## SCIENTIFIC AND PRACTICAL SIGNIFICANCE OF ACUTE MYOCARDIAL INFARCTION AMONG THE POPULATION OF ELDERLY AND OLD AGE (REVIEW)

Rakhmatova D.B.<sup>1</sup>

<sup>1</sup>Bukhara State Medical Institute, Uzbekistan

**Abstract:** Analysis of literature data shows that the most important aspect of modern infarctology is that 75% of out-of-hospital sudden circulatory arrests are caused by coronary pathology and acute myocardial infarction, despite the advances in treatment and diagnosis achieved in recent years, it still occupies a leading position in the structure of population mortality. According to statistics in the world, 54% of deaths are caused by diseases of the cardiovascular system. In Uzbekistan, despite the fact that large-scale comprehensive measures are being taken to radically improve the quality of medical care to the population, there is a high mortality rate from CVD: in 60% of cases, the cause of death is precisely cardiac pathologies, 7000 people die from AMI every year, in 23000 - the cause of premature death is AH, 5000 people have diabetes and 3.6 thousand people die from a stroke.

Key words: myocardial infarction, cardiovascular diseases, acute coronary syndrome

The problems of effective cardioprophylaxis, including the development of methods of emergency medical care, are of priority importance in modern science and practice. In this regard, it should be emphasized and indicated that the strategy of action of the Republic of Uzbekistan in five priority areas for 2017-2021 defines specific tasks such as "first of all, reforming the system of emergency and emergency medical care as the first link in increasing the availability and quality of delivery. The population of medical services, ensuring a decrease in the incidence of the population and an increase in life expectancy" [2,9,10].

The average human life expectancy, according to modern population studies in gerontology, is growing all over the world. Thus, in low- and middle-income countries, almost half of middle-aged and elderly people have multimorbidity, about 25% of them have at least 3 chronic diseases at the same time, about 10% - 4 or more [1,2,3]. Physical multimorbidity (the presence of 2 or more chronic diseases in a person is known as Physical multimorbidity) is associated with a lower quality of life, increased health care costs and, ultimately, an increased

risk of premature mortality, researchers argue that regardless of socio-economic development of the country, the main causes of death and disability in elderly and senile people (60 years and older) are CHD, many of which are often found together [4,5].

Modern emergency cardiology is an area of dynamic development in both scientific and practical medicine. In recent years, there have been significant changes in the idea of what you need to know (erudition), what (practice) should be able to, and finally, what level of competence, for example, preventive cardiology and its population strategies, should a modern cardiologist or general practitioner / family doctor correspond to [9,10].

**Purpose:** to study the scientific and practical significance of acute myocardial infarction among the elderly and senile population.

**Results and discussion.** Analysis of literature data shows that the most important aspect of modern heart attack is that 75% of community-acquired sudden cardiac arrests are caused by coronary pathology and acute myocardial infarction, despite the advances in treatment and diagnosis achieved in recent years, it still occupies a leading position in the structure mortality of the population. According to statistics in the world, 54% of deaths are caused by diseases of the cardiovascular system. [3,5,6,7]. In Uzbekistan, despite the fact that large-scale comprehensive measures are being taken to radically improve the quality of medical care to the population, there is a high mortality rate from CVD: in 60% of cases, the cause of death is precisely cardiac pathologies, 7000 people die from AMI every year, in 23000 - the cause of premature death is AH, 5000 people have diabetes and 3.6 thousand people die from a stroke.

The experience of foreign countries and the results of large controlled preventive programs, such as CINDI, TACIS, RECORD, including those conducted in Uzbekistan, have shown several reasons that prompted the treatment of AMI epidemiology [3,4,5]. The leading one is new population - preventive knowledge that has appeared in different areas of preventive cardiology. First, epidemiological and preventive studies had a significant impact on the diagnostic process in emergency cardiology and contributed to the introduction of fundamentally new methods of prevention. [2,7,8]. It is enough to give examples of the modern prevention of CVD, chronic heart disease and a whole range of other internal pathologies. Secondly, such an area as screening, register, with which a new quality is associated in the early diagnosis, prevention and clinical examination of the most common diseases. Cardiological and preventive science and practice are faced with fundamentally new tasks to determine the "preventive window" for primary, secondary, tertiary and quaternary prevention of not only

chronic heart disease, but also urgent cardiac conditions, in particular ACS/AMI. Third, the evolution of CVD. As modern researchers recommend, in this regard, two processes should be noted: on the one hand, new orphonic cardiological diseases are described, on the other hand, anxiety is growing due to the formation of resistance of CVD, in particular AMI, to existing cardiac drugs and / or drugs of the ABCDE program [7].

Among modern people and patients, the proportion of people with risk factors for AMI is increasing. This means that a modern person or a patient with AMI proceeds against the background of risk factors and multimorbidity, some of which may be the cause of the development of "endpoints" from them. Knowledge of RF is necessary for practical health care and preventive science to predict, prevent and optimize the treatment of AMI. Therefore, today the requirements for RF and preventive knowledge, that is, epidemiological studies, are sharply increasing in the diagnosis and management of AMI. The purpose of such studies is to help reduce the mortality rate of residents of different regions of the world and increase life expectancy through the implementation of comprehensive measures by stimulating early access to medical care, the formation of a lifestyle and a responsible attitude of the population to their health. At the same time, it should be noted that, despite the urgency of the AMI problem and the numerous conducted (mainly clinical) and currently ongoing studies, no specific algorithms for actions aimed at preventing the development of AMI have been identified, especially in the elderly and senile population. In the work of Oshchepkova E.V. et al (2012) analyzed the incidence and mortality from MI in the Russian Federation in 2000-2011. It turned out, according to the official statistics of Russia, the leading place among the causes of death from CVD is IHD, which in the structure of mortality from CVD was 52.8% [12]. These figures are 3 times higher than in the USA, and 9 times higher than in Japan. These authors, analyzing the "endpoints" of AMI (the number of AMI cases and deaths from it are analyzed in absolute terms and per 100 thousand population) also showed that mortality from AMI significantly predominates in men. The authors also emphasized that in recent years there has been an increase in the number of deaths from AMI among women in older age groups, an increase in mortality from repeated MI is recorded (from 2000 to 2011 by 33.7%). High hospital mortality remains, which is 15-16% with a high level on the 1st day after admission to the hospital (40.4%). Erlikh A.D., Gratsianskiy N.A. (2009) reported that, according to the results of the RECORD Register, hospital mortality from MI was 13.2% [14]. In the well-known Lyubertsy study of mortality in patients with AMI (Russia), Martsevich S.Yu. and co-author (2012) conducted in the Lyubertsy hospital of the Moscow region, the mortality rate from AMI is 15.2% [15].

In other epidemiologists-clinical studies, mortality from AMI was: according to the Moscow Department of Health - 15.4%; Hasdai D. Et al (2002) EHS - 7.5%; Fox R.A.A. et al. (2003) GRASE 8%; in the CRUSADE register of researchers Patel M.R., Chen A.Y., Peterson E.D. (2006) - 6%. In all these studies, the problem of hospital mortality was noted on the 1st day after admission to the hospital (40.4%) [13].

According to the researchers, such an epidemiological situation with respect to AMI necessitates a special analysis of its risk factors / causes (late admission of patients to the hospital, the severity of the patient's condition, lack of thrombotic therapy, resuscitation, etc.) in observational and epidemiological studies. It should be noted that the "Chazovskaya system" of medical care (created in the 60s - 70s of the last century) made it possible to significantly reduce hospital mortality from MI, which was less than 10%, comparable to the same indicator in non-CIS countries [7].

Researchers from near and far abroad - Oschepkova E.V. and co-author (2012) by assessing the organization of medical care for patients with ACS with ST segment elevation in dynamics for 2009 and 2010. in the constituent entities of the Russian Federation, Yong F. et al. (2010) in the USA Björck L. et al (2009) in Sweden and Unal B. et al (2004) in patients with acute coronary pathology [12] note that for a more complete and objective assessment of the incidence and mortality of AMI and the quality of treatment of patients with this disease, it seems appropriate to conduct an epidemiological study. In the available literature, such work in the elderly and senile population turned out to be extremely insufficient. Gerasimenko N.F., Oganov R.G., Mychka V.B. (2011) in their studies argue that the epidemiology, clinical course and dynamics of the development of CVD/MI differ in women and men. In this issue, there is an opinion that cardiac pathologies are associated mainly with men [11]. This is actually not the case, as epidemiological studies show that women in Europe are much more likely to die from CVD than men (55% of women and 43% of men):

• Ischemic Heart Disease is the cause of death in women in 24%, stroke - in 18% and other CVDs - in 15% of cases, while in men IHD/AMI causes death in 21%, stroke - in 11% and other CVDs - in 11% of cases;

• In Europe, over the past 40 years, mortality from coronary artery disease among men has decreased by 50%, however, women have not observed positive dynamics in the structure of mortality from CVD;

• IHD/MI continues to lead in the structure of causes of female mortality (24%), which is significantly more dangerous than breast cancer, which has always been considered a "killer of women".

**Conclusions:** All of the above indicates the need for more scientifically grounded medical monitoring of the condition of not only men, but also women of elderly and senile age, with an emphasis on screening early detection and correction of their main risk factors for CVD / AMI. However, as modern studies show, today women undergo an in-depth epidemiological examination before the onset of symptoms of AMI / CVD; they are less likely to be recommended measures for the primary and secondary prevention of Chronic Noncommunicable Diseases. Such measures can help preserve the health, prolong and improve the quality of life not only for older women, but also for men. [1,7,9,11,15].

## References

- Rakhmatova D.B. Main symptoms and leading clinical options for the flow of acute coronary syndromes in women.//Asian Journal of Multidimensional Research (AJMR)
  - 2019. Volume: 8, Issue: 11. – P. 69 - 74.
- Rakhmatova D.B., Mavlonov N.Kh. Pharmacoepidemiological analysis of patients with acute coronary syndrome in women. // World Journal of Pharmaceutical Research -2020. Vol 9, Issue 6. – P.2298 - 2304.
- 3. Borovikov V. // STATISTICA: the art of data analysis on a computer. // For professionals. SPb.: Peter, 2001. -- 656 p.
- Kanyukov V.N., Ekimov A.K.// Modeling in health care management. // Orenburg: OSU, 2010. -- 564 p.
- Kim J.-O., Mueller C.W., Klekka W.R. et al. // Factorial, discriminant and cluster analysis. // Per. from English Ed. I.S. Enyukova. - M: Finance and Statistics, 1989. -215 p.
- 6. Oganov R.G., Maslennikova G.Ya., Shalnova S.A., Deev A.D. 2002. No. 2. S. 3-7.
- Rakhmatova Dilbar Bahriddinovna, Tursunov Khatam Khasanbaevich, Mavlonov Namoz Khalimovich. Features of the frequency of acute myocardial infarction among the unorganized population of the elderly and old age. // International Journal of Modern Agriculture - 2021. Volume. 10, No.1. - P. 995 – 1004. Disponível em: http://www.modern-journals.com/index.php/ijma/article/ view/704.
- Zaitseva VV. The relationship of risk factors for coronary artery disease and the state of the coronary bed in women of reproductive age: author. dis. Cand. honey. Sciences / V.V. Zaitseva. - M., 2012. –25 p.

- Alikhanova K.A., Omarkulov B.K., Abugalieva T.O., Zhakipbekova V.A. // Study of the prevalence of diseases of the cardiovascular system among the population of the Karaganda region. // Fundamental research. 2013. No. 9-5. S. 804-809.
- Kurbanov R.D., Nikishin A.G., Pirnazarov M.M., Khasanov M.S., Nurbaev T.A., Yakubbekov N.T., Abdullaeva S.Ya.// Predictive value of laboratory and instrumental diagnostics in patients with acute myocardial infarction on the background of diabetes mellitus. // Eurasian Journal of Cardiology. 2013. No. 2. S. 27-35.
- 11. Gerasimenko N.F., Oganov R.G., Mychka V.B. Womans Heart // Cardiovascular therapy and prevention. -2011.-V.10-N01:5-7.
- 12. Oshchepkova E.V., Dmitriev V.A., Gridnev V.I., Dovgalevsky P.Ya. Assessment of the organization of medical care for patients with acute coronary syndrome with an elevation of the JT segment in dynamics for 2019 and 2010. in the constituent entities of the Russian Federation implementing the vascular program (according to the Russian register of ACS) // Ter.arch. -2012-№1. P.24-27.
- 13. Hasdai D., Behar S., Wallentin L. et al. A prospective survey of the characteristics, treatments and outcomes of patients with acute coronary syndromes in Europe and the Mediterranean basin. The Euro Heart Survey of Acute Coronary Syndromes (Euro Heart Survey ACS) // Eur Heart J. 2002; 23: 1194-1200.
- Erlikh A.D., Gratsianskiy N.A. Independent Register of Acute Coronary Syndromes RECORD. Characteristics of patients and treatment before discharge from the hospital // Atherothrombosis - 2009; 2: 106-121.
- Martsevich S.Yu., Ginzburg M.L., Kutishenko N.P. Lyubertsy study of mortality in patients with acute myocardial infarction (LIS): analysis of anamnestic factors determining death in hospital // Cardiovascular therapy and prevention: -2020; 1: 46-47.