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ASSESSMENT OF SOCIO-DEMOGRAPHIC INDICATORS IN PATIENTS WITH CORONARY ARTERY DISEASE IN THE FERGANA REGION

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ABSTRACT

This article analyzes the quantitative correlation between sociodemographic factors, such as work status, age, and marital status, and the risk of developing coronary heart disease (CHD). Research suggests that work status, especially high levels of workplace stress, may be associated with an increased risk of CHD. Age is an important factor, given that CHD is most often diagnosed in older people. An ascending trend has been identified for this indicator: the risk of developing IHD increases with age. Marital status also influences the incidence of CHD. A vibrant marital status may be a protective factor against CHD due to the social support network. However, in the case of an unhappy marriage or the absence of a partner, the risk of developing CHD may increase. The findings of this article support the need to consider sociodemographic factors when determining strategies for the prevention and control of CHD.

ОЦЕНКА СОЦИАЛЬНО-ДЕМОГРАФИЧЕСКИХ ПОКАЗАТЕЛЕЙ У БОЛЬНЫХ ИШЕМИЧЕСКОЙ БОЛЕЗНЬЮ КОРОНАРНЫХ АРТЕРИЙ В ФЕРГАНСКОЙ ОБЛАСТИ

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Ишемическая болезнь сердца, трудовой статус, Ферганская область, семейное положение и ишемическая болезнь

ABSTRACT

В статье анализируется количественная корреляция между социально-демографическими факторами, такими как трудовой статус, возраст и семейное положение, и риском развития ишемической болезни сердца (ИБС). Исследования показывают, что статус работы, особенно высокий уровень стресса на рабочем месте, может быть связан с повышенным риском развития ИБС. Возраст является важным фактором,



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сердца.

поскольку ИБС чаще всего диагностируется у пожилых людей. По данному показателю выявлена восходящая тенденция: риск развития ИБС увеличивается с возрастом. Семейное положение также влияет на заболеваемость ИБС. Устойчивое семейное положение может быть защитным фактором против ИБС благодаря сети социальной поддержки. Однако в случае несчастливого брака или отсутствия партнера риск развития ИБС может возрасти. Результаты этой статьи подтверждают необходимость учитывать социально-демографические факторы при определении стратегий профилактики и контроля ИБС.

Introduction. Over the past decades, researchers have increasingly paid attention to the role of psychosocial factors in the development and progression of cardiovascular diseases (CVD), including coronary heart disease (CHD) and other chronic non-communicable diseases.

Some of the key psycho-emotional conditions that can affect the health of the heart and blood vessels are anxiety, depression and prolonged stress. These conditions can stimulate the sympathetic nervous system, causing vasoconstriction and platelet formation, and damage the vascular endothelium, which in turn leads to the development of atherosclerosis.

Society takes a hit to its health not only from individual stress, but also from social and economic pressure. Social and emotional support can make a significant contribution to reducing the risk of developing CHD, especially in men.

WHO reports a high incidence of mental disorders among patients with coronary artery disease - 25% of them have them to varying degrees. Depression was noted in every fifth patient with IHD.

The international INTERHEART study examined the effect of stress on the development of acute myocardial infarction (AMI). The results showed that stress, especially at work, was a significant predictor of AMI. Specifically, depression and stress were the second leading cause of AMI after nine other risk factors.

Purpose of the study:

To study the influence of socio-demographic factors (age, work status and marital status) on the risk of developing coronary heart disease (CHD) in the Fergana region.

Research objectives:

- 1. Collection of socio-demographic data (including age, work status and marital status) from patients with coronary artery disease in medical institutions of the Fergana region.
 - 2. Analyze the data and determine existing connections between these factors and IHD.
 - 3. Assess the specific influence of such factors in the context of the Fergana region.
- 4. Formulate proposals for the prevention and control of IHD, taking into account the local characteristics of the Fergana region.

Material and methods of research. These clinical experiments involved 518 people (295 men and 223 women) suffering from coronary heart disease and angina pectoris of functional class 1-III. They were registered as patients of family clinic No. 2 in the city of



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Fergana, Fergana regional multidisciplinary medical center, Fergana city hospital No. 2 and other local medical institutions.

Study participants were both male (mean 54 ± 0.4 years) and female (mean 55.7 ± 0.5 years), and their ages ranged from 40 to 69 years. They suffered from angina pectoris of functional class I-III, some of them even had a history of myocardial infarction. But none of them had complicated somatic diseases.

Research results and their discussion.

Age structure of the cohort. The study included participants in the age range of 40 to 69 years. This age range was chosen because this age group is most likely to develop cardiovascular disease.

Based on this information, according to Table 1, we see the distribution of patients by age groups. This gives us an idea of how many of the participants fall into each age category and allows us to more accurately interpret the results.

Table 1
Age and sex of patients with coronary artery disease

Age	Male n=295	Female n=223
40-49	52	49
50-59	159	140
60-69	84	34

The study results show that the largest number of patients with coronary heart disease (CHD) are men and women aged 50 to 59 years. At the same time, almost every third man in the study was diagnosed with coronary artery disease significantly more often than women in the age group of 60-69 years (with p <0.01).

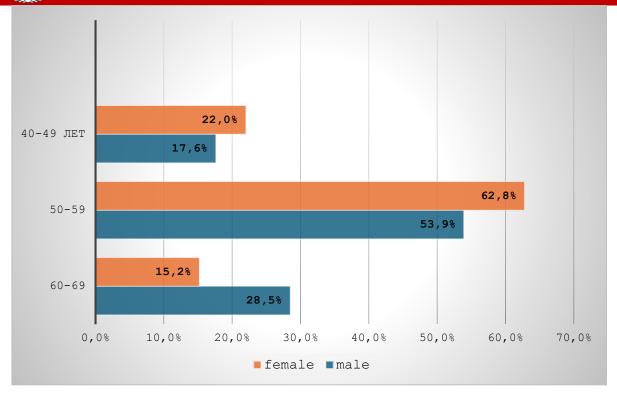


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Pic. 1. Age range of patients with coronary artery disease

According to the study results, women in the older age group (60-69 years old) made up 15.2% of all participants. At the same time, 17.6% of men and 22% of women belonged to the age group of 40-49 years.

It is interesting to note that coronary heart disease was diagnosed in 36 women (16.1%) before menopause, and that a large number of women (142, or 63.7%) began menopause before age 50.

These data may form the basis for further research into the influence of factors such as age and menopause on the development of coronary heart disease in women.

Job status. The results of the study showed that the majority of patients with coronary heart disease and angina pectoris, despite the fact that they were younger than 60 years, were not working. 73% of men were unemployed, and 56% of them were under 60 years of age. Only 27% of men with a documented diagnosis of coronary artery disease were employed, and 26% of them were over 60 years of age. As for women, 84% of them were also unemployed, and half of them were under 55 years of age.

It is worth noting that among those who were working at the time of the survey, one fourth of women were over 55 years old.

Table 2

Work status of examined patients with CAD

Work status	Male	Female
Employed	80 (21 of them older than	36 (9 of them older than 55)
	60)	



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Unemployed	215 (120 of them younger	187 (96 of them younger
	than 60)	than 55)

Analysis of patients' marital status. The research data shows the following:

- are married 88% of men and 86% of women;
- divorced or never married 11%.

However, it is important to note that among patients with coronary heart disease, the number of widows among women was twice as high as among men with a similar marital status (single). This indicates that women suffering from CHD may have less social support, which is known to play an important role in chronic disease management and may affect their quality of life.

Table 3

Marital status of men and women with ischemic heart disease

Marital status	Male	Female
Unmarried	9	2
Married	260	194
Divorced	12	4
Widower / widow	14	23

Conclusions. An important factor influencing the quality and life expectancy of patients with angina pectoris in the Fergana region was socio-economic conditions. High unemployment rates among men (73%) and women (84%) indicate possible problems in providing timely and complete medical care and the necessary level of self-care.

The study found that a significant proportion of patients with angina pectoris live in rural areas, where there are often problems with access to the necessary medical care. In addition, living conditions in an unemployment society may cause additional stress and contribute to negative changes in health status.

With these data, it is important to understand the importance of a comprehensive approach to cardiovascular disease management that considers not only medical but also socioeconomic factors. Appropriate support and social protection programs can play a significant role in improving the quality of life and prognosis for patients with angina pectoris in the Fergana region.

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