

INNOVATIVE METHODS OF MONITORING AND REGULATING HEALTH INDICATORS FOR THE PREVENTION AND PREVENTION OF CARDIOVASCULAR DISEASES

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Abstract— This article discusses the frequently occurring cardiovascular diseases, which today is one of the main reasons for the high mortality rate among the population. Preventing the occurrence of cardiovascular diseases, as well as their timely diagnosis is also proposed here.

Index Terms— cardiovascular diseases, health indicator, prevention, monitoring, methods, innovation.

1 INTRODUCTION

The heart is an important organ in the human body. It is a pump and provides a flow of blood through the vessels, thereby supplying all organs with oxygen. In the elderly, most people are susceptible to various cardiovascular diseases, most often heart attacks and strokes. People over the age of 40 must regularly undergo diagnostics in polyclinics and medical centers. But most people do not pay proper attention to their health. Improper diet, sedentary habits, bad habits exacerbate the risk of developing cardiovascular diseases. The most common of these are arterial hypertension, ischemic heart disease, angina pectoris, heart attack, thrombosis. The main risk factors for developing cardiovascular diseases are smoking, stress, hypertension, hyperlipidemia, diabetes, obesity and lack of mobility. An important role in heart diseases is played by the hereditary predisposition.

2 Procedure for Paper Submission

It is easier to prevent the occurrence of cardiovascular diseases than to treat their consequences, because the consequences can be fatal. To prevent the occurrence of heart disease, you must follow certain rules that will ensure a long and healthy life:

- Compliance with sleep
- Compliance with diet and diet
- There are mostly boiled or stewed foods, instead of fried
- Exclude salt from the diet or reduce its content
- Active lifestyle
- Prevention of stress and fatigue
- Be under medical supervision
- Do not consume alcoholic beverages
- Do not use tobacco products
- Control any kind of changes in the body

3 INNOVATIVE TECHNOLOGY

For the convenience of people at risk of developing cardiovascular diseases, you can use a special bracelet that will give certain signals, changes in the state and deviation from the norm. It will be able to include many different functions: constant pulse measurement, blood pressure measurement, the ability to measure blood sugar levels daily, measuring the number of steps taken, the possibility of introducing data on water intake, warning about the time of eating, as well as the time of sleep and awakening.

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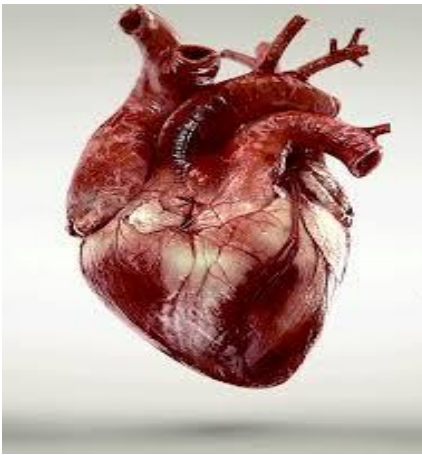


Figure 1. The Heart of a Healthy Man

This technology allows you to see the statistics of the data, for a certain time. The doctor, under whose supervision the patient is, can observe the patient's daily condition, its activity, possible disorders of the diet, as well as compare all these data obtained with the help of the proposed bracelet. For convenience, the bracelet can add a connection to the Internet and to the doctor's mail. When connected to the network, the bracelet will send the received data to the attending physician. It is also possible to improve the bracelet by adding it to another device, which will contain sterile scarifiers, slides and devices for obtaining a general blood test. The proposed bracelet can be used not only for people aged, but also for adults and children, with diseases and various heart defects.

According to statistics, in the world in 2012, cardiovascular diseases killed 17.5 million people, that is, 3 out of 10. Of these, 7.4 million people died from coronary heart disease and 6.7 million people from a stroke. . In our country, various measures are being taken to reduce the level of mortality among the population. At the initiative of the World Heart Federation in 1999, the "World Heart Day" was organized, which is celebrated annually on the last Sunday of September. This action was supported by the World Health Organization, as well as by UNESCO. The event is held in more than 100 countries of the heart. The purpose of this event is the opportunity to convey to the population the importance of the role of the heart in the human body, as well as offer people methods of prevention.

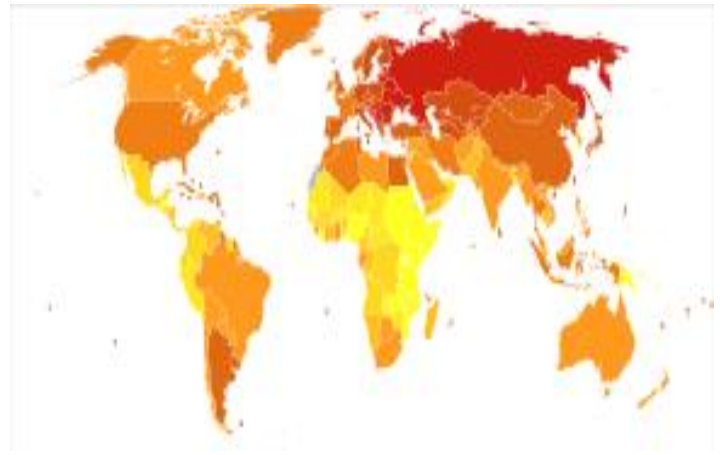
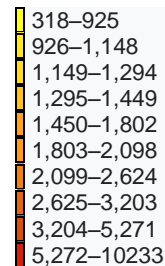


Figure 2. Cardiovascular diseases deaths per million persons in 2012



4 ADDITIONAL INFORMATION

According to statistics, in the world in 2012, cardiovascular diseases killed 17.5 million people, that is, 3 out of 10. Of these, 7.4 million people died from coronary heart disease and 6.7 million people from a stroke. . In our country, various measures are being taken to reduce the level of mortality among the population. At the initiative of the World Heart Federation in 1999, the "World Heart Day" was organized, which is celebrated annually on the last Sunday of September. This action was supported by the World Health Organization, as well as by UNESCO. The event is held in more than 100 countries of the heart. The purpose of this event is the opportunity to convey to the population the importance of the role of the heart in the human body, as well as offer people methods of prevention.

5 CONCLUSION

A healthy heart is the key to longevity. If you adhere to the above rules, you can avoid having problems with the heart. In the Republic of Uzbekistan, a set of measures to prevent obesity and cardiovascular diseases was approved. In recent years, the



Figure 3: Proposed modern bracelet for measuring the physiological state of the patient

propaganda of a healthy lifestyle has become relevant on the territory of our country. The construction of new parks and structures was aimed at various types of outdoor activities, such as cycling, walking, running, etc. With makhalla committees and guzars, centers for the introduction of a healthy lifestyle among the population were opened. Here, a primary blood test for cholesterol and a primary examination to identify the body mass index, followed by recommendations in nutrition and the selection of individual cardio-loads. These centers cover an average age of 30 to 65 years, which are the age group at risk of cardiovascular diseases.

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