

ANTHROPOMETRIC CHARACTERISTICS OF THE PHYSICAL STATUS OF WOMEN IN THE FIRST AND SECOND PERIOD OF MIDDLE AGE

Khamdamova M.T.,

Bukhara State Medical institute.

✓ *Resume,*

An anthropometric analysis of Mature women living in the Bukhara region was carried out. The quantitative distribution of women by constitutional characteristics of their physique was revealed; anthropometric indicators (standards) for each somatotype were determined. Data on the specificity of the component composition of the body in these women and some other indicators of physical development were obtained.

Keywords: anthropometric studies, women, Mature age, somatotype, physical status.

АНТРОПОМЕТРИЧЕСКАЯ ХАРАКТЕРИСТИКА ФИЗИЧЕСКОГО СТАТУСА ЖЕНЩИН ПЕРВОГО И ВТОРОГО ПЕРИОДА СРЕДНЕГО ВОЗРАСТА

Хамдамова М.Т.,

Бухарский государственный медицинский институт

✓ *Резюме,*

Проведен антропометрический анализ женщин зрелого возраста, проживающих в Бухарском регионе. Выявлено количественное распределение женщин по конституциональным характеристикам телосложения; определены антропометрические показатели (нормативы) для каждого соматотипа. Получены данные о физическом развитии женщин первого и второго периода среднего возраста.

Ключевые слова: антропометрические исследования, женщины, зрелый возраст, соматотип, физический статус.

ЎРТА ЁШ БИРИНЧИ ВА ИККИНЧИ ДАВРИДА АЁЛЛАР ЖИСМОНИЙ ҲОЛАТИНИНГ АНТРОПОМЕТРИК ХУСУСИЯТЛАРИ

Ҳамдамова М.Т.,

Бухоро давлат тиббиёт институти.

✓ *Резюме,*

Бухоро вилоятида яшовчи ўрта ёш биринчи ва иккинчи даврида аёллар жисмоний ҳолатининг антропометрик таҳлили амалга оширилди. Аёлларнинг жисмоний жиҳатдан конституциявий хусусиятлари бўйича миқдорий тақсимланиши аниқланди, ҳар бир соматотип учун антропометрик кўрсаткичлар (стандартлар) аниқланди. Ушбу аёлларда жисмоний ривожланиши ҳақида маълумотлар олинган.

Калит сўзлар: антропометрик текширув, аёллар, етуқ ёш, соматотип, физик статус.

Introduction

The development of a personal approach to a sick and healthy person is one of the important trends in the development of clinical and preventive medicine. The implementation of the personalized approach is associated with the individualization of the assessment of a person's physical status and adaptive potential. At the same time, of course, one of the basic methods is constitutional anatomical diagnostics [1, 2, 3]. This method is widely tested in practice, the results of its use are easily comparable; it is quite easy to learn, does not require significant time costs and special expensive equipment, which makes it advisable to implement the anthropometric approach in a variety of medical institutions (health centers, hospitals, research institutions, etc.). The anthropometric method is based on the identification of signs of intra-group similarity and non-group differences in any analyzed population. Representatives of different constitutional groups (or somatotypes) differ not only in different anatomical characteristics of their physique, but also in the specifics of their reactivity [4, 5, 7]. Different frequency of occurrence of somatic pathology in the

representatives of different constitutional types [6]. Moreover, anthropometric markers (bioindicators) have been established that indicate an increase in the probability of occurrence of a very different somatic pathology in representatives of specific somatotypes, and different effectiveness of its treatment in owners of different somatotypes, which is advisable to take into account both when developing individual prevention measures and personalized treatment. At the same time, there is a shortage of modern data on the physical status of a person under normal conditions, especially in relation to different age and gender categories of the population. The data available on this issue should be constantly reviewed, updated, and supplemented.

The aim of the work was to identify the constitutional and anatomical characteristics of the physique of Mature women living in the conditions of the Bukhara region.

Research material and methods

Using anthropometric the method studied the physique features of 480 women of the first and second period of middle age, Uzbek by nationality, living in the

territory of Bukhara and the Bukhara region. The study group did not include cases with diseases of the musculoskeletal system, cancer, myasthenia gravis, obesity and other nosological forms, the presence of which could affect the component composition of the body and indicators of physical development. The growth and weight parameters (length and body weight) were determined, and the coverage and linear parameters of the body (diameters) were measured using the anthropometric method. The body mass index (BMI) for women of each constitutional type was calculated individually using the formula $BMI = \text{body weight (kg)} / \text{height}^2 \text{ (m)}$. Statistical data processing included the calculation of arithmetic averages and their errors; the reliability of differences was determined by the method of confidence intervals.

Results and discussion

The analysis made it possible to identify among Mature women representatives of all known constitutional groups-leptosomal, mesosomal, megalosomal and their constituent somatotypes, determined, however, with different frequency. Leptosomal Constitution was found in 122 cases out of 480 (25.4%), the owners of mesosomal Constitution were 139 women (39.7%), megalosomal - 188 (39.1%). In 31 cases (6.5.0%), it was not possible to establish membership in other constitutional groups (the Constitution is uncertain). Among women of leptosomal Constitution, stenoplastic somatotype was predominant (61.7%); women of asthenic somatotype, according to our data, made up 38.3% of the surveyed. Among women mesosome of the Constitution of the holders of metaplasticity somatotype constitute 57.6%, endomorph - 42.4%.

Among women of megalosomal Constitution, euriplastic somatotype was detected in 42.3% of cases, subathletic - in 39.7% and athletic-in 18.0% of cases. In the General population of women of Mature age are the dominant metaplasticity (26.9%) and ctenoplectrini (16.7%) somatotype. The most rarely defined asthenic (1.7%) and athletic (5.2%) somatotypes. The frequency of the detection of the other somatotype was not significantly different from each other: endomorph somatotype recorded in 13.7%; subtleties - 11.5% europlastics - 12.3%, and uncertain in 11.9% of cases.

Women of different somatotypes differ significantly in height-weight and other anthropometric parameters of the body. So, the body length is minimal in women of stenoplastic (158.2 ± 0.51 cm; from 149.2 cm to 165.0 cm individually) and mesoplastic (159.6 ± 0.40 cm; 152.0-164.8 cm) somatotypes, which is 1.07 and 1.06 times more than the maximum value of this attribute in women of athletic somatotype (169.4 ± 1.65 cm, $p < 0.05$). Body weight also has somatotypological features: its value in women of asthenic somatotype in adulthood is 47.8 ± 0.60 kg (44.2-54.6 kg), stenoplastic catfish-totype - 50.6 ± 0.37 kg (from 42.6 to 54.2 kg), mesoplastic type - 62.2 ± 0.22 kg (56.3-64.9 kg), picnical type - 68.6 ± 0.74 kg (64.5-82.7 kg), athletic type - 66.2 ± 0.99 kg (62.0-76.5 kg), subathletic type - 68.2 ± 0.96 kg (63.4-76.5 kg), and euriplastic somatotype - 75.0 ± 1.03 kg (68.4-92.5 kg). BMI has pronounced constitutional features. Its value, according to our data,

for women of the asthenic somatotype is normally 16.9; stenoplastic-20.3; subathletic-23.3; athletic-24.2; mesoplastic-24.6; euriplastic-24.7; picnical somatotype-26.2. Transverse dimensions of the limbs (diameters) are minimal in women of the asthenic somatotype, and maximum in women of the athletic and euriplastic somatotypes. Thus, the distal diameter of the shoulder and forearm in asthenic somatotype is 4.4 ± 0.11 cm and 4.0 ± 0.08 cm, respectively, which is 1.55 and 1.49 times less than in women of the athletic somatotype ($p < 0.05$), as well as 1.67 and 1.54 times less ($p < 0.05$), compared with representatives of the euriplastic somatotype.

Different height and weight indicators in representatives of different somatotypes indicate the appropriateness of assessing the generally accepted BMI, taking into account individual constitutional features. Currently, a BMI of less than 18.5 is considered by clinicians as a body mass deficit, more than 25.0 as an excess, and more than 30 as obesity [4]. The normal BMI value, according to our data, varies from 16.9 (asthenical somatotype) to 26.2 (endomorph type). The data obtained indicate the need for a differentiated approach to the interpretation of BMI values and revision of its standards taking into account individual constitutional features, which is important for the prevention of alimentary obesity, its diagnosis and monitoring of treatment effectiveness.

Thus, the study made it possible to identify and quantitatively characterize the distribution of women by constitutional types in the conditions of relative norm in the studied population of Mature persons of the Uzbek ethnic group living in the territory of the Bukhara region. It is shown that the value of BMI, which is widely used in dietetics, nutritionology and other clinical specialties, largely depends on the constitutional characteristics of women.

LIST OF REFERENCES:

1. Bunak V. V. Methods of anthropometric research / V. V. Bunak. M.-L., State Medical Publishing House, 1931. 168 Pp.
2. Nikityuk D. B. Constitutional and anthropometric approaches to the study of the child's body / D. B. Nikityuk, K. V. Vybornaya // Morphology. 2006. Vol. 130, vol. 5. Pp. 64-65.
3. Nikityuk D. B. Constitutional approach in childhood: situation analysis and research methods / D. B. Nikityuk [et al.] // Morphological sheets. 2009. Vol.1-2. Pp. 85-87.
4. Nikityuk D. B. Use of the anthropometric method for the diagnosis of certain alimentary-dependent diseases / D. B. Nikityuk, N. S. Bukavneva, S. V. Klochkova // Questions of nutrition. 2014. Vol. 83, vol. 3. Pp. 218-219.
5. Nikolaev V.G. Anthropological examination in clinical practice / V. G. Nikolaev [et al.]. Krasnoyarsk: Publishing house of KSMU, 2007. 171 Pp.
6. Nikolenko V.N., Nikityuk D.B., and Chava S.V.. Domestic constitutional anatomy in the aspect of personalized medicine. 2013. Vol. 4(1). Pp. 37-43.
7. Tutelyan V. A. Implementation of the anthropometric approach in clinical medicine: perspectives and approaches / V. A. Tutelyan [et al.] // Bulletin of anthropology. 2013, vol. 3(25). Pp. 37-43.
8. Khamdamova M. T. Ultrasound anatomy of the uterus and appendages in women // "Science and education in the modern world: challenges of the xxi century" Nur-Sultan, Kazakhstan, december, 2019. P. 37-41.

Entered 09.02. 20202