator is statistically significantly different from Lankaran and Yardimli teenagers (630.7 ± 31.1 and $521.4 \pm 46.2\%$) ($P < 0.05$). The

prevalence of chronic diseases of the respiratory organs was relatively high among Jalilabad teenagers ($704.2 \pm 29.5\%$). In comparison with this region, the prevalence of chronic respiratory diseases was recorded at a statistically honest low level: in Astara ($567.7 \pm 35.8\%$; $P < 0.01$), in Lerik ($592.6 \pm 35.7\%$; $P < 0, 01$), Yardimli ($521.4 \pm 46.2\%$; $P < 0.01$) and Masalli ($587.5 \pm 31.8\%$; $P < 0.01$). Thus, the inter-district difference in Lankaran economic region according to the prevalence of chronic diseases of the respiratory organs recorded among teenagers is statistically honest, and the ranking of the districts is as follows: Yardimli (1), Astara (2), Masalli (3), Lerik (4), Lankaran (5).) and Jalilabad (6).

Among the chronic diseases of adolescents before military conscription, bone-muscular system pathologies occupy the third place, their prevalence level was in the range of $273.5 \pm 41.2\%$ to $352.7 \pm 30.8\%$ across regions. The minimum and maximum levels of the indicator are statistically significantly different from each other ($P > 0.05$). Thus, the level of diseases prevalence of the musculo-skeletal system among teenagers in the subordinate districts of the republic of Lankaran economic region before military conscription is close to one another.

Diseases of the eye and its apparatus are widespread among teenagers, in the republic subordinate districts of the Lankaran-Astara economic region, a relatively low level of prevalence was recorded in Lerik ($195.8 \pm 28.9\%$), and a high level was recorded in Jalilabad ($295.8 \pm 29.5\%$). The inter-district difference is statistically honest ($P < 0.01$).

According to the prevalence of diseases of the eye and its accessory apparatus among adolescents, the ranks of the towns of regions are low: Lerik ($195.8 \pm 28.9\%$; I), Yardimli ($205.1 \pm 37.3\%$; II), Astara ($229.2 \pm 30.3\%$; III), Masalli ($262.5 \pm 28.4\%$; IV), Lankaran ($278.0 \pm 28.9\%$; V) and Jalilabad ($295.8 \pm 29.5\%$; VI) .

Among the chronic diseases of adolescents before military service, the 5th place are diseases of the circulatory system ($15.9 \pm 9.1 - 37.5 \pm 12.3\%$), the 6th place are diseases of the blood and blood-forming organs, the endocrine system ($15, 6 \pm 8.9 - 20.8 \pm 9.2\%$), the 7th place is taken by mental disorders ($5.3 \pm 5.3 - 12.5 \pm 7.2\%$). The

total prevalence of diseases in other classes is high ($\geq 256.4 \pm 40.4\%$), the relatively low level of this indicator is in Yardimli ($256.4 \pm 40.4\%$), the high level is in Lankaran ($370.1 \pm 31.1\%$). The difference recorded between regions is statistically honest, the ranking of regions is as follows: 1st place Yardimli, 2nd place Astara, 3rd place Masalli, 4th place Lerik, 5th place Jalilabad, 6th place Lankaran.

Thus, the level of prevalence of chronic diseases among adolescents in republic subordinate districts of Lankaran economic region differs from each other.

The prevalence of oral cavity diseases is between $359.0 \pm 44.3\%$ (Yadimli) and $504.2 \pm 32.3\%$ (Jalilabad). The difference of these indicators is statistically honest ($P < 0.01$). The prevalence of these diseases is in Astara ($447.9 \pm 35.9\%$), Lankaran ($460.6 \pm 32.1\%$), Lerik ($428.5 \pm 36.0\%$) and Masalli ($425.0 \pm 31.9\%$) are not statistically significantly different from each other. A pairwise comparison of regions shows that the difference between Astara, Lankaran, Lerik, Yardimli and Masalli and Jalilabad is not statistically honest. Inter-regional statistically honest difference was registered between Yardimli and Jalilabad. The ranking of the regions according to the prevalence of oral cavity diseases is as follows: 1st place from the bottom goes to Yardimli, 2nd place to Masalli, 3rd place to Lerik, 4th place to Astara, 5th place to Lankaran and 6th place is Jalilabad.

Chronic gastritis and gastroduodenitis are on the 2nd place among diseases of the digestive organs. The prevalence of these diseases is between $59.8 \pm 21.9\%$ (Yadimli) and $75.0 \pm 17.0\%$ (Jalilabad) and does not statistically differ from each other. The prevalence of the disease in Astara ($62.5 \pm 17.5\%$), Lankaran ($74.7 \pm 16.9\%$), Lerik ($68.8 \pm 18.4\%$) and Masalli ($66.7 \pm 16.1\%$) are very close to each other.

Thus, the difference between the regions of the Lankaran economic region according to the prevalence of diseases of the digestive organs is mainly due to the difference in the prevalence of oral cavity diseases among teenagers in these regions.

Acquired flat-toedness (code – M 21.4) occupies the first place among diseases of the musculoskeletal system. The prevalence of acquired flat-footedness was relatively low ($76.9 \pm 24.6\%$) in Yardim-

li and relatively high ($120.3 \pm 21.0\%$) in Lankaran and did not statistically differ from each other ($P > 0.05$). The level of the indicator is practical in Astara ($93.8 \pm 21.0\%$), Lerik ($100.5 \pm 21.9\%$), Masalli ($95.8 \pm 19.0\%$) and Jalilabad ($100.0 \pm 19.4\%$) and was at the same level.

The specific weight of adolescents with severe polymorbidity (the presence of 4 or more chronic diseases) in the districts of the region was between $4.1 \pm 1.3\%$ (Masalli district) and $13.6 \pm 2.2\%$ (in Lankaran district), the difference between regions is statistically honest ($P < 0.05$). in Astara ($10.4 \pm 2.2\%$), Lankaran ($13.6 \pm 2.2\%$), Lerik ($8.0 \pm 2.0\%$) and Jalilabad ($10.4 \pm 2.0\%$) the specific weights of adolescents with 4 and more chronic diseases do not differ statistically from each other ($P > 0.05$). A statistically significant difference was found between Astara and Yardimli, Lankaran and Lerik, Yardimli and Masalli, Jalilabad and Masalli in a pairwise comparison of regions ($P < 0.05$). If we take Masalli teenagers as a control group, the relative risk of the mentioned polymorbidity is 2.5 in Astara; 3.3 in Lankaran; 2.0 in Lyric; It was at the level of 1.7 in Yardimli and 2.5 in Jalilabad.

The percentage of adolescents with 3 chronic diseases in the region was $21.3 \pm 1.2\%$. In the districts of the region, the level of the indicator was in the range of $13.2 \pm 2.5\%$ (Lerik) and $32.4 \pm 3.0\%$ (Lankaran). The difference of these indicators is statistically honest ($P < 0.01$). According to this indicator, the ranking of the regions is as follows: Lerik, Masalli, Yardimli, Astara, Jalilabad and Lankaran.

The percentage of adolescents with 3 or more chronic diseases in the region is 30.4%, 31.2% in Astara, 46.0% in Lankaran, 21.2% in Lerik, 25.6% in Yardimli, 18.3% in Masalli and 35.4% in Jalilabad.

The specific weight of adolescents without chronic diseases varied in the range of $0-12.8 \pm 3.1\%$ in the districts of the region. The difference between districts is statistically honest. According to the health index (specific weight of those without chronic diseases), the ranking of the regions is as follows: Yardimli ($12.8 \pm 3.1\%$), Lerik ($5.3 \pm 1.6\%$), Lankaran ($2.1 \pm 0.9\%$) and Masalli ($2.1 \pm 0.9\%$), Astara ($1.0 \pm 0.71\%$) and Jalilabad (0).

The specific weight of adolescents with a chronic disease was $14.5 \pm 1.0\%$ in the region, it was in the range of $2.1 \pm 0.9\%$ (Masalli) and

33.9±3.4% (Astara) in the districts of the region, and statistically significantly different.

The percentage of adolescents with three or more chronic diseases was 18.3±2.5% (95% confidence interval 13.3–23.3%) and 46.1±3.2% (95% confidence interval 39.7– 52.5%) has changed in the interval. The inter-regional difference is statistically significant ($P<0.01$). The level of the indicator is close to each other in Masalli (18.3±2.5%), Lerik (21.2±3.0%) and Yardimli (25.6±4.0%), their comparison shows the fairness of the null hypothesis ($P > 0.05$). In Astara (31.2±3.3%) and Jalilabad (35.4±3.0%), the specific weight of adolescents with 3 or more chronic diseases is close to each other, compared to Masalli and Lerik, it is statistically significantly higher ($P<0.05$), statistically less honest than Lankaran ($P<0.01$). Taking the group of adolescents from Masalli district, which has the lowest level of the indicator, as a control group, and calculating the relative risk of adolescents with 3 or more chronic diseases in other districts, it was determined that its level varies in the range of 1.2-2.5 and is, accordingly: in Astara - 1.7; Lankaran – 2.5; in Lerik - 1.2; Yardimli – 1.4 and Jalilabad – 1.9.

24.9±2.8 and 31.7±1.5% of teenagers living in urban and rural areas of Lankaran economic region respectively had 3 or more chronic diseases ($P < 0.05$). Polymorbidity is more typical for adolescents living in rural areas, the risk of association of 3 or more chronic diseases was 1.3 times higher in rural adolescents compared to urban adolescents.

The document "Table of Diseases" is considered the basis for decision-making on options for military service of teenagers. The analysis of the decisions of the military doctor's examination during the initial military registration shows that the opinion of "suitable for military service" (A) of teenagers living in Astara, Lankaran, Lerik, Yardimli, Masalli and Jalilabad is 38.5±3.5, respectively; 38.2±3.1; 37.0±3.5; 35.9±4.4; It was determined by 37.5±3.1 and 36.7±3.1%. According to this indicator, the difference between regions is not statistically honest ($P > 0.05$).

"Suitable for military service out of the ordinary" (B) opinion 26.6±3.2% in Astara, 27.8±2.9% in Lankaran, 25.9±3.2% in Lerik,

25.6±4.0% in Yardimli , 26.3±2.8% in Masalli, 26.7±2.9% in Jalilabad were determined based on the adolescent's certificate. According to this indicator, no statistically honest difference was found between the regions.

The specific weight of teenagers with the opinion "unfit for military service in peacetime, limited use in wartime" (C) was as follows: 18.2±2.8% in Astara, 18.7±2.5% in Lankaran, 20.1±2.9% in Lerik, 17.9±3.5% in Yardimli, 18.8±2.5% in Masalli and 19.2±2.5% in Jalilabad ($P>0.05$).

16.2±2.7% of teenagers in Astara, 14.5±2.3% in Lankaran, 16.5±2.7% in Lerik, 19.8±3. It was observed in 7% in Yardimli, 16.6±2.4% in Masalli and 16.6±2.4% in Jalilabad. According to this indicator, the inter-regional difference was not statistically honest ($P > 0.05$).

The opinion "not valid for military service due to removal from military registration" (D) was determined for a small number of teenagers: 0.5±0.5% in Astara, 0.8±0.6% in Lankaran, 0.5±0.5% in Lerik, 0.8±0.8% in Yardimli, 0.8±0.6% in Masalli and 0.8±0.8% in Jalilabad ($P > 0.05$).

LEVELS OF PHYSICAL DEVELOPMENT OF ADOLESCENT BOYS AT THE TIME OF INITIAL MILITARY REGISTRATION AND UNTIL CONSCRIPTION

Body mass index <18.49 kg/m² malnutrition (fimental - development) is considered a weakness. The specific weight of such teenagers is relatively small in Astara (8.9±2.1%; 95% confidence interval 4.7-13.1%), relatively high in Masalli (14.5±3.1%; 95% confidence interval 8.3-20.7%) and did not statistically differ from each other ($p>0.05$).

Body mass index, which is a characteristic of normal physical development, is in the range of 18.50-24.99 kg/m² in 62.9±3.5% (55.9-69.9%) of teenagers in Astara, 64.8% ±3.1% in Lankaran (95% confidence interval 58.6-70.9%), in Lerik-69.8± 3.3% (95% confidence interval 63.2-76.4%), in Yardimli in 64.1±4.4% (95% confidence interval 55.3-72.9%), in Masalli in 65.9±3.1% (95% confidence interval 59.7 -72.1%) and 64.2±3.1% (95% confidence

interval 58.0%-70.4%) in Jalilabad and did not statistically differ from each other ($p>0.05$).

Excess body mass (body mass index 25.0-29.99 kg/m²) is relatively low ($15.0\pm2.3\%$; 95% confidence interval 10.4-19.6%) in Masalli. It was relatively high in Astara ($24.0\pm3.1\%$; 95% confidence interval 17.8-30.2%) and statistically significantly different from each other ($p<0.05$). A pairwise comparison of the regions according to this indicator shows that the difference between Astara and Lankaran, Lerik, Yardimli and Jalilabad was not statistically fair.

Sign of obesity (body mass index ≥ 30 kg/m²) $2.7\pm1.2\%$ in Lerik, $3.3\pm1.2\%$ in Jalilabad, $4.1\pm1.3\%$ in Lankaran, $4.2\pm1.4\%$, $4.6\pm1.4\%$ in Masalli and $5.1\pm2.0\%$ in Jalilabad were found in adolescents, and according to this indicator, the difference between regions was not statistically significant ($p>0.05$).

One of the criteria that integrally reflects the physical development of adolescents and allows predicting the probability of somatic pathologies is the WHtR index calculated based on the ratio of the waist circumference to the waist. The normal value of this index is considered to be <0.56 . The specific weight of teenagers with WHtR index <0.56 is $84.4\pm2.60\%$ in Astara, $85.5\pm2.26\%$ in Lankaran, $84.1\pm2.65\%$ in Lerik, $81.2\pm3.61\%$ in Yardimli, It was $84.2\pm2.35\%$ in Masalli and $80.8\pm2.54\%$ in Jalilabad, and did not differ statistically ($p>0.05$).

One of the important characteristics of physical development of teenagers is its harmony. As it is known, the harmonics of physical development are used centile tables of body mass and height. Features of the harmony of harmonious physical development: body mass and height individual size >97 ; $\leq 97 - >90$; $\leq 90 - >75$; $\leq 75 - >25$; $<25 - >10$; $<10 > 3$ rd centiles. The results of our comparisons are given in Table 1. As can be seen, the harmony of physical development in $71.9\pm3.24\%$ of teenagers in Astara, $69.3\pm2.97\%$ in Lankaran, $74.1\pm3.18\%$ in Lerik, $74.4\pm4.03\%$ was recorded in Yardimli, $65.8\pm3.06\%$ in Masalli, and $75.0\pm2.79\%$ in Jalilabad. Evaluating these indicators with the χ^2 criterion allows revealing a statistically correct difference ($\chi^2=19.8$; $\phi=5$; $p<0.02$). Dysharmonic physical development was observed in $34.2\pm3.06\%$ of adolescents in Ma-salli

(relatively high level) and in $25.0 \pm 2.74\%$ of adolescents in Jalilabad (relatively low level indicator).

Table 1. Distribution of teenagers according to the harmony of physical development and WHtR index during initial military registration (%)

Regions Physical development	Astara	Lankaran	Lerik
Harmonic	71,9 \pm 3,24	69,3 \pm 2,97	74,1 \pm 3,18
Disharmonic	28,1 \pm 3,24	30,7 \pm 2,97	25,9 \pm 3,18
Integrity criteria	$\chi^2=19,8$; $\partial=5$; $p<0,02$		
WHtR<0,56	84,4 \pm 2,60	85,5 \pm 2,26	84,1 \pm 2,65
0,56-0,59	6,3 \pm 1,75	4,1 \pm 1,27	6,9 \pm 1,84
$\geq 0,59$	9,3 \pm 2,09	10,4 \pm 1,96	9,0 \pm 2,08
$\geq 0,59$	15,6 \pm 2,60	14,5 \pm 2,26	15,9 \pm 2,65
Regions Physical development	Yardımlı	Masallı	Jalilabad
Harmonic	74,4 \pm 4,03	65,8 \pm 3,06	75,0 \pm 2,79
Disharmonic	25,6 \pm 4,03	34,2 \pm 3,06	25,0 \pm 2,24
Integrity criteria	$\chi^2=19,8$; $\partial=5$; $p<0,02$		
WHtR<0,56	81,2 \pm 3,61	84,2 \pm 2,35	80,8 \pm 2,54
0,56-0,59	8,5 \pm 2,57	5,0 \pm 1,41	9,2 \pm 1,86
$\geq 0,59$	10,3 \pm 2,81	10,8 \pm 2,00	10,0 \pm 1,93
$\geq 0,59$	18,8 \pm 3,61	15,8 \pm 2,35	19,2 \pm 2,54

The information we received about the risk factors and the level of risk affecting the harmony of the physical development of adolescents during the initial military registration is given in table 2.

Table 2. Risk factors for harmony of physical development during initial military registration of teenagers

Signs	Variants of signs	Physical development				Level of the risk
		harmonic		disharmonic		
		n	%	n	%	
	Astara	138	71,9±3,24	54	28,1±3,24	1,12

Admini strative district	Lankaran	167	69,3±2,97	74	30,7±2,97	1,23
	Lerik	140	74,1±3,18	49	25,9±3,18	1,04
	Yardımlı	87	74,4±4,03	30	25,6±4,03	1,02
	Masallı	158	65,8±3,06	82	34,2±3,06	1,37
	Jalilabad	180	75,0±2,79	60	25,0±2,79	Control
	Town	195	79,6±2,57	50	20,4±2,57	Control
	Village	675	70,9±1,47	299	29,1±1,47	1,43
Family	Complete	689	75,0±1,43	230	25,0±1,43	Control
	Uncom- plete	191	60,3±2,82	119	39,7±2,82	1,59
Number of children in the family	≤2	590	77,3±1,51	173	22,7±1,51	Control
	≥3	280	61,4±2,27	176	38,6±2,27	1,70
Mother's education	High	155	79,9±2,87	39	20,1±2,87	Control
	Secon- dary and primary	715	69,8±1,43	310	30,2±1,43	1,50
Father's education	High	180	83,7±2,52	35	16,3±2,52	Control
	Secon- dary and primary	690	68,7±1,46	314	31,3±1,46	1,92

Table 2. (continue)

A private room of a teenager	Yes	105	84,0±3,28	20	16,0±3,28	Control
	No	765	69,9±1,38	329	30,1±1,38	1,88
Health status of parents	provides savings	266	78,2±2,24	74	21,8±2,24	Control
	Non provides savings	604	68,7±1,56	275	31,3±1,56	1,44
Chronic disease of	No	30	81,1±6,43	7	18,9±6,43	Control
	1	140	79,1±3,05	37	20,9±3,05	1,11
	2	483	76,1±1,69	152	23,9±1,69	1,26

adoles- cence	3	179	69,2±2,86	80	30,8±2,86	1,63
	4+	38	34,2±4,50	73	65,8±4,50	3,48

Taking into account that the specific weight of adolescents with disharmonious physical development is relatively low in Jalilabad, the level of relative and attributive risk compared to this region was: 1.12 times and 3.1% in Astara, 1.23 times and 5.7% in Lankaran, 1, 04 times and 0.9% in Lerik, 1.02 and 0.6% in Yardimli, 1.37 times and 9.2% in Masalli.

Among adolescents from urban and rural settlements, the specific weight of those with disharmonious physical development (20.4 ± 2.57 and $29.1\pm1.47\%$, respectively; $p < 0.05$) was statistically significantly different from each other. The relative risk of disharmonious physical development of rural teenagers was 1.43 times, and the attributive risk was 8.7% higher.

During the observation period, the WHtR index was <0.56 (86.5 ± 2.3 and $88.5\pm2.5\%$ in Astara, 86.7 ± 2.2 and $88.0\pm2.1\%$ in Lankaran, 85.2 ± 2.6 and $86.8\pm2.5\%$ in Lerik, 83.8 ± 3.4 and $84.6\pm 3.3\%$ in Yardimli, 86.71 ± 2.2 and $88.3\pm2.1\%$ in Masalli, $83,3\pm2.4$ and $85.0\pm2.3\%$ in Jalilabad) and ≥ 0.59 (6.8 ± 1.8 and $5.2\pm1.6\%$ in Astara, 7.5 ± 1.7 and $7,1\pm1.7\%$ in Lankaran, 6.3 ± 1.8 and $5.8\pm1.7\%$ in Lerik, 8.5 ± 2.6 and $9.4\pm2.7\%$ in Yardimli, $6.2\pm1,6$ and $6.7\pm1.6\%$ in Masalli, 6.21 ± 1.6 and $6.7\pm1.6\%$ in Jalilabad) the specific weight of teenagers did not change significantly ($p>0.05$).

Thus, positive changes did not occur in the physical development of teenagers after their initial military registration until their military call-up.

RESULTS

1. The primary disability level of 14-17-year-old boys in Azerbaijan and the regions of it: Lankaran economic region varies chaotically in 2011-2015, the chronological average is 19.4 ± 0.5 for the country; 17.4 ± 2.6 in primer; 26.9 ± 4.9 in Lankaran; 14.3 ± 3.2 in Lerik; 20.0 ± 3.4 in Yardimli; It is 23.2 ± 2.4 in Masalli and 19.1 ± 4.0 in Jalilabad. Mainly nervous

system symptoms ($21.3 \pm 1.0 - 24.0 \pm 1.1\%$), mental disorders ($11.7 \pm 0.8 - 15.0 \pm 0.9\%$), eye ($7.5 \pm 0.7 - 9.1 \pm 0.7\%$), diseases of respiratory organs ($6.0 \pm 0.6 - 8.0 \pm 0.7\%$), consequences of traumas ($6.5 \pm 0.7 - 7.5 \pm 0.7\%$) and congenital anomalies ($5.1 \pm 0.6 - 5.8 \pm 0.6\%$).

2. The inter-district difference in the health status of teenage boys before military service is statistically honest, $1888.8 - 2454.2$ chronic diseases per 1000 teenagers, including $195.8 \pm 28.9 - 295.8 \pm 29.5$ eyes, $521.6 \pm 35.7 - 704.2 \pm 29.5$ respiratory organs, $581.2 \pm 45.6 - 725.0 \pm 28.8$ digestive organs, $273.5 \pm 41.2 - 352.7 \pm 30.8$ bone - muscle system diseases fall. The specific weight of adolescents without chronic diseases is $0 - 12.8 \pm 3.1\%$, the specific weight of those with 4 or more chronic diseases is $4.1 \pm 1.3 - 13.6 \pm 2.2\%$, the specific weight of those with 3 chronic diseases is varies in the range of $13.2 \pm 2.5 - 32.4 \pm 3.0\%$.
3. The risk factors of chronic diseases in adolescents, especially polypathy, are: residential district and locality (risk level < 2.5 and < 1.3), family incompleteness (risk level 1.9), multiple children (risk level 2.0), mother's and father's secondary and primary education (risk level 1.9 and 3.8), housing conditions (risk level 1.6). Due to chronic diseases, the level of suitability of teenagers for military service decreases ($14.5 \pm 2.3 - 19.8 \pm 3.7\%$ are temporarily for military service, $0.5 - 0.8\%$ are unfit for military service).
4. According to the characteristics of the physical development of teenagers during the period of military registration and before military conscription, the inter-regional difference is statistically honest ($p \leq 0.003$), the median of the indicator is $49.9 - 53.5$ kg for body mass, $158.0 - 163.5$ cm for height, chest $80.9 - 82.1$ cm for head circumference, $56.3 - 56.5$ cm for head circumference, body mass index $< 18.49 \text{ kg/m}^2$ has a specific gravity of $8.9 \pm 2.1 - 14.5 \pm 3, 1\%$, the specific weight of those with $\geq 30 \text{ kg/m}^2$ is in the range of $2.7 \pm 1.2 - 5.1 \pm 2.0\%$, the specific weight of those with disharmonious physical development is $25.0 \pm 2.79 - 34.2 \pm 3.06\%$, the specific weight of those with the risk of diabetes mellitus 2 ($\text{WHR} \geq 0.56$) and

the risk of arterial hypertension ($WHtR \geq 0.59$) is $14.5 \pm 2.26 - 19.2 \pm 2.59\%$, respectively. and varies in the range of $9.0 \pm 2.08 - 10.8 \pm 2.0\%$.

5. The dispensary observation of adolescent boys before initial military registration and military conscription is inadequate (cases of hearing, vision and speech disorders, scoliosis, and stature disorders detected during preventive examinations remained stable in 2005-2015, the quality standards of preventive examinations were not ensured), the number of first detected diseases per 100 adolescents is $6.8 \pm 2.3 - 15.8 \pm 2.4$ for a pediatrician; $1.7 \pm 1.2 - 5.0 \pm 1.4$ for the surgeon; $9.5 \pm 2.1 - 20.8 \pm 2.6$ for an ophthalmologist; $3.4 \pm 1.7 - 14.6 \pm 2.3$ for a neuropathologist; $7.8 \pm 1.9 - 11.3 \pm 2.0$ for otolaryngologist; it was $50.8 \pm 3.6 - 83.8 \pm 2.4$ for a dentist and $0.9 \pm 0.9 - 2.5 \pm 1.0$ for a psychiatrist.

PRACTICAL RECOMMENDATIONS

1. In order to strengthen the suitability of teenagers for military service, it is necessary:
 - Ensuring the participation of a pediatrician, surgeon, neuropathologist, ophthalmologist, otorhinolaryngologist and psychiatrist in the annual preventive examination of boys until the initial military registration (up to 15 years of age);
 - Standardisation of the protocol of medical care to prevent the formality of preventive examinations;
 - Comprehensive assessment of anthropometric indices in preventive examinations;
 - To comprehensively characterize the state of the organism, to determine the degree of impaired functions of the organs;
 - Planning and ensuring the implementation of the treatment and secondary prevention of detected pathologies;
 - Applying a healthy lifestyle, physical activity.
2. Planning the rehabilitation of disabled teenagers by including ambulatory: polyclinic, inpatient and hospital stages.

3. Determining the functional disorders (mental, sensorial, speech, motor, cardiovascular, respiratory system, etc.), the structure and reasons of life activities limitation of disabled teenagers for certification.
4. Adjustment of the examination program during the initial military registration of teenagers to the standards, familiarization with the "Table of Diseases" of the doctors participating in the examination.
5. Optimizing the physical development of adolescent boys before military service, to ensure their involvement in sports sessions, to ensure special observation of those with body mass index $\geq 25\text{kg/m}^2$, especially those with WHtR index ≥ 0.56 and > 0.59 .

LIST OF SCIENTIFIC WORKS USED ON THE DISSERTATION TOPIC

1. İbrahimli, H.İ., Musayev, F.İ. Hərbi xidmətə çağırışa qədər yeniyetmələrin stomatoloji problemlərinin səciyyələri // - Bakı: Sağlamlıq, 2016. №6, - s.169-173
2. Musayev F.İ. Hərbi xidmətə çağırışa qədər yeniyetmələrdə sağlamlıq imkanlarının məhdudluğu və hərbi xidmətə yararlılıq potensialı // - Bakı: Sağlamlıq, 2017. №4, - s.129-132
3. Musayev, F.İ. İlkin hərbi qeydiyyat qədər yeniyetmələrin profilaktik müayinələrinin keyfiyyət səciyyələri // - Bakı: Azərbaycan Təbabətinin Müasir Nailiyyətləri, 2017. №3, - s. 44-47
4. Мусаев Ф.И. Межрайонные особенности физического развития юношей-допризывников в Азербайджанской Республике // - Казань: Общественное здоровье и здравоохранение, 2018. №1, - с. 7-10

5. Musayev, F.İ. Hərbi xidmətə çağırışa qədər yeniyetmələr arasında polimorbidlik // - Bakı: Azərbaycan Tibb Jurnalı, 2021. №1, - s. 144-150
6. Musayev, F.İ. Lənkəran iqtisadi rayonunda yeniyetmə oğlanların ilkin hərbi qeydiyyatı qədər dispanser müşahidəsinin təşkili xüsusiyyətləri və keyfiyyət səciyyələri // Əziz Məmmədkərim oğlu Əliyevin doğum gününə həsr olunmuş elmi-praktiki konfransın məcmuəsi. – Bakı: - 2020-ci il, dekabr, s. 58-68
7. Musayev, F.İ. Lənkəran iqtisadi rayonunda 14-17 yaşlı oğlan əlillərin tibbi şəhadətləndirilməsinin keyfiyyət səciyyələri // Əziz Məmmədkərim oğlu Əliyevin doğum gününə həsr olunmuş elmi-praktiki konfransın məcmuəsi. – Bakı: - 2021-ci il, dekabr, s. 45-46
8. Мусаев, Ф.И. Распространенность хронических заболеваний среди допризывников в сельских районах // Современная медицина: новые подходы и актуальные исследования. Сборник статей по материалам LXVIII v научно-практических конференции. – Москва: -2023, №1(62), - с. 29-35

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