# PRACA POGLĄDOWA REVIEW ARTICLE

# SCREENING AND PERIODICAL MEDICAL EXAMINATIONS AS IMPORTANT PART OF PUBLIC HEALTH: PROBLEM OF THE LEGAL IMPLEMENTATION

BADANIA PRZESIEWOWE I OKRESOWE BADANIA LEKARSKIE JAKO WAŻNY ELEMENT ZDROWIA PUBLICZNEGO: PROBLEMY PRAWNE ZWIĄZANE Z ICH IMPLEMENTACJĄ

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#### ABSTRACT

Introduction: Public health is an important concept, which is continually being globalized and integrated into today's society. It helps to improve and prolong the quality of life of people and prevent the spread of epidemics and serious incurable diseases. The components of public health include protection, prevention, and promotion. Prevention, the measures taken to prevent disease as opposed to treatment consist of screening and periodical medical examinations. There are two types of screening- universal screening and case finding (individual screening). Universal screening and periodical medical examination are identical concepts; the terms dispensary and individual screening (case finding) have similar meanings and can be used interchangeably. These concepts and their importance are analyzed in this research.

**The aim:** A research on the legal regulation of periodic health examinations and screening as a two systems, which provides the implementation of prevention within the public health. Analysis of foreign experience such countries as: Great Britain, USA, Austria, Germany, Australia, France, Italy and others.

Materials and methods: The research based on: Ukrainian legislation, European Union's Law Acts, decisions of the ECHR, EU's member-states law, WHO Acts and Recommendations, scientific articles. The research is also based on general scientific and special research methods (such as dialectical, comparative, analytic, synthetic).

**Review:** In Europe (except Germany and Austria) is happening the transition from the system of mandatory periodical medical examination to new screening system. However, despite this, periodical medical examinations of Europeans held in connection with exist system health insurance (both voluntary and mandatory).

**Conclusions:** Screening and periodical medical examinations are two of the most important aspects of public health as they help to diagnose diseases at an early stage, even before showing any symptoms. Screening and periodical medical examinations ensures the safety and health of the entire population as opposed to certain individuals and therefore be mandatory procedure in today's society.

KEY WORDS: Public Health, Screening, Universal Screening, Case Finding, Periodical Medical Examination

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## INTRODUCTION

Public health is the science and art of preventing disease, prolonging life and promoting human health through organized efforts and informed choices of society, organizations, public and private, communities and individuals [1]. Today the research of public health are topical.

The integration and interactions between numerous cultural, economic, social, environmental, governmental, and political processes are characteristic of our complex globalized world. These processes exist at all levels, from global to local [2].

Global public health is conceptualized by the recognition that the processes that underpin globalization have led to an increased vulnerability of public health. Impacted by a wide range of factors, both from within and without boundaries, global public health faces new challenges [3]. In USA for three decades, experts have been stressing the importance of law to the effective operation of public health system [4].

The goal of public health system is to prevent the spread of epidemics and serious incurable diseases and to prologue and improve the quality of life. Only in recent years, scientists have concluded that the realization of such goals is only possible with integrated system, which was termed public health. Public health consists of three interrelated and complex parts – protection, prevention, promotion. Each part includes several elements so, prevention consists of two elements – vaccination and screening.

The terms periodical medical examination and screening have similar meanings and are used interchangeably [5]. However, it is worth to accent, that this does not correspond to reality. There are two types of screening- universal screening and case finding (individual screening). So, the contents of universal screening (screening of all people in a certain category, for example, all persons up to twenty-one years and up to nineteen years in Ukraine and Germany respectively) and the periodical medical examinations is similar. But individual screening (case finding) involves a smaller group of people based on the presence of risk factors (for example, family history of tuberculosis). The terms dispensary (which is known in the CIS) and individual screening (case finding) have similar meanings and can be used interchangeably.

Individual screening (case finding) is to prevent new disease cases by reducing risk factors. It is to detect disease, thereby leading to early treatment and improved prognosis. These preventive measures identify and treat persons who already have certain risk factors or in whom the condition is not yet clinically apparent [6]. Individual screening is carried out by doctors of the secondary and tertiary levels of health care in the form of a screening test if the person belongs to group of risk (for example, has a predisposition to hereditary diseases). Individual screening is carried out in accordance with the State program (for example, in England there are many the Government programs depending on sex, age, heredity, living conditions of patients, etc.).

Therefore, the Ukrainian Ministry of health proposed to introduce a systematic screening for tuberculosis among highrisk groups (persons belonging to risk group is determined by the questioning of the professional – medical history) in 2018.

Disease screening is one of the most basic tools of modern public health and preventive medicine. Screening programs have a long and distinguished history in efforts to control epidemics of infectious diseases and targeting treatment for chronic diseases [7].

It is worth noting general practitioners execute periodical medical examination. Physicians carry out periodical medical examinations in order to acquire information on patient susceptibility to certain diseases or to obtain general or specific knowledge on their health status [8]. Periodical medical examinations (once a year) are mandatory in Germany, Austria, the United States, Australia, New Zealand, etc.

In European countries, professional opinions differ about the effectiveness, usefulness and satisfaction of a periodic health examination [9]. The European countries gradually refuse periodic health examinations in the health care system in favor of programs of individual screening.

### THE AIM

A research on the legal regulation of periodic health examinations and screening as a two systems, which provides the implementation of prevention within the public health. Analysis of foreign experience such countries as Great Britain, USA, Austria, Germany, Australia, France, Italy and others.

## MATERIALS AND METHODS

Research based on: Ukrainian legislation, European Union's Law Acts, decisions of the ECHR, European's member-states law, WHO Acts and Recommendations, scientific articles.

In general, the theoretical bases of our research are the following researches: Pashkov V. [10, 11], Ampuja M. [2], Hrekov Y., Hrekova M. [12], Burris S., Mays G. P. [4], Olefir A. [13,14], Holland W. [5], Harkusha A. [15, 16], Seballos R. [6], Gutorova N. [17,18,19], Bytyak O. [20] Stoto M. A., Almario D. A., McCormick M. C. [7] and many others.

In addition, article is based on dialectical, comparative, analytic, synthetic and comprehensive research methods.

### **REVIEW AND DISCUSSION**

There are no binding international agreements that would have regulated screening and periodical medical examinations as an important part of public health at present. The issue concerning legal regulation of screening and periodical medical examinations belongs to the competence of national states.

Screening and periodical medical examinations is closely related to human rights (the right to life, health, prohibition interference in private life and others), and this means that international standards in the field of human rights protection can be applied to this relation.

All questions related to public health are resolved at the level of international conferences and WHO Acts and Recommendations (for example, A Global Charter's for the Public's Health, Principles of screening).

The ECHR in its decisions indirectly established the obligation of States to ensure the functioning of the system screening. For example, states may also be under a positive obligation to prevent the spreading of contagious disease. For example, after finding a structural problem of inadequate medical care in Georgian prisons, the Court required the Georgian authorities to take the necessary legislative and administrative measures to prevent the spreading of contagious diseases, such as tuberculosis and hepatitis, in the prisons, to introduce a screening system for prisoners upon admission and to guarantee prompt and effective treatment [21, 22].

In Shelley v. the United Kingdom, a prisoner complained about a decision to provide disinfecting tablets instead of needle-exchange programmes as he was concerned that it failed to sufficiently address the risks caused by the sharing of infected needles. The Court found that there was no authority in the case-law that placed any obligation under Article 8 on a Contracting State to pursue any particular preventive health policy. While it was not excluded that a positive obligation might arise to eradicate or prevent the spread of a particular disease or infection, the Court was not persuaded that any potential threat to health that fell short of the standards of Articles 2 or 3 would necessarily impose a duty on the State to take specific preventive steps. Matters of health-care policy, in particular as regards general preventive measures, in principle fell within the margin of appreciation of the domestic authorities. Giving due leeway to decisions about resources and priorities and to a legitimate policy to try to reduce drug use in prisons and noting that some preventive steps had been taken and that the authorities were monitoring developments elsewhere, the Court concluded that there had been no violation of the applicant's right to respect of his private life [23].

Experience in Europe shows that European countries refuse the system of periodical medical examinations (as usually periodical medical examination are not covered by medical insurance).

Germany and Austria are the only two EU countries that have a standardized periodic health examination in the basic package of its social insurance system. Every insured person (which are nearly all citizens) from age 19 on has a right to a health examination once a year (citizens fall under child and school health until age 19). Apart from the periodic health examination, there is programmatic screening for cervical and breast cancer [9].

However, periodical medical examinations are carried out by Europeans within the insurance medicine. Nevertheless, insurers, fearing cases of insurance fraud, also with caution refers to individuals who are trying to conclude a contract medical insurance. Therefore, insurers set preventive measures in the form of a requirement to do a medical examination by profile physicians.

Therefore, in order to obtain the European Health Insurance Card or a contract of voluntary medical insurance, applicants need to do professional periodical medical examinations in the professionals.

Thus, in the EU Member States along with the existing system screening there is also a system of periodic health examinations, which is closely related with the insurance medicine. The existence of these two systems provides the implementation of prevention within the public health.

The organization of Austrian social insurance security feels that the periodic health examination still (and probably more than in the past) appeals to a demand of the insured population and wants to continue the periodic health examination. However, at the same time there is need to reexamine the format of the periodic health examination and to bring it in line with the latest insights in (preventive) medicine and health care [9]. Considering that the health system has also become a symbol of prosperity and well-being in this country, it is must not be refused from the periodic health examinations, but rather to promote and encourage the population to do periodic health examinations.

In Europe, experts questioned the need for periodic medical examinations. However, in fact they exist and will continue to exist. Periodic health examinations, and the screening existing parallel covered the entire population, thus they have a common aim – to detect and prevent development of the disease in the early stages, to inform patients about the condition of their health.

Given this, there is necessity in creating the system of mandatory health insurance in within which will be required periodical medical examinations and parallel will exist the program screening.

# CONCLUSIONS

1. Public health is an important concept, which is continually being globalized and integrated into today's society.

- 2. The components of public health include protection, prevention, and promotion.
- 3. Prevention, the measures taken to prevent disease as opposed to treatment consist of screening and periodical medical examinations.
- 4. There are two types of screening universal screening and case finding (individual screening).
- 5. Universal screening and periodical medical examination are identical concepts. The terms dispensary and individual screening have similar meanings and can be used interchangeably
- 6. In Europe (except Germany and Austria) is happening the transition from the system of mandatory periodical medical examination to new screening system. However, despite this, periodical medical examinations of Europeans held in connection with exist system health insurance (both voluntary and mandatory).
- 7. Required periodical medical examinations are organically connected with the functioning of the system of mandatory health insurance in the developed country Europe.
- 8. Screening and periodical medical examination are one of the most important parts of prevention and public health respectively. Because it helps to improve and prolong the quality of life of people and prevent the spread of epidemics and serious incurable diseases.
- 9. Screening and periodical medical examinations ensures the safety and health of the entire population as opposed to certain individuals and therefore be mandatory procedure in today's society.
- 10. In Ukraine, there is a necessity in creating a system of compulsory health insurance, in that will conduct a periodical medical examination population.

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# **Conflict of interest:**

The Authors declare no conflict of interest

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