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Essential public health operations in the WHO European Region

Podstawowe funkcje zdrowia publicznego w regionie europejskim Światowej Organizacji Zdrowia

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Summary

Public health (PH) is the science and art of preventing disease, prolonging life and promoting health through the organized efforts of society. Its role is to provide population-wide preventive services and to support other services of the health system, especially individual treatment services, as so-called curative medicine. Nowadays, as a result of epidemiological, demographic, social and economic circumstances, it is widely expected to increase the efficiency of PH services. In 2012 in the European region of the World Health Organization there were adopted resolutions on improving the health of the region's population (i.e. policy framework "Health 2020") and to improve PH services towards reaching the "Health 2020" (i.e. a plan of strengthening PH services across the European region). Poland as a signatory of this agreement is required to take appropriate action and reporting. The underlying proposal for strengthening PH capacities was to determine the PH scope (i.e. 10 essential PH operations, EPHOs) and to diagnose the current state of art in the region. The leading problems with the implementation of EPHOs, and therefore the greatest need for improvement, was found in the countries of eastern and southern parts of the region. Strengthening the PH capacities in Poland requires, among others, cooperation with representatives of curative medicine. This objective should be used consistently in unified PH course for all doctors applying for the specialization.

Streszczenie

Zdrowie publiczne (ZP) jest nauką i sztuką zapobiegania chorobom, przedłużania życia oraz promowania zdrowia poprzez zorganizowane działania społeczeństwa. Jego rola polega na świadczeniu populacyjnych usług zapobiegawczych i wspieraniu innych usług systemu zdrowia, a zwłaszcza indywidualnych usług leczniczych tzw. medycyny naprawczej. Obecnie w wyniku uwarunkowań epidemiologicznych, demograficznych, społecznych i ekonomicznych powszechnie oczekuje się zwiększenia wydajności usług ZP. W 2012 roku w regionie europejskim Światowej Organizacji Zdrowia przyjęto rezolucje o poprawie stanu zdrowia ludności regionu (tzw. polityka „Zdrowie 2020”) oraz o usprawnieniu usług ZP na rzecz realizacji „Zdrowia 2020” (tzw. plan zwiększenia potencjału ZP). Polska jako sygnatariusz tego porozumienia jest zobowiązana do podjęcia odpowiednich działań i sprawozdawczości. Podłożem planu zwiększenia potencjału ZP było wyznaczenie zakresu działania ZP (tzw. 10 podstawowych funkcji ZP) oraz zdiagnozowanie aktualnego stanu zaawansowania prac w krajach regionu. Największe problemy z realizacją funkcji ZP, a więc także największe potrzeby zmian, stwierdzono w krajach wschodniej i południowej części regionu. Zwiększenie potencjału ZP w Polsce wymaga m.in. współpracy z przedstawicielami medycyny naprawczej. Celowi temu powinien służyć jednolity dla wszystkich specjalności kurs specjalizacyjny z ZP.

INTRODUCTION

The representatives of the United Nations who created the World Health Organization (WHO) recognized

that health is one of the fundamental human rights, a condition for security and peace and a common value (1, 2). Poland accepted this stand in 1948, through

the ratification of the Constitution of the WHO (3). Later, the United Nations has repeatedly stressed the value of health in numerous resolutions, including the Millennium Development Goals, being an obligation of the international community to undertake development activities for 2015 (4).

The WHO and the European Union stated that investments in health are an investment in the development of individuals and humanity, social well-being and prosperity, not a cost. These bodies agree that a well-functioning health system enables maintaining and improving health and thereby contributes to social development and wealth (5, 6). It is therefore essential in the life of individuals and of every society, the functioning of states and global development. At the same time – in the current organizational structure and with the current level of funding – most of the national health systems cannot cope with the new health needs and social expectations (7, 8). One of the responses to the crisis in health systems is striving to increase the efficiency of public health (PH).

The aim of this article is to present the role of PH in the health system and actions taken in the European Region of the WHO in order to increase the capacity and efficiency of PH.

The following study understand **PH as a science and an art of preventing disease, prolonging life and promoting health through organized activities of a society.** The definition was formulated by Sir Donald Acheson and adopted by the WHO (9, 10). Health policy means action plans for health.

HEALTH SYSTEM

Observing the Polish public debate gives the impression that the most important role in maintaining the health of the population is played by healthcare, especially specialist and hospital one. Meanwhile, restorative medicine is just one of the links in a complex system that works for health.

According to the WHO – in a task aspect – a health system is “a team of public and private organizations, institutions and resources that work to improve, maintain or restore health”. The system provides services for individuals and entire populations, as well as conducts intersectoral actions. Through them, it seeks to modify the plans of other social sectors to influence the environmental, social and economic determinants of health (e.g. improvement of the sewage treatment system, influencing legislation related to tobacco and road safety, etc.) (5, 11).

According to the World Bank – in a structural aspect – a health system (fig. 1) includes: (a) resources and processes to provide preventive and curative services (medical care); (b) resources and processes associated with services, norms, standards (health services); (c) a fragment of the economy responding to the health needs through: the production and distribution of medicinal products and devices, activity of pro-

viders and insurers, education and vocational training, rehabilitation, etc. (health sector); (d) elements of the activities of other social sectors critical to health, such as e.g. food production, transport, housing, education, etc. (determinants of health) (12).

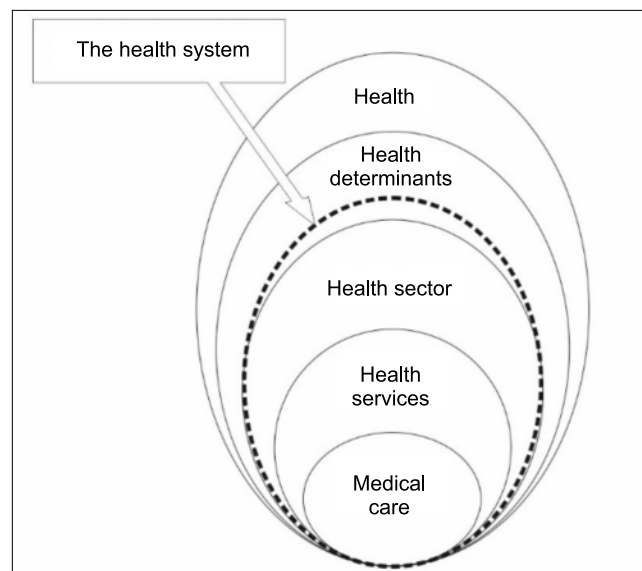


Fig. 1. A health system. Source: Bitrán et al. (12)

In Poland, different terms are customarily used, most often the “health care system” term. However, in legislation, the term “health care” has at least two different meanings (13). The “health care system” term is similarly vague. Model studies on the Polish system pay relatively little attention to population services, as well as inter-sectoral actions, or relations with the entities for which health is not a priority for action (14).

PUBLIC HEALTH IN A HEALTH SYSTEM

A well-functioning health system provides services to three groups of recipients: the entire population, individual patients and the chronically ill and disabled. **Population prevention services are the domain of PH and individual diagnostic and therapeutic – restorative medicine (treatment).** Care services, addressed to individuals, families or communities, are the domain of social assistance in its broader meaning (15).

PH uses a wide range of methods, including technological, economic, legislative, control and law enforcement, aimed at modifying the natural, anthropogenic and social environment. PH instruments include medical methods, such as: vaccinations, mass screening and control of infections associated with health care. It also includes “soft” methods, such as education, social marketing, advocacy and social engineering (e.g. community development).

Currently, European health systems exhibit asymmetry in the levels of development of these services and the dominance of restorative medicine. However,

due to many conditions, other cells, i.e. PH and care, are becoming increasingly important. It results, among others, from the extending life span and population aging, the prevalence of chronic diseases and risk factors for these diseases, the rising cost of health care, the economic crisis on the financial market crisis with refugees, large direct and indirect costs of health inequalities, the health inequalities as well as rising social expectations towards various forms of health care. **We are currently witnessing an unprecedented re-evaluation of system services.**

A well-functioning health system should also ensure coordination of the services of prevention, treatment, rehabilitation and care, and thus create a coherent health care package. Providing a wide range of services, at the right time and place, being also time effective and cost-effective, is internationally known in the literature as integrated or coordinated care (16). In Poland, coordinated care determines the harmonization of primary health care (PHC) specialist outpatient care (SOC) and hospital services (17).

Today, in many countries, system integration of services, especially the population/preventive PH services and individual/curative ones, is insufficient (18). It should be noted, however, that the desire for integration is common and visible in the search for theoretical research and practical activities. A specific example may be a US plan to integrate those services in the context of natural disasters and mass threats (19) and a plan to protect the PH structures and resources and treatment as part of the critical infrastructure (20).

“HEALTH 2020” AN INCENTIVE FOR THE DEVELOPMENT OF PUBLIC HEALTH

“Health 2020” is a political document, unanimously approved by the Resolution of the European Regional Committee of the WHO in 2012 (21). The WHO European Region includes 53 countries in Europe and outside Europe – all developed after the breakup of the Soviet Union, as well as Israel and Turkey. This region is characterized by the presence of very large differences between countries in terms of economic development, culture, the health of residents and the occurrence of health inequalities (22).

“Health 2020” is a kind of a guide for Member States to create their own health policies with the participation of governments and societies, and also a joint declaration of achievement health goals defined throughout the region by 2020 (23-25). The document structure is shown in tables 1 and 2. One of the four priority areas of action is to expressly increase PH capacity. In addition, the other three areas are closely related to the activities of the PH. Over the years, they have collected convincing scientific evidence in fact that many interventions in the area of PH, including health promotion and disease prevention, can be effective in improving health, and the same time, result is savings or gener-

ate additional measurable benefits. Therefore, achievement of the main goal of “Health 2020” depends on the implementation of professional activity at the population level.

Tab. 1. Structure of the European policy “Health 2020”. Own development

The main goals (vision)
Significant improvement of the health and well-being of populations, reducing health inequalities, strengthening PH, ensure people-centred health system that are universal one, fair, sustainable and of high quality
Strategic objectives
1. Improve the health of all and reduce health inequalities 2. Improve leadership and participatory governance for health
Priority areas for policy action
1. Investing in health throughout a life-course approach and the empowerment of people 2. Tackling the major health challenges of noncommunicable and communicable diseases 3. Strengthening people-centred health systems, public health capacity and emergency preparedness, surveillance and response 4. Creating resilient communities, capable of adapting to changes in the environment, and supportive environments
Broad target areas
1. Burden of disease and risk factors 2. Healthy people, well-being and determinants 3. Processes, governance and health systems
Targets
1. Reduce premature mortality 2. Increase life expectancy 3. Reduce health inequalities 4. Enhance well-being 5. Ensure universal health coverage and the right to the highest attainable level of health 6. Set national goals and targets related to health

Tab. 2. A cross table of areas, objectives and priority areas of the European policy “Health 2020”. Source: the WHO (2013) (13)

Objective areas	Targets	Strategic objectives	Priority areas
Burden of disease and risk factors	1	1	2
Healthy people, well-being and determinants	2	1	1 and 4
	3	1	1 and 4
	4	1	1 and 4
Processes, governance and health systems	5 and 6	2	3

“Health 2020” was being developed for two years as a result of numerous consultations conducted also outside Europe. There were several important reports developed, including ones on the health situation, and the organization and functioning of PH and health systems in the region (26-30). The proposed actions are based on knowledge and evidence gathered as a result of the implementation of, among others, the Strategy for Health for All, the Healthy Cities Project, the Millennium Development Goals and the policy of “Health 21”. Currently, the WHO provides dozens of ancillary studies on various aspects of the implementation of this policy, including measures to improve PH.

Implementation of the objectives of “Health 2020” has been monitored by the WHO since 2014 with the use of quantitative (baseline data is from 2010) and qualitative indicators. This year’s European Report on Health, issued every three years, is a flagship publication of the WHO office in Copenhagen, presenting the first results of the implementation of the “Health 2020” (31).

To sum up – the current European health policy clearly emphasizes the importance of health and the quality of life in the system of values. Very strong emphasis was placed on the strengthening of PH, including drawing attention to: the social determinants of health, empowerment of communities and patients, the so-called resilient communities, health promotion, disease prevention, the so-called whole-of-government and whole-of-society approach and interactive health governance system.

Health is in fact a fundamental value, a source of creative activity, a basis for implementation of plans. Health protection is one of the key drivers of the development of science, the humanities, and the economy. A health policy gives the public the opportunity of creation (32, 33).

BASIC FUNCTIONS OF PUBLIC HEALTH

For the purposes of the implementation of the policy “Health 2020”, a list of Essential Public Health Operations (EPHOs) has been developed for the European region (10). There had existed a similar list, however, it became necessary to modify it for the current needs.

Currently, the functions include:

1. Surveillance of population health and well-being.
2. Monitoring health hazards and emergencies and responding to them.
3. Health protection, including environmental, occupational, food safety, etc.
4. Health promotion, including actions focused on social determinants of health and health inequalities.
5. Disease prevention, including early detection of illness.
6. Provide governance for health and well-being.
7. Provide adequate and competent PH workforce.
8. Provide a sustainable PH organizational structure and financing.
9. Advocacy, communication and social mobilization for health.
10. Developing research in the field of PH to conduct policy and practice.

Each of these functions is described in detail. Functions 1-5 are considered the core (core EPHOs). In this group, functions 1 and 2 are intelligence and 3 to 5 are the main PH services. Providing the leading services requires specialized competence, i.e. profiled knowledge, skills, and attitudes of employees. In the previous decade, many countries carefully defined the competencies of PH employees, including general and specific competencies, e.g. in the field of epidemiology and health promotion (34-38). While functions 6 to 10 include the so-called enabler EPHOs, the performance of which requires competence in the field of PH and

other disciplines. Grouping function clusters is shown in figure 2.

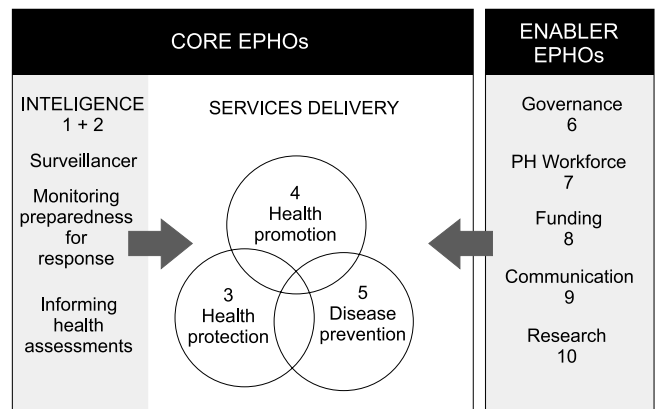


Fig. 2. Clusters of the essential public health functions. Source: the WHO (2012) (42)

CURRENT CAPACITY OF PUBLIC HEALTH

Development of a list of essential operations was linked to the results of the PH capacity (conditions) research in 27 EU countries and an analysis carried out in 41 countries of the European Region of WHO (39, 40). Both surveys were based on self-assessment of the progress of work (according to the questions asked and criteria), so the results obtained by this method are some approximation. Unfortunately, they are not satisfactory. It was found that greatest number of countries (approx. 50%) carries out activities related to the classically understood PH, i.e. surveillance, monitoring health situation and prevention. **The lowest number of countries developed activities related to staff training.** Assessment of the quality of the activities is even more worrying (fig. 3). **Insufficient development of PH was found especially in the eastern and southern parts of the WHO European Region.**

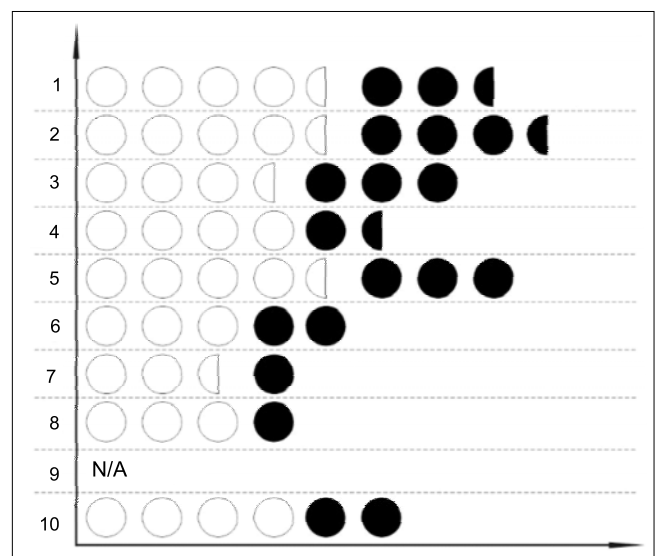


Fig. 3. Estimated range and quality of the basic functions of public health in the WHO European region. Source: the WHO (2012) (48) White circles – the estimated percentage of countries that conduct any activities related to EPHOs (range), black circles – the estimated implementations of the full range of EPHOs (quality) N/A – not available

Currently, the WHO proposes a regular monitoring of the national PH capacity and services with an advanced self-assessment tool (41). In Poland, such a review was conducted as a result of cooperation with the Ministry of Health. It showed numerous weaknesses within PH and time will tell how it will be used.

EUROPEAN PLAN TO INCREASE PUBLIC HEALTH CAPACITY

Simultaneously with the adoption of the “Health 2020”, the WHO Regional Committee approved the “European Action Plan for Strengthening Public Health Capacities and Services” (42-44), since the implementation of this policy requires improvement of population services in health system. A clue to the development of the plan was the overview of the current PH capacity discussed above. This plan indicates what actions within each function (EPHOs) should be taken in 2012-2020 by Member States and by the Regional Office in Copenhagen and the WHO headquarters in Geneva.

In the following years, reports were published on the cost-effectiveness and profitability of PH intervention, which reinforces the importance of this plan (45). For example – profitable interventions (or “better” than cost-saving ones) in the short term (0-5 years) included, among others: road injury prevention, active transport, walking and cycling, safe green public spaces, protection against heat waves, healthy employment, insulation and ventilation of buildings, legislation to counteract violence, prevention of postnatal depression, family support psycho-social support for older people, reducing the availability of alcohol (46). Figure 4 includes a “meme” as an illustration.

CONCLUSIONS

Implementation of the “Health 2020” policy and PH development are dependent on, among others, the competencies of PH employees. To a large extent, they also depend on cooperation with other stakeholders of the health system and their willingness to support such plans. Education and communication are therefore really important. In 2010, *Lancet* published an extensive article on the education needs of different groups of health workers, including doctors, in the new millennium (47). It described three historical stages of education for different professions related to health protection. At the beginning of the twentieth century, informative learning was most common, based on knowledge, and the goal was to “pro-

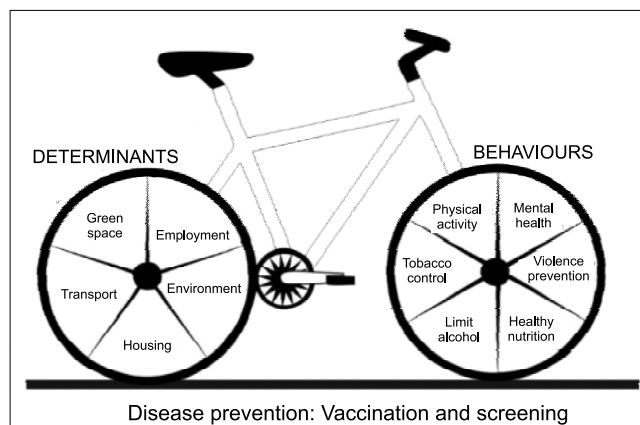


Fig. 4. Cost-effective public health interventions. Source: the WHO (2013) (46)

duce” experts. In the mid-century, formative learning originated, based on the problem, which was used to build competencies around socializing and education of professionals.

Currently, there is an urgent need for transformative learning and teaching interdependence.

Transformative learning attributes included abandonment of: (a) memorizing facts in favor of the capability of searching for information, analysis and synthesis aimed at making a decision, (b) obtaining certificates for achieving key competences to work in a team, (c) an uncritical acceptance of the existing educational model for creative thinking, adapting other people’s experiences to local needs. The aim of the transformation is to produce the change agent, a person responsible for the creation of conditions conducive to the implementation of changes, supporting this change and assessing its effects.

Interdependence within education is abandonment of: (a) teaching in isolation (silo teaching) in favor of interdisciplinary and interprofessional teaching, (b) education in one institution in favor of networks, coalitions and consortiums, (c) institutional navel-gazing of educational entities in favor of participating in the global flow of the content of education, resources and innovation.

In such a context – that of transformative education and that attempting to show the interdependence of the problems – the uniform specialized course of public health should be assessed (48). The intention of those managing the health system was to create a platform for an agreement between representatives of restorative medicine and PH.

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