

Changes in Feeding Regimes During the Climacteric Period of Women

🔟 Gulbakhor Saidova

Department of Hygiene of children, adolescents and nutrition, Tashkent Medical Academy, Tashkent, Uzbekistan

Received: 12 May 2025; Accepted: 08 June 2025; Published: 10 July 2025

Abstract: Together with the constant increase in the life expectancy and standard of living of people, millions of children are growing up, and the generation of educated women is trying to fully understand the processes that take place in their organism. Women are realizing all the information about these physiological processes and how this affects their life and health. Menopause is the turning period of the climacteric period, or it happens when a certain period, a specific stage in a woman's life, the function of the ovaries gradually disappears. The climacteric period is a physiological period in a woman's life, but her pathological course is also possible, then it is called climacteric syndrome (CS). CS is one of the very common concepts among modern women.

Nutrition it is a normal physiological state at any age, and as such is one of the factors of maintaining efficiency. Being balanced with age, it has been proven to have a significant impact on the development of the aging processes of the body and the nature of the changes that occur in its various systems.

Keywords: Women, changes in the diet, selected groups, hygienic methods.

Introduction: By the current day, the research has become clear that, following the progress in clinical and preventive medicine, it has become clear that every year the number of different diseases continues to grow: diseases related to heart function, digestive disorders, endocrine dysfunction, several diseases associated with oncological and gynecological and other systems in the female reproductive system [2, 5].

In most cases, the death rate of the population and the main cause of disability is considered to be a large part of the working time due to temporary disability [1,3,8, 10]. The experience of countries where a significant decrease in illness and death is achieved shows that success is mainly a process associated with lifestyle changes.

Women's health after the onset of menopause will largely depend on how she eats [4,6]. Proper nutrition during this period is considered not only due to its appearance and delicate shape, but also to the Prevention of diseases of different ages, in combination with maintaining health [7,9. This case is the principle of the importance of the relevance of this study.

PURPOSE OF THE RESEARCH

Methods for studying changes in feeding regimes during the climacteric period of women, as well as their assessment.

METHODS

In our research, we received the following objects, women of menopause aged 46 to 58 living in the city of Tashkent. The total number of women in the climacteric period included in the study was 450 people. 450 women were examined during the climacteric period to determine obesity. Also, 875 women living in 2 districts of Tashkent City were included in a voluntary informed consent work-Control study. The studies were carried out at the Department of Child, Adolescent hygiene and nutrition hygiene of the Tashkent Medical Academy, at the 4th family polyclinic in the Shaykhantohur District of Tashkent City, as well as among women living in the city of Tashkent (Sobir Rahimov, Shaykhantohur, Yunusabad districts). The main task of family polyclinics is to provide medical care to the population, as well as the formation of a healthy lifestyle. Together with the

medical staff of the family polyclinic, marketing issues for the prevention and treatment of menopause in women were carried out during the climacteric period. Research using a map of questionnaires developed by children, adolescents and employees of the Department of food hygiene examined social conditions and other risk factors. The decline of menopause during menopause was more common among women living in the Shaykhantohur and Sobir Rahimov districts of Tashkent. Also in our study, medical and sociological research included: extraction from medical record data (Form №. 025/y) and the history of development (Form № 030/y), and then the deep medical examination of women in the climacteric period was considered. When studying anamnestic data by interrogation method, we also studied the foci of past diseases, chronic diseases and infections. Disease analysis was carried out in accordance with the International Statistical Classification of disease and health-related problems.

RESULTS

The control group included 466 women without menopause problems, comparable in age to the main group. The main group included 500 women who consulted a doctor about menopause (Table 1). In addition to studying the morbidity of women by treatment and according to the data of annual medical examinations, the survey included marital status, age at the beginning of the menstrual cycle, age of marriage, number of pregnancies, childbirth, abortions, height, body weight, general blood test and objective examination, as well as menopausal problems that women sought to see a doctor. Considering that postmenopause is accompanied by an increase in body mass index (BMI), a change in the ratio of waist (OT) and hip volume (OB), abdominal obesity (AO), blood pressure (BP) was also measured, OT with a centimeter tape in the middle of the distance between the navel and the xiphoid process and OB, followed by BMI calculation.

Age group	Control		The main group	
	abs	%	abs	%
Up to 40 years old	14	3,0±0,8	16	3,2±0,8
40-44 year	190	40,8±2,3	201	40,2±2,2
45-49 year	155	33,3±2,2	170	34,0±2,1
50-54	96	20,6±1,9	100	20,0±1,8
55 and >	11	2,4±0,7	13	2,6±0,7
Total	466	100,0	500	100,0

Table 1
Distribution of selected women by age group (%to total)

In order to further eliminate the influence of women's age and obtain representative data, morbidity comparisons were conducted in the age groups of 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 surveyed, women of these age groups accounted for 94.6% in the control group and 94.2% in the main group. The sources of information were: outpatient patient card (f-025/y), dispensary monitoring card (f-030/y), as well as journals and books of annual medical examinations. All data from the primary accounting documents were entered into specially designed morbidity logs for the studied

contingent of women. The study of menopausal morbidity revealed some features, the average incidence rate for women of all ages in the main group was 1760.8%, and in the control group was 1550.3%; the incidence rates of women in the main and control groups had statistically significant differences (P<0.001). It should be noted that in both the control and the main group, the older the age of the women, the higher the incidence rate (Table 2). Before the age of 49, the increase in morbidity was more significant in the main group - by 19.6% (control group - 10.2%), after 50 years - in the control group (control - 12.7%, main group - 4.5%).

Age, years	Morbidity			
	The control group	The main group	Р	
40-44	1360,9±32,5	1480,1±32,6	<0,01	
45-49	1500,3±33,6	1770,5±35,7	<0,001	
50-54	1690,1±35,8	1850,9±35,7	<0,01	
On average for the whole group	1550,3±33,6	1760,8±35,6	<0,001	

Table 2In our study, age-based control and indicators of the average multi-year rate of totalfemale morbidity in key groups

Our research confirms the results of previously published works on the increase in the incidence rate of women with increasing age. The incidence rate of the main group of women in all age groups was significantly higher than in the control group (P<0.01). This confirms that the overall incidence of menopausal women is associated with hormonal changes in their bodies. In the structure of morbidity of women, both in the control and in the main group, the leading place was occupied by respiratory diseases (the control group – 28.0%, the main group – 30.0%, respectively), diseases of the circulatory system (21.8 and 24.6%), digestive organs (16.3 and 15.3%) of the genitourinary system (10.2 and 9.2%) and diseases of the blood and hematopoietic organs (10.3 and 8.6%). The listed classes of diseases accounted for 86.6% of cases in the control group and 87.7% in the main group.

Of the respiratory diseases in the main group, a significantly higher incidence rate is typical for acute respiratory viral infections -1.4 times higher than in the control group. Despite the absence of significant differences in the incidence of other forms of pathology, the trend towards higher rates in the main group is quite clear: out of 7 registered classes of diseases, 6 classes of diseases had higher incidence rates in the main group than in the control group.

The analysis of data on the general morbidity of women in the menopausal period revealed some of its features by disease classes and nosological forms. As can be seen from the table, the incidence rate in the main group of women is statistically significantly higher than that of women in the control group, mainly due to the class of respiratory diseases (525.8% versus 433.9%) and the class of diseases of the circulatory system (433.8% versus 338.6%). Although the level of some infectious and parasitic diseases, diseases of the digestive system and genitourinary system is slightly higher in the main group of women than in the control group, however, there was no statistically significant difference between them (P>0.05). In the menopausal period, women were more likely to suffer mainly from acute respiratory viral infections, hypertension and coronary heart disease, compared with their peers of women who have not yet had menopausal syndrome.

Similarly to protein, a higher amount of fats was found in the actual diet of women in the main group, whose levels fluctuated by 70% in the winter-spring period and 41% higher than normal in the summer-autumn period, including 36% higher fats of vegetable origin (P<0.001). In the control group, in the winter-spring and summer-autumn periods, 3% and fats of vegetable origin were 13% lower than normal, respectively. The high amount of fat in the control group was noted due to excessive consumption of lamb and fatty beef meat. The carbohydrate content in the diets of the actual nutrition in the women of the main group in the winterspring and summer-autumn periods was 500 ±23, i.e. 190 g higher than normal. In both seasons, the control group was only 20.0% higher than normal (P<0.001). As mentioned above, the diet of menopausal women consumes an excessive amount of bread and confectionery products and other products. As a result, menopausal women who did not take hormone replacement therapy consumed more carbohydrates compared to the control group. The specific weight of individual foods as a source of carbohydrates against the background of actual nutrition in women of the main and control groups is shown in Figure 4.4. Consequently, the ratio of proteins, fats and carbohydrates in the women of the main group does not correspond to hygienic standards, it is 1:1.4:5.3 in

the winter-spring period, 1:1.4:5.3 in the summerautumn period versus 1:1:4, and in the control group 1:1:4.

DISCUSSION

Fish products characterized by high biological availability are accepted by the researchers in negligible quantities, 2 and 3 times a month. During the calculation, it was noted that one woman in the main group in the winter-spring and summer-autumn periods accounted for 110 and 90 grams of meat and meat products per day, and in the control group in the winter-spring and summer-autumn periods by 2 grams more, respectively. Cheese and cheese were not consumed enough from fermented dairy products, the assortment consisted mainly of milk, curdled milk, katic, and kurt. In the winter-spring and summerautumn periods, dairy products in the main group were 47.8% lower than normal, while in the control group they exceeded the norm by 8.7% in the winter-spring period, and 110% higher than normal in the summerautumn period. Eggs in the main and control groups and in the winter-spring and summer-autumn periods were 71.4% satisfied. Fats in the diets of women in the main group in the winter-spring and summer-autumn periods by 30 g, in the control group in the winterspring and summer-autumn periods by 15 g are represented by vegetable oils (mainly cottonseed oil), because cooking hot food (2 times a day) is carried out using cotton oil. The total amount of vegetable oil consumed in the main group is 8 g more, and in the control group it is 7 g lower, while animal fats are provided in the main group by 60 g, and in the control group by 10 g lower than normal, respectively.

CONCLUSION

Regardless of the presence or absence of menopause, all women over the age of 40 are characterized by an increase in the overall incidence, but the incidence rate of women with signs of menopause is significantly higher than that of women without hormonal disorders. In all women over the age of 40, 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. Women with signs of menopause have significantly higher levels of hypertension, coronary heart disease and acute respiratory viral infections, with respect to diseases of other classes, there is only a tendency to increase the indicators When organizing preventive work with menopausal women, priority should be given to secondary and tertiary prevention of hypertension, coronary heart disease and acute

respiratory viral infections.

REFERENCES

Abusueva Z. A., Strizhova N. V., Berestovaya N. A. Postmenopause and age-related features of osteoporosis localization // Obstetrics and gynecology, Moscow, 2005, No. 2, pp. 50-52.

Abusueva Z. A., Fayzullin L. Z., Strizhova N. V., Sukhov G. T. Genetic factors cardiovascular diseases in postmenopausal women //Obstetrics and Gynecology, Moscow, 2006, No. 5, pp. 32-34.

Avakova K. A. Nutrition in old age: simple rules of good health // Diabetes. Lifestyle. Moscow, 2006, No. 4, pp. 24-25.

Azimboev E. A. Ovkatlanish regimi – salomatlik garovi //Relevant. problems of hygiene, sanitation and ecology: Mater. scientific and practical conference dedicated. 70th anniversary of the Research Institute of Sanitation, Hygiene and Occupational Diseases. Vol., 2004. pp. 135-137.

Arutyunov G. P. Nutrition of patients with chronic heart failure: problems of nutritional support // Therapist. Archive, Moscow, 2003, No. 8, pp. 88-91.

Alimukhamedov D. S. Hygienic justification for the prevention and treatment of iron deficiency anemia in children and adolescents living in rural areas by baking enriched bakery products at home: Abstract of the dissertation. ... Candidate of Medical Sciences. Tashkent, 2005. pp. 15-25.

Babakhodzhaev N. K. Problems of rational nutrition of the population in the light of the state program for reforming the healthcare system of the Republic of Uzbekistan //Current problems of hygiene, toxicology, epidemiology and infectious diseases in the Republic of Uzbekistan. Mater. UP of the Congress of Hygienists, sanitary doctors, epidemiologists and Infectious Diseases Specialists of the Republic of Uzbekistan. Tashkent, 2020, p. 78.

Bakhritdinov Sh. S., Khudaiberganov A. S. Nutritionology. - Tashkent, 2010. - 136 p.

Bekmirzaeva Sh. T. Features of the course of menopause in pregnant women and changes in immunological parameters on the background of hormone therapy: Abstract of the dissertation. ... Candidate of Medical Sciences. – Tashkent, 2018. – 16 p.

Belozub G. I. Climax - stage. Up the stairs leading down. Saint Petersburg, 2006. pp. 5-10. 11. Berdiev U. G. Diagnosis and treatment of menopausal myocardiodystrophy in women: Abstract of the dissertation. ... Candidate of Medical Sciences. – Tashkent, 2010. – 34 p.