



**HYGIENIC ANALYSIS OF DISEASES OBSERVED DURING
CLIMAX PERIOD IN WOMEN**

Saidova Gulbakhor

Department of Hygiene of children, adolescents and nutrition

Tashkent Medical Academy

Tashkent, Uzbekistan

E-mail: gulbaxorsaidova595@gmail.com

<https://orcid.org/0009-0002-0522-409X>

Abstract: Climax is not a disease, but a completely normal physiological period observed in the life of any woman after the age of 45. At this age, the ovaries in a woman's body, which are responsible not only for bearing children, but also for a woman's appearance, gradually begin to stop functioning. Our research confirms the results of previously published work that women's incidence rates increase as they age.

Key words: climacteric period, climacteric syndrome (CS), indicators of morbidity, age-related changes

A woman's health status is largely determined by her age-related characteristics and the changes occurring in the body, even physiological, that require increased attention to oneself, including during menopause, when there is severe stress or a decrease in the power of adaptive mechanisms. The climacteric period as a whole can be considered as a complex age-related restructuring, primarily of neurohumoral regulation, associated with a decrease in reproductive function. The peculiarity of this period is that, along with a decrease in reproductive function, age-related pathological changes develop in many organs and tissues during this period, and many diseases appear. Menopause is the process by which a woman loses fertility and her menstrual cycles stop. Menopause occurs naturally throughout life and is not considered a disease. Despite the fact that this is a natural process, neglecting it leads to a number of complications. Menopause, which until



recently was not something to talk about out loud, became one of the most pressing issues regarding women's health in the 1990s. [1] The climacteric period is a physiological period in a woman's life when ovarian function gradually fades away, but its pathological course is also possible - climacteric syndrome (CS), which occurs in 80% of modern women. [5] With the beginning of the decline of ovarian function in a woman's body, a change in all types of metabolism occurs and, as a result, an increase in the frequency of many non-infectious diseases. [6,7] Due to menopausal syndrome, disturbances in fat and carbohydrate metabolism lead to weight gain and obesity. In addition, hair loss, headache, weakness, memory loss, impaired concentration, shortness of breath, increased or decreased blood pressure. Symptoms such as aggressiveness, decreased libido and heaviness in the chest area appear.

Prevention of complications of menopausal syndrome should begin with an assessment of the health status of women. Of particular importance is the analysis of morbidity rates among menopausal women in comparison with the health status of women in the corresponding age groups who have not yet begun the transition to menopause. This assessment was the purpose of this study. The fact is that all of the above requires an in-depth study of the diseases of women during menopause in order to develop preventive measures that improve health, in particular, the functional reserve of the body, which ensures flexibility and resistance.

Materials and research methods

The case-control study [3,4] included 966 residents of 2 districts of Tashkent (Shaykhantakhur and Sobir-Rakhimov districts) aged from 40 to 58 years (median age was 46.0) on the basis of voluntary informed consent. years, the median duration of menopause was 4 years). The main group included 500 women who consulted doctors with menopause problems. The main criterion for selecting women into this group was their violation of the regularity of absence of menstruation. The control group included 466 women without menopause problems, comparable in age to the main group of women. (Table 1) The data presented in Table 1 indicate almost complete identity of the compared groups.

Table 1.

Distribution of examined women by age groups (% of the total number)

Age group	Case (main group.)		Control	
	Abc	P \pm m, %	Abc	P \pm m, %
Up to 40 years old	16	3,2 \pm 0,77	14	3,0 \pm 0,76
40-44 years old	201	40,2 \pm 2,19	190	40,8 \pm 2,20
45-49 years old	170	34,0 \pm 2,02	155	33,3 \pm 2,01
50-54	100	20,0 \pm 1,79	96	20,6 \pm 2,11
55 и >	13	2,6 \pm 0,73	11	2,4 \pm 0,68
Total	500	100	466	100

In order to further eliminate the influence of women's age and obtain representative data, comparisons of morbidity were carried out in the age groups 40-44; 45-49 and 50-54 years (441 women in the control group and 471 women in the main group). Of all the women examined, women of the indicated age groups made up 94.7% in the control group and 94.2% in the main group.

The sources of information were: an outpatient card (f-025/u), a control card of dispensary observation (f-030/u), as well as journals and books of annual medical examinations. All data from primary accounting documents were entered into specially designed morbidity registers for the studied contingent of women.

Incidence rates are calculated on average for 3 years (2005-2007). The development and analysis of morbidity was carried out according to the International Classification of Diseases, 10th revision. Statistical processing of data was carried out using a software package: calculation of average values, relative indicators, errors of average and relative values; the significance of differences in frequencies in groups was assessed using Student's t - test.

Research results.



The study of morbidity during the menopausal period revealed some features characteristic of this period of women's lives. According to our data, the average morbidity rate for women of all ages in the main group was 1760.8%, and in the control group 1550.3%; the incidence rates of women in the study and control groups had statistically significant differences ($P < 0.01$).

It should be noted that both in the control and in the main group, the older the age of the women, the higher the incidence rate (Table 2). Before the age of 49 years, the increase in incidence was more significant in the main group - by 19.6% (control group - 10.3%), after 50 years - in the control group (control - 12.7%, main group - 4.5%)

Despite the absence of significant differences in the incidence rate of other forms of pathology, the trend towards higher rates in the main group is manifested quite clearly: of the 7 registered classes of diseases for 6 classes of diseases, the incidence rates in the main group were higher than in the control group.

Table 2.

The incidence rate of women in menopause (per 1000 women in the corresponding group).

	Classes and nosological forms of diseases.	Control group	Main group	P
I	Some infectious and parasitic	74,8 ± 7,2	80,0 ± 7,5	>0,05
	Viral hepatitis	71,5 ± 7,3	72,1 ± 7,1	>0,05
III	Diseases of the blood and blood-forming organs	160,2 ± 10,9	152,1 ± 10,4	>0,005
IX	Diseases of the circulatory system	338,6 ± 15,9	433,8 ± 17,5	<0,001
1	Hypotension	24,2 ± 4,3	33,9 ± 4,9	>0,05
2	Hypertonic disease	173,1 ± 11,4	222,2 ± 12,5	<0,01
3	Angina pectoris	30,2 ± 4,8	44, ± 5,6	>0,05
4	Cardiac ischemia	108,0 ± 9,0	130,9 ± 9,6	<0,05



X	Respiratory diseases	433,9 ±18,1	525,8 ±19,3	<0,001
1	Angina	90,7 ±8,3	106,9 ±8,7	>0,05
2	Acute respiratory viral infection	158,0 ±10,9	222,9 ±12,5	<0,001
3	Bronchitis	105,1 ±8,9	116,8 ±9,1	>0,05
4	Pneumonia	14,4 ±3,3	14,9 ±3,2	>0,05
5	Bronch. asthma	61,2 ±6,8	61,6 ±6,7	>0,05
XI	Digestive diseases	252,5 ±13,8	268,9 ±13,8	>0,05
XIII	Diseases of the musculoskeletal system and connective tissue	53,7 ±6,4	53,9 ±6,2	>0,05
XIV	Diseases of the genitourinary system	158,7 ±10,9	162,8 ±10,7	>0,05
	Total	1550,3 ±33,6	1760,8 ±35,6	>0,001

During menopause, women get sick more often than their peers who have not yet developed menopause due to an increased risk of cardiovascular disease, hypertension and coronary heart disease. In addition to the indicated nosological forms, endometritis, uterine fibroids and osteoporosis are more often noted in postmenopausal women. Thus, the level of common diseases is higher in women who have reached menopause, and the frequency of certain classes of diseases and nosological forms has age-related characteristics. The incidence in all age groups is significantly higher in the main group of women. The incidence of the disease also increases with age. In the postmenopausal period, acute respiratory viral infections, hypertension, some malignant tumors and osteochondrosis are more often observed. The high level of the listed nosological forms is associated with the functional state and resistance of the body, neurovegetative, endocrine-hardware, psycho-emotional state, living conditions, diet and daily routine, lifestyle.

Cardiovascular diseases in women over 40 years of age are often associated with menopause and are one of the most common causes of death in women of this



age. The occurrence of diseases is promoted not only by estrogen deficiency, but also by other factors - genetic, family predisposition to heart disease, etc. [2,7] The increase in the incidence of respiratory diseases may be due to a decrease in the body's protective properties against the background of hormonal changes.[5]

Thus, the identified differences in the incidence of women in groups of the same age, differing in the presence or absence of signs of menopause, may be primarily due to different levels of hormonal levels.

Conclusions

1. Regardless of the presence or absence of menopause, all women over 40 years of age are characterized by an increase in overall morbidity, but the incidence rate of women with signs of menopause is significantly higher than that of women without hormonal imbalance.

2. For all women over 40 years of age, the main forms of diseases in order of importance are: diseases of the respiratory system, diseases of the circulatory system, diseases of the digestive system. The significance of the first two classes of diseases in women with signs of menopause is higher than in the control group.

3. Women with signs of menopause have a significantly higher level of hypertension, coronary heart disease and acute respiratory viral infections; in relation to diseases of other classes, only a tendency towards an increase in indicators was noted.

4. When organizing preventive work with women in menopause, priority attention should be paid to secondary and tertiary prevention of hypertension, coronary artery disease and acute respiratory viral infections.

LITERATURE

1. Ilovaiskaya I.A., Donina E.Y. What you need to know about menopause./ Tashkent, 2003, pp.15-61. Kalashnikova, M. D.; Kathuria, Y.B.; 2.Melnichenko, G. A. Features of the postmenopausal period in women with endocrine diseases (clinical lecture) //Problems of Reproductions, 2003, No. 1, pp.44-52.
- 3.Mamatkulov B.Tibbiet statistics (biostatistics) asoslari // Tashkent; 2005, 143 bet.



4. Mamatkulov B., La Marr, N. Rakhmanova, Clinical epidemiology: Fundamentals of evidence-based medicine. Tashkent, 2008, p. 63.
5. Smetnik V. P., V. I. Kulanova. Menopause Guide. Moscow: Medical Information Agency. 2001, p. 68.
6. Bjurntorp P. The regulation of adipose tissue distribution in humans // Int .J.Obes. 1997. №20. –C.291-302
7. Hu F.B., Stompter M J., Haffner S.M., et al Elevated Risk of cardiovascular Disease Prior to Clinical Diagnosis of Type 2 Diabetes // Diabets Care. 2002 ; 25 (7); P.1129-1134;