

MODERN STRATEGY OF HEALTH CARE REFORM AND THE ROLE OF PREVENTIVE MEDICINE IN IT

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Objective. *The purpose of the work is to characterize the role of preventive medicine in modern health care in Ukraine.*

Material and methods. *The main methods of preventive medicine are genetic and biochemical studies, when the doctor considering the most probable risk factors of the disease can make a plan to prevent possible illness.*

Results. *The differences in the directions of prophylactic and preventive medicine are analyzed. The measures concerning introduction of preventive medicine in the current conditions of implementation of the health care reform program of Ukraine are investigated.*

Conclusions. *Preventive medicine is aimed at the early detection of diseases and reducing the likelihood of their development, on the overall improvement of the body in order to increase resistance to other diseases and increase the life expectancy.*

Ключові слова:
превентивна медицина, персоніфікований підхід, комплексна превентивна діагностика, профілактика, здоровий спосіб життя.

Клінічна та експериментальна патологія Т.17, №3 (65), С.98-101.

СУЧАСНА СТРАТЕГІЯ РЕФОРМУВАННЯ ОХОРОНИ ЗДОРОВ'Я ТА РОЛЬ ПРЕВЕНТИВНОЇ МЕДИЦИНИ В НІЙ

Ж. А. Чорненко

Мета роботи - охарактеризувати роль превентивної медицини у сучасній охороні здоров'я України.

Матеріал і методи. Основними методами превентивної медицини слугують генетичні та біохімічні дослідження, коли лікар розглянувши найбільш ймовірні чинники ризику захворювання може скласти план попередження можливих хвороб.

Результати. Проаналізовано відмінності у напрямках профілактичної та превентивної медицини. Досліджено заходи щодо впровадження превентивної медицини в сучасних умовах реалізації програми реформування охорони здоров'я України.

Висновки. Превентивна медицина спрямована саме на раннє виявлення хвороб і зниження ймовірності їх розвитку, на загальне оздоровлення організму з метою підвищення опірності іншим хворобам і збільшення тривалості життя.

Ключевые слова:
превентивная медицина, персонифицированный подход, комплексная превентивная диагностика, профилактика, здоровый образ жизни.

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СОВРЕМЕННАЯ СТРАТЕГИЯ РЕФОРМИРОВАНИЯ ЗДРАВООХРАНЕНИЯ И РОЛЬ ПРЕВЕНТИВНОЙ МЕДИЦИНЫ В НЕЙ

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Цель работы - охарактеризовать роль превентивной медицины в современной системе здравоохранения Украины.

Материал и методы. Основными методами превентивной медицины служат генетические и биохимические исследования, когда врач рассмотрев наиболее вероятные факторы риска возникновения заболевания может составить план предупреждения возможных болезней.

Результаты. Проанализированы различия в направлениях профилактической и превентивной медицины. Исследованы мероприятия по внедрению превентивной медицины в современные условия реализации программы реформирования системы здравоохранения Украины.

Выводы. Превентивная медицина направлена именно на раннее выявление болезней и снижение вероятности их развития, на общее оздоровление организма с целью повышения устойчивости к другим болезням и увеличение продолжительности жизни.

Introduction

Healthy lifestyle is now becoming increasingly more and more popular among all age groups in Ukraine. With the help of modern digital technology, healthy eating, movement and sleep practices make them accessible to everyone. At first sight both prophylaxis and preventive medicine are engaged in one and the same, but this is not quite so. The main difference between these directions is that preventive measures tend to be directed at a rather large group of people, whereas preventive medicine deals with each person separately, taking into account the specifics of a particular organism. Thus, the specialist works with each patient on the system of an individual approach, which greatly enhances the effectiveness of the activities undertaken. The development of preventive and preventive medicine provides the opportunity to prevent the evolution of many serious diseases.

It has historically happened that a person seeks a medical attention in case of problems. As soon as certain physical manifestations appear that impede to our calm life, we begin to seek a specialist who should push us for further action. It's like classical medicine. It's like classical medicine that helps to "repair" our body. But now a new trend is gradually spreading: to watch our health at all times. Logic is very simple: why to wait for problems if they may be prevented?! Most of the human diseases, such as: cardiovascular, systemic or oncological ones, develop not in one day, but time plays a significant role. In the early stages, most of these diseases can be successfully cured or transferred to the stage of remission, but during the late stage, unfortunately, it is possible only to improve symptoms.

Achievements of bioengineering, molecular biology and genetics are the basis of this new direction. Due to the widespread use of testing methods and study of biomarker molecules, it is possible today not only to reveal hidden pathologies, but also to give an accurate prediction of the propensity to various diseases.

Objective

Using the "targeted", personalized approach, preventive medicine aims to continue the full value life of a person up to 120 years - this age is considered by gerontologists to be our biological norm now.

Material and methods

The main methods of preventive medicine include genetic and biochemical research, as well as innovative methods for studying internal human systems. Analysis of the molecular impairments in each particular person at the preclinical stage precede any prescriptions. Its main principles:

1. Genetic testing, which allows to study the history of hereditary diseases, to assess the overall physiological and psychological state of the patient, and then - to identify individual risks.
2. Regular monitoring of the body as a whole and each organ of the body.
3. Determination of specific measures, mainly without use of medicines, to prevent the development of pathologies.

ologies.

Results and discussion

At present, the most demanded direction of the preventive medicine is the development of methods for early diagnostics of diseases. As it is known, manifestations, noticeable on ultrasound imaging, X-rays, etc., are signs of diseases that are already actively developing. For the detection of diseases long before the emergence of such signs modern diagnostic methods are used, for example, in the last decade, there was a lot of new techniques to detect violations in the work of internal human systems, which made it possible to make better predictions. Nevertheless, many ailments are still difficult to diagnose in advance. Experts are also trying to invent more effective methods to reducing the risk of disease and ways to stop disease development, which is also important [1]. Timely diagnostics - the guarantee of a full value life.

That is why more attention is paid to the development of the so-called preventive medicine, which is designed to diagnose a certain disease in advance. The results of a complex preventive diagnostics (EFFICIENCY) allow you to consult a doctor before the body begins to respond sensitively to the problem, and, therefore, choose a treatment strategy faster. The program of efficiency is chosen by doctors, taking into account the main risk factors, age categories, gender of a person. Such a comprehensive survey, which is becoming increasingly popular in medical institutions, is valuable primarily for the person himself, because she (he) can successfully control her (his) health [4]. An example of this is the online platform developed by the medical laboratory. Visitors independently pass tests that allow you to assess the risk of a particular illness (heart attack and stroke, prostate cancer, diabetes), after which you can get all the necessary information about the causes, prevention and a program of efficacy concerning this disease. Why do we need it? Doctors give sad statistics - every seventh person in Ukraine at the age of 50 years old with revealed oncopathology suffer from cancer of the prostate gland [3] (prostate cancer). And this is just officially diagnosed cases from the National Cancer Registry. According to the data of the Institute of the heart of Ministry of Public Health of Ukraine about 50 thousand cases of stroke are recorded a year and about 100 thousand - heart attacks on average. 80% of cases of second-line diabetes can be avoided in case of timely diagnostics. These data are very demonstrative - the vast majority goes to the doctor when they understand that they need doctor's help. But there is a variety of diagnostic methods that allow to get valuable data much earlier even before first manifestations.

For example, one of the main causes of the development of cardiovascular disease is atherosclerosis (the formation of "plaques" on the internal walls of the vessels) - the result of cholesterol deposition and other lipids on the inner membrane of the arteries [2]. Normally, cholesterol is a vital ingredient for our body, but metabolic disorders lead to an increase in the percentage of cholesterol. There is a gradual narrowing of the lumen of blood vessels, the blood circulates worse, general

condition of the organism worsens. In some cases, vessels' occlusion clogging, which leads to heart attack (cardiac vessels) or stroke (brain vessels) occur.

People over the age of 40 must take lipidograms once a year and monitor its results [2]. Lipidogram determines the content not only cholesterol but also other lipids in the blood, which allows timely to diagnosis their increase and choose therapeutic strategy. Even simple lifestyle correction can significantly reduce the risk of heart attacks and strokes.

Another very urgent problem is cancer. Unfortunately, it is often diagnosed at the stage when serious surgical and medical treatment is needed. In some cases, the disease develops very quickly and the cancerous tumor begins to give metastases to other organs, which greatly worsens the prognosis [3].

People suffering from prostate gland cancer go to a doctor about a disease when the disease is quite appreciable. But it is possible to diagnose a disease much earlier, watching the so-called prostate-specific antigen. This protein is synthesized by the prostate gland, so the growth of its parameters indicates the problems with the gland, which, by the way, is an important indicator in general. Antigen level increase may be a signal of not only cancer, but also the appearance of benign tumor or prostatitis [3]. Thus, it is impossible to overestimate the importance of this diagnostic test. That is why the control of prostate-specific antigen is recommended for all men aged 45 and over.

One more disease, the development of which can be prevented by early diagnosis is diabetes mellitus.

The first type diabetes, which usually occurs in children or young people, is diagnosed at the age of 10-30 years: insulin is almost or generally not produced by the pancreas.

The most common form of diabetes is diabetes mellitus of the second type: insulin is produced in sufficient quantity, but cells simply do not perceive it. Test for glycosylated hemoglobin and blood glucose level will help to diagnose diabetes and, if necessary, control it. These indices are very informative and allow timely to adjust the lifestyle, reducing the negative effects of the disease [5].

Another achievement of modern medicine and the basis of personalization of preventive medicine is the development of genetics science. Data from genetic tests that help to make a complete map of the genome enable to establish a predisposition to many diseases and to develop individual health care recommendations - more effective and with minimal side effects [4]. Today, more than 1,500 new tests developed over the past few years have been used for this purpose - and by experts' estimation it is not the limit.

Data on the DNA structure of a particular person are his genetic passport. Just this document becomes the main source of information that allows physicians to develop specific recommendations for the prevention of possible diseases, taking into account individual predisposition.

A vivid example of the effectiveness of this approach

is the treatment of cancer. Timely genetic testing helps to reduce the dose of chemotherapy drugs by more than 30% and provides tremendous opportunities for treatment.

Testing - a source of information about possible risks [5]. However, the development of the most diseases is a result of the interaction of hereditary preconditions with the effects of the environment.

Conclusions

The present dictates us the new requirements, in which the development of preventive medicine acts as an inalienable and promising direction for the development of a modern health care system. Thousands of experts from all over the world contribute to the development of this technique, and new studies are regularly conducted that enable doctors to predict possible illnesses more accurately.

Thus, the analysis of marker molecules will help to identify already not potential risks, but quite a real pathology. The study of auto-aggressive antibodies, these guards of the immune system, becomes an accurate diagnostic tool. The increase in their number, which is recorded in the tests, indicates the onset of the disease and helps to develop timely an individual treatment plan. Experts also try to invent more effective methods of reduction.

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