Analysis Of The Assessment Of The Attitude To The State Of Its Health Among The Inorgonized Population

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Abstract: Analysis of the assessment of attitudes towards their health among the unorganized population. With the important role of timely and adequate detection of various diseases and pathological conditions by doctors of the health facility, the adequacy of assessing patients health is of particular importance. An adequate assessment of the patient's own health is an important help in the timely referral to the doctor and the conduct of the preventive measures. In this regard, the frequency of the main components of the metabolic syndrome among people who differ in assessing their health was analyzed.
Among the unorganized population of Bukhara there is an inadequate assessment of the state of health among patients with arterial hypertension, with body mass index and obesity and a violation of carbohydrate metabolism.

Key words: arterial hypertension, obesity, body mass index, diabetes, hyperlipidemia, hypercholesterolemia.

1. INTRODUCTION

The number of noncommunicable diseases is growing steadily in both developing and developed countries. This is a consequence not only of an increase in the life expectancy of the population, but also of malnutrition and a sedentary lifestyle. The changing nature of food is complemented by socio-economic and technological development, as well as accelerated urbanization. Among the dietary noncommunicable diseases, type 2 diabetes mellitus is a serious problem as its prevalence is growing rapidly worldwide. In 2013, 387 million people were diagnosed with type 2 diabetes mellitus, this number is expected to reach 592 million by 2035 [2]. According to the International Diabetes Federation, 80% of people with type 2 diabetes mellitus live in low- and middle-income countries.

Type 2 diabetes mellitus increases the risk of cardiovascular disease, kidney disease, disability and premature mortality [2, 3], and also carries a heavy economic burden on patients, their families and the health care system [5].

The prevalence of metabolic syndrome in the world ranges from 10% to 84%, depending on the region, urban or rural area, the composition (sex, age, ethnicity) of the studied population and the definition of the syndrome used. In general, according to IDF estimates, one quarter of the world's adult population suffers from metabolic syndrome [9].

According to NHANES [7], metabolic syndrome was 5% among subjects with normal body weight, 22% among overweight people and 60% among obese people. Its incidence also increases with age: 10% in persons aged 20-29, 20% in the age of 40-49, and 45% in the age of 60-69.

A report from the Framingham Heart Study showed that an increase in body weight greater than 2.25 kg over 16 years is associated with a 45% increased risk of developing metabolic syndrome [10].

It is assumed that the main role in the development of metabolic syndrome is played by the adipocytes of the omentum and retroperitoneal space, since they produce factors that influence the formation of insulin resistance [3].

The problem of metabolic syndrome is one of the most pressing problems of modern medicine, which is primarily due to its widespread distribution. This syndrome is currently found in economically developed countries in 10-30% of the adult population [3,5].

According to the most conservative estimates, about 20% of the adult population have disorders of carbohydrate metabolism of one degree or another.
[3]. There is no doubt that even impaired glucose tolerance can contribute to the development of complications, primarily vascular [2,3]. According to the WHO, insulin resistance occurs in 4% of women and 15 men under 40, 23% of men and 10% of women from 40 to 55 years, 33% of men and 16% of women over 55 [6].
An important but still insufficiently studied issue is the early diagnosis of metabolic syndrome before the manifestation of clinical signs. At the subclinical stage, the pathological functional and biochemical changes associated with metabolic syndrome are reversible, that is, with appropriate treatment, the disappearance or at least a decrease in the severity of the main manifestations of metabolic syndrome is possible [8].

Purpose of the study. Explore attitudes towards the state of health of the population relative to some components of the metabolic syndrome

2. MATERIALS AND METHODS

The analysis includes the results of a population study among the unorganized population of Bukhara, numbering 797 people (242 men and 555 women). A / P was measured twice on both hands, with an interval of at least 5 minutes, and when assessing blood pressure, the average values of 2 measurements were taken into account. The values of systolic blood pressure ≤ 139 were taken as normal blood pressure; diastolic blood pressure ≤ 89, Arterial hypertension -systolic blood pressure≥140; diastolic blood pressure ≥ 90.); The state of glucose tolerance was assessed based on indicators of the standard test of glucose tolerance with the determination of fasting glycemia, as well as 1 and 2 hours after taking the surveyed 75 g. glucose. The study used an automatic glucose analyzer"AMES" (Japan). %): normal glucose tolerance: with fasting glycemic levels <100, 1 hour after glucose load <160 and 2 hours after <100; impaired glucose tolerance: fasting glycemia <100; 1 hour after glucose load> 160 and / or 2 hours after> 100; diabetes mellitus: fasting glycemia> 100, 1 hour after glucose load> 180, 2 hours> 130.

Overweight, according to the recommendations of the International Group on Obesity (1997), is fixed at the Quetelet index calculated by the formula: weight (kg) / height (m) ^{2}, $\geq$ 25, and IC levels $\geq$30 are taken for obesity. At the same time, in population studies, body mass index is recommended to take IC values> 29 (Rose GA, Blackburn H., 1968). Therefore, in the present work, IC values $\geq$ 30 were taken as body mass index criteria, since this IC level differs little from the body mass index criteria recommended for population studies and, at the same time, meets the criteria for obesity recommended by the International Group on Obesity.

Lipid content in venous blood was determined on the analyzer Hospitex. Studied cholesterol (CS) and triglyceride (TG) levels. For hypercholesterolemia (HC), cholesterol levels> 6.1 mmol / L were taken, and for hypertriglyceridemia, the TG level> 1.7 mmol / L.

3. RESULTS AND DISCUSSION

The study of the frequency of hypertension among persons differing in the assessment of his health showed (Table 1) that 1.43% of women who consider themselves healthy had high blood pressure. The frequency of hypertension among women who assess their health as satisfactory was 15.05%, those who consider themselves not quite healthy - 29.23%, and who assess their health as "seriously ill" - 79.17%. Among men, these figures were respectively - 0.0%, 19.28%, 26.67% and 73.68%.

The data obtained indicate that the population did not quite adequately assess the state of their health by patients. The fact that 15.05% of women and 19.28% of men who assess their health as "satisfactory" suffer from hypertension, indicates that they are not sufficiently critical of their health.

Table 1 The prevalence of hypertension among people with different assessments of their own health.

Floor	Health assessment	with arterial hypertension		Without arterial hypertension	
		N	%	n	%
Women	Healthy	1	1.43	69	98.57
	Satisfactorily	56	15.05	316	84.95
	Not quite healthy	19	29.23	46	70.77
	Seriously sick	38	79.17	10	20.83
Total among women		114	20.54	441	79.46
Men	Healthy	-	0.00	42	100,00
	Satisfactorily	32	19.28	134	80.72
	Not quite healthy	4	26.67	11	73.33
	Seriously sick	14	73.68	5	26.32
Total among men		50	20.66	192	79.34

Further the prevalence of impaired glucose tolerance and diabetes mellitus among individuals with different assessments of their own health was studied (Table 2). Among

women who consider themselves healthy, 18.57% were found to have impaired glucose tolerance, and among those who assess their health as "satisfactory" - 16.58%. Special attention should be paid to the fact that none of the 17 women who had diabetes mellitus for the first time during the screening, did not consider themselves "seriously ill". Among those women who assessed their state of health as "satisfactory" and "not entirely healthy" the frequency of newly diagnosed diabetes mellitus was 3.53% and 6.25%, respectively.

Table 2 The prevalence of impaired glucose tolerance and diabetes mellitus among people with different assessments of their own health.

Floor	Health assessment	Normal tolerance ness		impaired glucose tolerance		Diabetes mellitus identified earlier		Diabetes mellitus detected for the first time	
		n	%	n	%	n	%	n	%
Women us	Healthy	57	81.43	13	18.57	-	0.00	-	0.00
	Satisfy tally	294	79.89	61	16.58	-	0.00	13	3.53
	Not quite healthy	40	62.50	19	29.69	1	1.56	4	6.25
	Seriously sick	18	37.50	17	35.42	13	27.08	-	0.00
Total among women		114	74.36	110	20.00	14	2.55	17	3.09
Men	Healthy	38	90.48	4	9.52	-	0.00	-	0.00
	Satisfy tally	128	77.58	35	21.21	1	0.61	1	0.61
	Not quite healthy	2	13.33	11	73.33	1	6.67	1	6.67
	Seriously sick	13	68.42	-	0.00	4	21.05	2	10.53
Total among men		50	75.10	50	20.75	6	2.49	4	1.66

The incidence of impaired glucose tolerance among men who consider themselves healthy was 9.52%, which is almost times lower than among women who consider themselves healthy - 18.57% (the differences are statistically significant, p <0.05). Attention should also be paid to the following fact - among women who assess their health as "satisfactory", the incidence of newly diagnosed diabetes mellitus was 5.8 times higher than among men who also assess their health (the differences are statistically significant, p <0.05).
Analysisthe state of prevalence of abdominal obesity among people with different assessments of their own health showed a high frequency of this pathology, both among women and among men (Table 3). According to the data obtained, every fourth woman who considers herself healthy has abdominal obesity (24.29%). Among men who consider themselves healthy,the frequency of abdominal obesity is more than 2 times lower (11.9%). It should be noted that the revealed differences were statistically significant (p <0.05). The frequency of abdominal obesity among women who assess their health as "satisfactory" was 38.75%. This is 1.7 times higher than among men with a similar assessment of their health (22.42%). These differences were also significant (p <0.05).

Table 3 The prevalence of abdominal obesity among people with different assessments of their own health.

Floor	Health assessment	Abdominal obesity		No abdominal obesity	
		n	%	n	%
Women	Healthy	17	24.29 *	53	75.71
	Satisfy tally	143	38.75 *	226	61.25
	Not quite healthy	35	53.85	30	46.15
	Seriously sick	40	83.33	8	16.67
Total among women		235	42.57	317	57.43
Men	Healthy	5	11.90	37	88.10
	Satisfy tally	37	22.42	128	77.58
	Not quite healthy	6	40,00	9	60,00
	Seriously sick	12	63.16	7	36.84
Total among men		60	24.90	181	75.10

Note: The table shows the reliability of the differences between the indicators of men and women.

With a view to more in-depth study of the issue of body weight, the body weight was assessed using the Quetelet index (Table 15). According to the data obtained, every tenth woman who considers herself healthy had a body mass index (10.0%). This is 3 times less (and statistically significant, $p <0.05$) than the same indicator among men (30.95%). At the same time, the frequency of obesity in the groups under consideration did not have statistically significant differences (2.86% and 2.38%, respectively, $p> 0.05$).

Table 4 The prevalence of body mass index and obesity among people with different assessments of their own health.

Floor	Health assessment	Normal weight		body mass index		Obesity	
		n	%	n	%	n	%
Women	Healthy	61	87.14	7	10.00	2	2.86
	Satisfactorily	236	63.96	79	21.41	54	14.63
	Not quite healthy	29	44.62	18	27.69	18	27.69
	Seriously sick	10	20.83	10	20.83	28	58.33
Total among women		336	60.87	114	20.65	102	18.48

Men	Healthy	28	66.67	13	30.95	1	2.38
	Satisfactorily	83	50.30	69	41.82	13	7.88
	Not quite healthy	3	20.00	3	20.00	9	60,00
	Seriously sick	8	42.11	5	26.32	6	31.58
Total among men		122	50.62	90	37.34	29	12.03

Note: The table shows the reliability of the differences between the indicators of men and women.

The frequency of body mass index among women and men who assess their state of health as "satisfactory" was 21.41% and 41.82%, respectively (the differences were significant, $p < 0.05$). At the same time, the frequency of obesity, identified by the Quetelet index, among women who assess their health as "satisfactory" was almost 2 times higher than among men with a similar assessment of their health (14.63% and 7.88% respectively, $p < 0.05$).

4. CONCLUSIONS

In the surveyed population, there was an unfavorable situation with regard to assessing the state of their health. Among women and men who consider themselves healthy, the incidence of arterial hypertension, impaired glucose tolerance, obesity and abdominal obesity, and diabetes mellitus remains high.

At present time, there is no doubt about the important role of hyperlipidemia as a risk factor for various diseases. Therefore, early diagnosis and adequate treatment of hyperlipidemia is one of the main directions in both preventive and curative medicine. On this basis, the prevalence of hyperlipidemia among individuals with different assessments of their own health was analyzed (Table 5).

Table 5 The prevalence of hyperlipidemia among people with different assessments of their own health.

Floor	Health assessment	With hypercholesterolemia		Without hypercholesterolemia		The State Tretyakov Gallery has		Tretyakov Gallery no	
		n	%	n	%	n	%	n	%
Women	Healthy	4	12.90	27	87.10	7	22.58 *	24	77.42
	Satisfy tally	16	11.35	125	88.65	28	19.86	113	80.14
	Not quite healthy	-	0.00	13	100.0	1	7.69	12	92.31
	Seriously sick	10	38.46	16	61.54	7	26.92 *	19	73.08
Total among women		30	14.22	181	85.78	43	20.38	168	79.62
Men	Healthy	2	10.00	18	90.00	3	15.00	17	85.00

	Satisfy tally	8	14.29	48	85.71	12	21.43	44	78.57
	Not quite healthy	-	-	-	-	-	-	-	-
	Seriously sick	4	28.57	ten	71.43	6	42.86	8	57.14
Total among men		14	15.56	76	84.44	21	23.33	69	76.67

Note: The table shows the reliability of the differences between the indicators of men and women.

According to the data obtained, 12.9% of women who assess their health as "healthy" suffer from HC. Among men, the same indicator turned out to be slightly lower - 10.0%, however, the revealed differences were not statistically significant ($p > 0.05$). On the contrary, the frequency of hypercholestrolemia among men who assess their state of health as "satisfactory" was slightly higher than among women (14.29% and 11.35%, respectively, $p > 0.05$). Interesting data were obtained in relation to the hypertriglyceridemia. The frequency of hypertriglyceridemia among women who consider themselves healthy was significantly higher than that among men (22.58% and 15.0%, respectively), and these differences were statistically significant ($p < 0.05$). On the contrary, the frequency of hypertriglyceridemia among women who consider themselves "seriously ill" was significantly ($p < 0.05$) lower than that in men (26.92% and 42,

1. In the surveyed population, an unfavorable situation has developed with regard to assessing the state of one's health.

2. Among women and men who consider themselves healthy, the incidence of arterial hypertension, impaired glucose tolerance and diabetes mellitus, hyperlipidemia is very high.

REFERENCES

[1]   Almazov V.A., Blagosklonnaya Ya.V., Shlyakhto E.V., Krasilnikova E.I. Metabolic cardiovascular syndrome. SPb.: Publishing house of SPbGMU, p.208, 1999.

[2]   A.S. Ametov, T.Yu. Demidova, M.V. Stelmakh, T.I. Dapuis. The relationship between obesity and type 2 diabetes mellitus in the light of evidence-based medicine // The journal for continuing medical education of doctors. Endocrinology: news, opinions, training # 2, p.38, 2016

[3]   Bokarev I.N. Metabolic syndrome. Clinical Medicine, No. 8, 2014.

[4]   Kayumov U.K, Adilova M.S, Khatamova DT. Results of long-term studies of metabolic syndrome // V Congress of the Association of Cardiologists of the CIS countries and the Association of Cardiologists

[5]   Uzbekistan, Tashkent, p.92, 2005.

[6]   Chazova I.E., Mychka V.B. // Consiliummedicum. 2002. V 4 (11). P 587-592.

[7]   Shevchenko O.P., Praskurnichy E.A., Shevchenko A.O., Metabolic syndrome. M.: Reafarm. 2001.

[8]   Aguilar M, Bhuket T, Torres S, Liu B, Wong RJ. Prevalence of the metabolic syndrome in the United States, 2003-2012. JAMA. 2015 May 19; 313 (19): 1973-4

[9]   Ford ES, Giles WH, Diets W.H. // AMA.2002.T.16, 287 (3). p.6356.

[10]   International Diabetes Federation: The IDF consensus worldwide definition of the metabolic syndrome,http://www.idf.org/metabolic-syndrome

[11]   Jaspinder K. A Comprehensive Review on Metabolic Syndrome. Cardiology Research and Practice, p.21, 2014.