

THE ROLE AND DEPARTMENTS OF HYGIENE IN THE DIRECTION OF MEDICAL PREVENTION. POPULATION HEALTH INDICATORS

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Abstract:Hygiene is an independent science that not only studies the impact of environmental factors on the human body, but also develops the most suitable living and working conditions, nutrition, water supply, and housing for the population based on the results obtained. To achieve these goals, hygiene sets the following tasks:

Study environmental factors and determine the characteristics of their impact on the human body. Based on the results obtained, it develops hygienic standards and regulations that are harmless to the human body and do not have a harmful effect even when exposed to them for a long time. It implements the developed standards and regulations and monitors their implementation.

As we know, the implementation of any hygienic standard or regulation is carried out by sanitation, which is an important part of hygiene.

Keywords:Hygiene, development, environment, standardization, negative factors, hygienic principles, inspection methods, sanitary description, physical, chemical, biological, physiological condition, organs.

INTRODUCTION

The main tasks set for the health care system of any state are to maintain and comprehensively strengthen the health of the population. The second task is to prevent the occurrence of diseases that are recorded among the population and to extend the life span of people. Solving such huge tasks is not only the work of doctors in the field of treatment, but also belongs to its preventive direction. Therefore, the preventive direction in the health care system should be its main principle.

Human health largely depends on the individual, but in some respects it is determined by the socio-economic conditions in the country, the level of medical services provided to the population, and the amount of national income allocated to healthcare.

In its place, the health of the population will not fail to show its influence on the socio-economic success of this country. A high level of health of the population, the rational organization of the health care system, has a positive effect on the further development of medical science in this country.

Modern problems of hygiene are:

- Assessment of changing environmental factors and their regulation
- Optimization of population nutrition
- Solving problems associated with urbanization
- Development of measures to improve working conditions in industrial enterprises (including small and medium-sized enterprises), a set of measures to improve the working conditions of workers and employees working in agriculture (including farms).
- Problems of rural hygiene (including privatization)
- Problems of accelerated aging of children and adolescents
- Measures to reduce the level of dangerous neoplasms and diseases of the cardiovascular system among the population with special hygiene issues.

Hygiene departments:

Communal hygiene – a science that develops measures to prevent factors related to the life and health of the urban and rural population and negative factors that directly affect it.

Occupational hygiene – studies the impact of the labor process and production environment on the body of workers, develops hygienic and therapeutic and preventive measures to protect the health of workers.

Radiation hygiene – studies the impact of ionizing radiation on the human body, and develops radiation safety measures for people who come into contact with these rays.

Military hygiene – a science that studies the impact of external environmental factors on the body of military personnel and develops theoretical and practical tasks in terms of hygienic provision of troops.

Hygiene of children and adolescents – studies the impact of environmental factors on the body of children and adolescents, and develops hygienic standards and measures.

Nutritional hygiene – is a science that studies the effects of food products on the human body and develops measures against alimentary diseases.

Social hygiene – studies the importance of social factors in shaping the health of the population and develops complex measures aimed at strengthening the health of the population.

Health itself should not be understood as the absence of signs of disease in the body of the entire population or individual individuals, but rather refers to the physical well-being and moral development of members of society.

MATERIALS AND METHODS

The descriptions of the methods used in hygiene inform us about the need for a thorough knowledge of the methods of examination of medical, biological and other sciences and fields, and show that without these methods no hygienic task can be fully solved.

Various methods are used in the implementation of hygiene tasks, and these methods are divided into the following groups according to their nature:

Methods of checking environmental factors:

- sanitary descriptive method;
- physical methods;
- chemical methods;
- biological methods.

Methods of studying the effect of environmental factors on the body:

- methods of checking physiological conditions;
- methods of checking the functional status of certain organs.

Methods of establishing hygienic standards and regulations and realizing their validity:

- statistical methods;
- calculation methods.

Demography — (Greek demos - population, graphia - study) is the science of the population and its development.

Demographic statistics studies the basic laws of the number, composition, birth, death, reproduction, and movement of the population. Demographic data are of great importance in planning the population's needs for medical care (the number of beds in a permanent hospital, positions in polyclinics, staff, the number of beds in nurseries, sanatoriums, the number of doctors and paramedical staff, pharmacies, etc.). The population is the object of direct health care for health institutions.

Statistical study of the population is carried out mainly in two directions:

1. Population statics, in other words, includes information about the number of the population at a certain time, its composition (gender, age, profession, occupation, family status, nationality, language, education), place of residence, geographical location, and density.

2. Population dynamics (movement) - changes in the population. It, in turn, is of two types:

a) mechanical movement;

b) natural movement (as a result of birth and death).

The population census is based on the principle of a snapshot, and is carried out on a specific day and hour, in the winter months of December or January, when the population is least mobile, and is based on registering the entire population. The population census is carried out using a direct survey method based on a uniform program and plan for the entire territory. Since the population census requires a lot of labor, effort, and money, it is usually carried out once every 10 years.

The population of the Republic of Uzbekistan, according to the last census conducted on January 12, 1989, was 19 million 905 thousand people, compared to 15 million 391 thousand in 1979 and 11 million 799 thousand in 1970. Over the past 20 years, the population of Uzbekistan has increased by 8 million 106 thousand people. Uzbekistan ranks first among the Central Asian republics in terms of population size and density.

RESULTS

Population health indicators include birth and death rates, physical development indicators, morbidity rates, life expectancy of the population, etc. The quantity and nature of these indicators are determined primarily by living conditions, working conditions, environmental conditions, etc. Hygiene science deals with the issues of creating the most suitable levels of environmental parameters for humans.

One of the main tasks of sanitary statistics is to study the health of the population of a specific district, city, region, develop medical measures to further improve it, and put them into practice.

Before studying and assessing the health of the population, a doctor must be able to clearly answer the question of what the concept of health and disease is, and what it depends on.

Health and illness are products of the social environment, formed under the influence of social conditions and factors. Health is a harmonious unity, harmony of biological and social qualities, which are innate, acquired and the product of the influence of social factors, and a violation of this unity, harmony is a disease.

Health and illness are products of human life activity, and the difference between them is the conditions that ensure this life activity. If such conditions are favorable for a person, for his life activity, for his self-realization, this is health, but if they are limited, cramped, and disturbed, then disease appears and leads to illness.

Therefore, it is wrong to look at human health and illness only from a biological point of view, but it is necessary to look at it based on the science of biology, as a product of social relations and the social environment.

Since ancient times, philosophers and doctors have tried to study health and illness in connection with human nature, life activities, character, and lifestyle. Hippocrates, the father of medicine, said in his time: as human activity is, so is his nature and diseases.

Thus, human health cannot be viewed in isolation from the specific environment in which it lives and its specific activities, from the comprehensive manifestation of life activity, from the purpose of a person, from his life and sociality. As difficult as it is to assess and characterize the health of a specific person, a person, it is even more difficult to assess and characterize the health of society, the population.

Public health is not only a medical concept, but in many ways it is one of the social, political, and economic categories of society, and is an object of social policy, therefore it is necessary to assess it more from its social rather than its medical essence.

In doing so, it is necessary to study the health of the population by linking the medical statistical and demographic indicators that characterize it with the natural, social, and biological factors that affect them.

Population health is characterized by three groups of medical-statistical and demographic indicators:

1. Demographic indicators.
2. Indicators of physical development of the population.
3. Indicators of morbidity and disability of the population.

It shows the dependence of population health on social conditions, social, economic and political development of society, social factors and natural conditions surrounding a person, external environment.

The external environment and socio-economic conditions affect the health of the population through their working and living conditions.

The health of the population is affected by many external environment, socio-economic factors, and the activities of the health care system and medical-sanitary service aimed at studying and improving the health of the population.

Thus, when we say the health of the population, its sanitary condition, we mean a complex of medical and statistical indicators and the natural, social, biological and psychological factors affecting them. The main task of sanitary statistics is to develop methods for studying population health, to study the main indicators of population health in relation to social, biological factors, the external environment, specific life, labor, and living conditions. There is no hygienic science that does not deal with population health statistics. That is why population health statistics and its methods of study are given a wide place in the coverage of sanitary statistics.

DISCUSSION

In Uzbekistan, the population density per square kilometer was 34.4 in 1979, while in 1989 it was 44.5. The number of urban residents in our republic is increasing every year, from 33% in 1970 to 41% in 1989.

The distribution of the population by age is of even greater importance. Without knowing the age structure of the population, it is impossible to correctly assess the indicators of birth, death, and morbidity among them.

Sanitary statistics rarely study events and incidents occurring among the population with an interval of 1 year. In order to provide the population with medical care tailored to its age, the population under 20 years of age is divided into the following groups:

- 0-1 – Infants (children of breastfeeding age);
- 1-2 – children of one year old;
- 3-6 – preschoolers;
- 7-10 – junior school age;
- 11-13 – middle school age;
- 14-17 – adolescents;
- 18-19 – military conscription age.

Populations are made up of people, and demographic phenomena are made up of characteristics that belong to people in a population. Thus, like other phenomena occurring in society, the number of observed events depends on the total population. Therefore, when we talk about the magnitude and

intensity of the observed phenomenon, it is not enough to know its magnitude in absolute numbers. In order to obtain accurate information about the processes occurring in the population, we need to compare these phenomena with the environment in which they occur, that is, the population. This requires the use of values called demographic indicators. However, one important point should not be forgotten here. The fact is that the number, magnitude of demographic processes correspond to a certain time interval. For example, the number of births can include births in a year or a month. The population is taken at the end or beginning of the year. Therefore, in order to be able to compare demographic indicators, it is first necessary to calculate the average population size. Often, the average population size is half the sum of its size at the beginning of the year and the end of the year. After determining the average annual population size, the main medical and demographic indicators that form the natural population movement in the district, region, city, republic are calculated.

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