EPIDEMIOLOGY AND RISK PROFILE OF MAJOR NONCOMMUNICABLE DISEASES IN RURAL POPULATIONS IN MEN AND WOMEN

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Introduction. In the current era of the "third renaissance", the issue of developing modern approaches to improving the control system over major noncommunicable diseases (NCDs), the development of its theoretical and scientific foundations remains an international priority. Even though the trend of NCDs has not only stabilized, but has become increasingly relevant and is predicted to take on a pandemic character in the near future.

The use of artificial intelligence (AI) in medical practice, in particular in NCDs, is already a fact, its new and promising direction in health care, as a "unique tool" that shows great potential in the prevention, diagnosis and therapy of NCDs, has been proven in recent years in research [11; 14; 13; 17; 10; 6; 16; 5; 7].

According to the results of a survey of doctors, the integration of AI into medical practice "helps the doctor as an additional tool" (28%), "fundamentally changes medicine" (5%), "fundamentally changes medicine, but the role of doctors will remain central" (67%) [3].

According to WHO, metabolic syndrome and obesity are responsible for up to 44% of CVD and 23% of CVD [15]. According to V.S. Krysanova and P.A. Kelekshaev (2020), approximately 4.72 million deaths (on average per year) are associated with metabolic syndrome and obesity [1].

A meta-analysis for Russia from 1980 to 2016 (333 causes of death and 84 risk factors were included in the analysis) confirmed that 48.5% of deaths in Russia in 2016 were caused by metabolic risk factors [9]. Metabolic syndrome is a risk factor for cardiovascular diseases, cancer, CVD, and neurological disorders [8].

Obesity also attracts attention by increasing financial costs: in some countries, 8% of the health system budget is spent on obesity-related diseases. Patients with obesity are twice as likely to receive medication compared to patients without obesity.

70% of the costs of NCDs, 23% of the costs of HCC, and 9% of the costs of cancer are associated with the presence of obesity [12]. The increase in costs

associated with obesity and obesity (up to 31.8% in healthcare costs and 68.1% in costs associated with reduced productivity) has also been noted in other studies and reviews [18; 2; 3; 4].

The negative epidemiological situation with non-communicable diseases, according to the presented data, has worsened and become more serious due to the lack of adequate management and control systems. In this regard, it is important to change and improve the preventive system for controlling the risk of NCDs, based on epidemiological results and conclusions and with priorities at the regional/territorial population level, and this area is receiving attention as a relevant scientific topic worldwide.

The general conclusion can be summarized as follows: the development of a customer-centric system for digital prevention is a relatively new concept, although this approach is gaining momentum worldwide.

The purpose of the study is to improve the screening and control system for major non-communicable diseases in the rural population of Andijan in a special epidemiological study.

Material and methods

Object of research a representative sample of 2,446 rural residents was taken from the Pakhtaabad district of Andijan region.

Subject of the study general clinical-laboratory, biochemical and screening methods for venous blood and serum of the population, as well as instrumental methods for the epidemiology of AKI.

Research methods. The study used epidemiological, general clinical, laboratory, biochemical, instrumental, and statistical research methods.

Results

The epidemiology and risk profile of UIC in the general adult rural population in men and women.

It is found that UIC is confirmed with a prevalence of 11.5% and 10.6% in the male and female population [X2 = 0.471; P>0.05; RR= 1.084; 95% CI = 0.860 – 1.367].

AG is recorded in the male and female population with a prevalence of 17.3% and 17.9% [X2 = 0.156; P>0.05; RR= 0.965; 95% CI = 0.808 – 1.153]. Respiratory diseases are observed at a relatively high frequency in men. In particular, OSOC is confirmed with a prevalence of 9.3% and 11.6% in men and women [X2 = 3.090; P<0.05; RR= 0.804; 95% CI = 0.529 – 1.027]. Community-acquired pneumonia is

confirmed with a prevalence of 6.8% and 8.0% in men and women [X2 = 1.171; P>0.05; RR = 0.850; 95% CI = 0.633 – 1.142].

In the adult male and female population, significantly lower prevalence rates are observed for glomerulonephritis – 0.5% and 0.3% [X2 = 1.271; P>0.05; RR= 2.092; 95% CI = 0.563 – 7.769].

The prevalence of pyelonephritis in men and women is recorded, respectively, at – 0.3% and 2.5% [X2 = 16.72; P<0.001; RR= 0.129; 95% CI = 0.040 – 0.415].

Type QD1 is confirmed at a detection frequency of 2.2% and 1.7% [X2 = 0.738; P>0.05; RR= 1.287; 95% CI = 0.723 – 2.292]. Type QD2 is consistent in both male and female populations, with prevalence rates of 11.1% and 11.4%, respectively [X2 = 0.046; P>0.05; RR= 0.975; 95% CI = 0.775 – 1.227].

The analytical data further confirm that there is a difference in the incidence of cancer in men and women – 4.9% and 4.5% [X2 = 0.218; P>0.05; RR = 1.091; 95% CI = 0.756 – 1.574].

It can be concluded that the risk of various degrees of development, in relation to UIC, is 10-11%, and in AG - 17.0%. The risk of developing OSOC is confirmed by 11.6% and 8.0% for CTCP. Such a risk is confirmed by 2.5% in BSC, 11.4% in diabetes mellitus and 4.9% in tumor diseases.

Conclusion

In the rural population aged 18–89 years, multiple risk factors are identified with the following prevalence rates: 2 risk factors – 22.9%, 3–4 risk factors – 46.4%, 5–6 risk factors – 17.0% and 7–9 risk factors – 2.2%. Multiple non-communicable diseases (polypathy) are characterized by 9 different components in the general population, men and women: “NCD + NCD” – 3.7%, 1.6% and 2.1%; “NCD + QD2” – 4.6%, 1.6% and 2.7%; “NCD + BSK” – 0.7%, 0.0% and 0.7%; “NCD + AG” – 3.5%, 1.4% and 2.1%; "YUIK + QD2" - 2.2%, 1.2% and 1.0%; "YUIK + OSOK" - 1.4%, 0.7% and 0.7%; "YUQK + NAK + QD2" - 1.0%, 0.6% and 0.4%; "YUQK + NAK + BSK" - 0.1%, 0.0% and 0.1%; "YUQK + NAK + QD2 + BSK" - 0.0%, 0.0% and 0.0%; "YUIK + AG + OSOK + QD2" - 0.2%, 0.1% and 0.1% [X2 = 2.418; P>0.05; RR= 5.019; 95% CI = 0.522 – 48.187].

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