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Evaluation of primary health care and improvement of the services provided

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Primary health care (PHC) is a central pillar of health systems internationally, based on the view of health as a universal and socially established right. The PHC services in Greece have been characterized over time by disintegration, and inefficiency, high levels of fragmentation and inequality, in terms of their access to the general population and geographical distribution, with incomplete implementation of the state health system. The recent, ongoing financial crisis, coupled with economic policies to reduce health expenditures, have exacerbated these problems and magnified the systematic weaknesses of PHC in Greece, as reflected by population health indicators, the financial burden of patients and the deteriorating quality of the services provided. These social inequalities in health, which developed in previous years, were intensified by the COVID-19 pandemic, which further highlighted the need to improve the health services provided and to promote a public health development strategy. Reform of PHC based on systematic evaluation can be a way of responding to its chronic weaknesses and meeting the urgent health needs of the population emanating from the crisis situation and the turbulent economic environment. Although several attempts have been made over the years to develop and implement a PHC system, these have been fragmented, and initiated from a technocratic perspective, diminishing the role of evaluation to a financial tool. The main characteristic of systematic evaluation should be continuous repetition of a circular process, consisting of collection of information, evaluation, and formulation of proposals for improvement and change. This process will support the universality of care and establish health as a social good, but it presupposes interdisciplinary and inter-professional cooperation, with the active involvement of patients.

Αξιολόγηση της πρωτοβάθμιας φροντίδας υγείας και βελτίωση των παρεχόμενων υπηρεσιών

Περίληψη στο τέλος του άρθρου

Key words

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"We need less research, better research, and research done for the right reasons"
Douglas G. Altman

1. INTRODUCTION

Primary health care (PHC) constitutes the basic element of a continuous health care process, based on the principle of cross-sector collaboration, and aiming to cover the "real health care needs and welfare" of a clearly defined population. One of its fundamental principles is that health is considered a human and social right,[1] which, in turn, determines the obligation of the state to provide integrated coverage for all its citizens, regardless of their social, economic, racial or religious status.[2] PHC is based on socially acceptable and scientifically proven methods and technologies, with the active and effective participation of the community in the design and evaluation of the services provided.[1]

PHC covers a wide range of activities and services, including promotion of health, prevention of diseases and provision of outpatient health care, ensuring equal access of the population, individually and as a family, to all the health services provided. This is a review of the role of evaluation and research in PHC, in the context of continuous evaluation, taking into consideration the effects of the economic crisis on the health of the population and on the country's healthcare system.

PHC has emerged as an alternative, realistic response to the functional crisis of the medical and hospital centered system, advocating the holistic approach to health. It is recognized as a necessary and realistic format for redesigning and upgrading health systems,[3] as reflected in the

relevant documentation of international organizations over the past 40 years.[1,4]

PHC has been developed in a worldwide aggressive environment, imposed by the neoliberal policies which cast doubt on the financial effectiveness of the public sector and its place in the economic development and prosperity of a country. In this ideological context, certain measures are imposed, such as cost control assessment, deconstruction of the social welfare state and the imposition of market conditions and competitiveness in health services. The implementation of neoliberal policies, internationally, mainly focuses on discrediting, underfunding, and restructuring the state health services, in order to achieve higher profits from the rapidly expanding market of private health services.[5]

The new policies are based theoretically on the human capital model for health, where health is considered a "capital reserve" that makes a profit during the healthy lifetime of an individual.[6] People initially inherit a certain amount of "human capital", which decreases over aging, but increases by investment in it. A person may decide on a maximum dividend on health capital at any age, compensating the marginal return on capital at the user's expense, with regard to the value of the net investment.[6] Each investment in capital goods deteriorates over time, and its degradation depends on the rate of depreciation. In this model, health is treated like any other form of capital goods and the human being in possession of the capital health reserve behaves as an investor, whose goal is to maximize his(her) profits from the exploitation of the capital during his(her) lifetime. The economic logic of profit was imposed as the guiding principle in the production and distribution of health services. Based on these theoretical principles, the neoclassical theory of economics of health has evolved dramatically, and has imposed profit as the guiding principle for the production of medical care. This transformation of the view of health from that of a public good into a commodity was accompanied by the replacement of medical ethics by the economic rationale of neoclassical theory. Under the prism of these developments, the institutional framework of PHC has evolved, worldwide, in ways that reflect the relevant theoretical and scientific transformations that took place during earlier decades.

Within this international environment, with all its associated contradictions, the first important intervention for the institutional establishment of a PHC system in Greece was implemented when law no 1397/83, concerning the National Health Service (NHS) came into force. During the following decade, 176 health centers and 19 small hospitals were created in rural areas in Greece, providing free health services for all.[7] The additional 220 health centers that were initially planned, were never established. The funding structure for the implementation of these centers was systematically hampered by social and professional groups engaged in the private sector. Various attempts to reform the system languished and the opportunity for the creation of an integrated health system was lost.[8–11] Since then, many proposals were formulated for the immediate operation of the PHC system in Greece, and relevant reformation efforts have taken place.[12–14] Severe organizational dysfunctions, however, have led to a health system that continues to be hospital-centered, with serious consequences for the health system, as cases that could best be treated at the primary level present directly to secondary care institutions.[12,15,16] The implementation of reforms of the PHC, including the institutionalization of the family doctor, the adoption of diagnostic and therapeutic protocols and electronic digitalization of the health system are continually being postponed, and the fundamental issue of appropriate financing of the PHC system is being systematically neglected.[14]

Despite all the efforts that have been made for improving the PHC system, the main traits of the services that are provided have not altered substantially.[17] The current health services are characterized mainly by the prescriptive management of chronic diseases, fragmentation, inefficient operation, deregulation of labor relations, reproduction of health provider-customer relations and a partially privatized system, operating with artificially created needs for services, leading to waste of resources and functions.[3,11,18,19]

The absence of political intent, combined with a lack of commitment to a joint vision, formidable private financial interests, technical and institutional barriers and a limited availability of resources, are just some of the constraints to the effective development of a state PHC system.[17,20,21] This failure is due, in part, to poor management by the state, but mainly to the constant obstacles created by private doctors and diagnostic centers, and the insurance companies; the greatest impediment to a generalized, efficient national health system[8] originates in financial interests, reactions from social groups, and corporate-professional pressure.[11]

The pathogenesis in the public health care system has been further exacerbated by the long-term implementation of policies deregulating the labor market, and the introduction of austerity policies which intensified following the global financial crisis in 2007. In 2010, this deregulation was consolidated, with the inclusion of Greece in the memorandum of structural adaptation policies, which

had a dramatic impact on the socio-economic factors that determine the health of the population.[3]

2. EFFECTS OF THE ECONOMIC CRISIS ON HEALTH CARE

Every economic crisis significantly reduces the total national wealth, causes loss of family and individual income for the majority of the citizens, increases unemployment and the risk of losing jobs, worsens living conditions, reduces social benefits and insurance coverage by the state, and makes it difficult for health services to function effectively and for citizens to gain access to those health services.[22] In Greece, Spain and Portugal, which are the most representative examples of the Eurozone economic crisis, significant problems were identified related to the access of citizens to health services, accompanied by cuts in health spending, and, at the same time, an increase was observed in the prevalence of infectious diseases and suicide.[23]

The economic crisis constitutes a higher risk for low- and middle-income countries. Examination of the relationship between economic crisis and social welfare highlights three key interrelated issues of inequality: (a) Gradual increase in socio-economic inequalities, (b) inequality in health and social protection conditions, and (c) social inequalities in access to and use of health services, with a direct impact on the level of health.[24,25]

It is of note that, during the recession in Europe, a 3% increase in unemployment rates was associated with a 4.45% increase in the suicide rate for those aged under 65 years, and a 28% increase in deaths due to alcohol abuse.[22] In addition, during the economic crisis in Greece, people facing unemployment and belonging to the lower income level were recorded as being in a poorer self-reported state of health.[26]

The world economic crisis has severely affected the Greek economy, making it possible for Greece to function as a criterion-mean for testing the relationship between socio-economic adjustment and the well-being of the population.[27] It is of note that in Greece in 2010, a significant part of the population started to experience extreme poverty; specifically, 3 million people were threatened with social exclusion. In 2011, 20,000 people were reported to be homeless and receiving food from non-governmental organizations (NGOs).[28] The percentage of the population in Greece living in poverty or social exclusion reached 34.8%, with a corresponding European average of 28.1%. Specifically, 21.1% of the population was living in poverty and 15.6% was in a family that faced the risk of unemployment.[29]

The implementation of austerity policies in the public health sector, combined with the rise in unemployment (26.5% in 2014), and poverty, job insecurity and social exclusion, poses a real threat to the health of the population.[27] The austerity program set in the relevant memorandum by the International Monetary Fund (IMF), the European Central Bank and the European Commission (EC) led to draconian cuts – the largest in Europe since World War II. The cost in terms of human lives is obvious, with an increase in homicides, in cases of HIV, and the return of malaria, as a consequence of the imposition of financial cuts on critical health programs.[30]

Following the crisis onset, a severe deterioration in a variety of public health factors was observed, including an increase in the prevalence of mental illness, suicide and epidemics, and worsening in the level of self-reported health.[31] It was also noted that the mortality rate at all ages, per 100,000 population, increased from 944 deaths in 2000, to 997 in 2010, and 1,174 in 2016, with this increase being the most marked after 2010, following the introduction of the austerity measures.[32] At the same time, an increase in infant mortality was observed, while the percentage of people whose health needs were not met increased from 10% to 34.4% between 2010 and 2015.[33] Low income, employment status and educational level were considered to be significant determinants for the above mentioned phenomena.[34] A significant increase in mortality level was also observed in elderly low-income retirees, with this trend being attributed to changes in the health insurance system.[35]

Negative crisis effects were also observed on mental health,[36] most noticeably on the suicide rate, which appeared to be affected by factors related to austerity.[37,38] According to the health research data of the Hellenic Statistical Authority (ELSTAT), suicide rates increased by 5–7% per year, i.e., from 377 in 2010 to 533 in 2013.[39] An increasing trend in diagnosed major depression was also observed, from 3.3% in 2008 to 6.8% in 2009, 8.2% in 2011, to 12.3% in 2013.[38] In the period between 2009–2014, the prevalence of self-reported depression increased by 80.8%, with 4.7% of the population aged 15 and over stating that they were depressed, compared with 2.6% in 2009.[39] At the same time, during the implementation of the austerity measures, the percentage of the population, aged 15 years and over reporting some chronic disease was 49.7%, an increase from 39.7% in the respective survey of 2007. In the period 2012–2015, an increase of 55.5% in 2013 and 39% in 2015 in self-reported morbidity was recorded. In 2015, almost 1/3 (28.5%) of the population self-assessed their state of health as mediocre or poor.[39]

2.1. The economic crisis and health risk factors

The effects of the financial crisis on morbidity from lifestyle-related diseases and health risk factors, such as cardiovascular disease and cancer, are difficult to map, but there is some evidence of note. A report by ELSTAT[39] provided clear indications of a reduction in the percentage of smokers and alcohol consumers between the years 2009 and 2014, but Greece continued to be at the top of the list of daily smokers among countries belonging to the Organization for Economic Co-operation and Development (OECD), with 27% of the population aged over 15 years being smokers on a daily basis.[40] The increase in the tobacco tax may have contributed to the reduction in smoking rates, as a decrease in cigarette consumption was ascertained within the first year of its imposition.[41] The strict enforcement of law 4633/2019 regarding the prohibition of smoking is expected to lead to a further reduction in tobacco consumption, but this repressive policy needs to be accompanied by a change in the mentality of citizens, and specifically young citizens, who should be supported in smoking reduction through health education programs and preventive interventions.

Regarding physical exercise, in Greece, only one in 10 people aged over 15 years engages regularly in intense physical activity. Between 2009 and 2014 a small increase (1.8%) was recorded in the percentage of overweight people, and a significant increase (22.2%) in the percentage of underweight people in Greece.[39] The use of addictive substances increased by 11.6% in 2008 in the age-group of 35 to 64 years, and by 22.4% at younger ages, in 2010.[28] In the student population, from 2003 to 2011, a gradual increase was recorded in the general use of illegal substances, and particularly in the use of cannabis. Specifically, from 2006 to 2014, in 15-year-old schoolchildren, a progressive increase was reported in the use of cannabis, at least once in their life, in the last 12 months, and in the last 30 days.[42]

The unhealthy dietary patterns that prevailed during the crisis, due to the reduction of disposable household income, have become a major factor in the excessive mortality in the 15–49 years age group.[32] In 2010 and 2016, Greek residents faced higher exposure to a variety of risk factors, including smoking, air pollution, high body mass index (BMI) and a low omega-3 fat diet, compared with Western European countries.[32] The humanitarian crisis is expanding as the needs of the population for health care have increased, but the systematic restructuring of state health services and the ever-increasing number of uninsured citizens have aggravated the difficulties in access to these services.[3] Characteristic of this situation is the example of the three epidemics that occurred in 2010, malaria, HIV and West Nile virus, with the relevant public health policies failing at the level of prevention and timely treatment.[43] The number of free needles and condoms distributed to injecting drug users via public harm reduction programs decreased by 31% in 2010 compared with 2009, shortly before a significant increase was recorded in newly diagnosed cases of HIV infection, while in 2011 mosquito control actions carried out by local authorities were delayed due to financial issues.[28]

2.2. The economic crisis and health care costs

In Greece, implementation of the memorandum led to a dramatic reduction in public health expenditures in the context of an extreme fiscal adjustment, severely testing the ability of the state health system to meet its statutory purpose.[27] The figures are indisputable and clearly demonstrate the current state of the health system.

In the first two years of austerity measures, the total funding of the Greek Ministry of Health was decreased by € 1.8 million, with public hospital expenses being cut by 12.5%, a reduction that was expected to be offset by improvements in terms of efficiency through the new tender procedures; however, in practice, the reduction was derived from salary reductions imposed on employees.[44,45] At the same time, the consolidation of the multiple insurance funds led to significant cuts in the social security system and an increase in the patients' contribution to medical care and diagnostic tests.[8] Total health expenditure during the economic crisis decreased by 34% (from € 23.2 billion to € 15.3 billion), with public spending in 2015 not exceeding 5% of the gross domestic product (GDP) (€ 9.5 billion), a significantly lower rate than that of other developed countries.[38]

Greece was probably the most extreme example of deliberate and continuous expenditure cuts in medical care.[46] Since the beginning of the fiscal adjustment program, health expenditures, as a percentage of the GDP, reached the lowest level among EU countries, with public hospital funding falling by almost 50% between 2009 and 2015.[47] In this fiscal environment, the situation for patients became even worse, as it is estimated that approximately one quarter of the population lost their insurance coverage due to long-term unemployment.[48]

During the economic crisis, total pharmaceutical expenditure also shrank from € 5.3 billion in 2008 to € 2.2 billion in 2014, leading to a decline from 2011 onwards of the public pharmaceutical spending per capita in Greece,

from € 460 per inhabitant in 2009 to € 183 in 2014. Meanwhile, in the EU countries, per capita public pharmaceutical expenditures ranged from € 291 in 2009 to € 285 in 2014, i.e., approximately €100 higher than that in Greece.[48] The participation of the insured patients in the cost of pharmaceutical products, despite the increase in the circulation of generic medicines and the decrease in the prices of medicines, increased from 9% to 29%. In addition, the reforms that were applied in the field of medicine resulted in significant shortages in pharmaceutical supplies, which in combination with the frequent strikes of pharmacists and the tactics of pharmaceutical companies caused strong social turmoil.[49,50]

2.3. The economic crisis and health services

The effects of the economic crisis on health have led to an increase in the needs of vulnerable groups of people, such as the unemployed, the uninsured, immigrants and low-salary workers, for hospital health care. Lower income and reduced purchasing power led to cuts in health expenditure and a decrease in the insurance premiums in the private sector.[51,52] Hospital admissions increased by 6.2% in 2010 and 21.9% in 2011, with patients spending € 25.7 million of their income to pay for outpatient health services in public hospitals, services provided free of charge before the crisis. The liberalization of private clinics was promoted and restrictive regulations in laboratories and medical centers were abolished.[28]

The 24% increase in public hospital admissions documented in the years 2009–2010, which also continued in the following years, was combined with a 25–30% reduction in admissions to private clinics, and had an increasing effect on the hospital workload and a negative impact on the quality of services in the public sector hospitals.[53,54]

In a period when citizens increasingly turned to state health facilities in order to reduce spending, public hospital operating costs (health care costs, medicines, chemical reagents, cleaning services, food, security and maintenance, etc.) decreased by 41.28% (from € 2.8 billion to € 1.65 billion).[55] At the same time, many hospital units were closed as part of the restructuring of the system to re-operate in a more efficient way, and more patients reported avoiding seeking necessary health care, mainly because of cost constraints, long waiting hours and the long distance from the health care unit.[56]

The reduction in operating expenses, combined with the lack of medical and nursing staff, resulted in low levels of user satisfaction with the health services, with 42% of patients reporting moderate to poor/very poor satisfaction.[38,57]

In 2013, health insurance coverage fell by 21%, bringing the population health insurance coverage to 79% from 100% before the economic crisis. The percentage (21%) of the uninsured population of Greece is the highest among the EU countries.[38] The main barrier to access to the state health care system is reported by 22% of the population to be the cost. In such an environment, many patients turned to the church or other charities to meet their health care needs.[58]

According to the data of the annual Euro Health Consumer Index (ECHI), which evaluates the health systems of 35 EU countries based on 48 indicators, in 2015 Greece ranked 28th (with a score of 577/1,000).[59] Greece recorded a negative performance on a range of criteria related to information and patient rights, family physicians, waiting lists, cancer survival, hospital infections, social inequalities in hospital access, illegal payments, smoking, lack of exercise, traffic deaths, delayed market introduction of innovative medicines and high medicine consumption (mainly antibiotics).[59] It is of note that, according to studies, prescription medication is considered the 4th leading cause of death in the United States of America (USA) and the 3rd in Europe.[60,61]

3. THE CONTRIBUTION OF RESEARCH AND EVALUATION TO THE PRIMARY HEALTH CARE SECTOR

PHC has been a major concern for health services over recent decades, as a well-developed health system with strong PHC is directly linked to better population health indicators.[62] Strong association is observed between chronic diseases and mortality, with 59% of annual deaths deriving from chronic diseases. Based on research findings, it is predicted that chronic diseases, such as diabetes mellitus (DM), and cardiovascular and respiratory problems, will be the leading causes of death in the near future.[63,64] For health professionals who take care of patients with chronic diseases, primary care is of utmost importance, in terms of organizing the optimal exploitation of their skills. Medical staff faces difficulties in providing instructions to and monitoring patients with chronic health problems, activities that are related to compliance with treatment and medical recommendations, while at the same time the cost of treatment of chronic diseases is significantly high.

To avoid gaps in the quality, activities and efficacy of the medical system, specific monitoring models for the on-going care of chronic diseases have been proposed and developed, such as the Chronic Care Model (CCM),[65] and

the Non-Communicable Diseases (NCDs) model.[66] These models are designed to be integrated and applied in the PHC system. Risk factors that are taken into consideration include features of the lifestyle and the physical and social environment that are related to morbidity and mortality, which in turn are related to 40% of chronic diseases that could have been prevented.[65] Treatment of patients with chronic diseases in the PHC setting is complicated, but effective PHC makes it possible to adequately prevent and manage these conditions.[67]

CCM and NCDs were designed based on the needs expressed by the PHC team, and the services provided based on these models are customized, with emphasis on reducing risk factors, strengthening the self-efficacy of patients and improving functional autonomy and health, having as a basis the biopsychosocial model developed through psychoeducation and patient support. The component necessary for the success of these models is the interdisciplinary, inter-professional, cross-sectoral and inter-departmental cooperation of the health team; the functional interconnection of the related services/departments will ensure improvement of the services provided to patients and the most efficient management of the available resources.[65] The organization and implementation of PHC programs varies between countries, as a variety of factors need to be taken into consideration, such as the living and working conditions, the cultural background, the dynamic relations between individuals and their needs and expectations at a collective level.[68]

Given the unfavorable economic situation in Greece and its social impact, which is reflected in the health sector, as analyzed above, the target should not be fragmented problem management, but strategic reformation of the NHS, with PHC as its main pillar. Ensuring the smooth operation of the present infrastructure of the public sector and developing a national PHC network based on solid foundations and values,[1] are of crucial importance for meeting the increased demand for health care services and for saving the significant resources, which are currently wasted at the expense of public health and in favor of profitability of the private sector.[3,5]

An important role in the achievement of the above objectives, is the development and implementation of scientific tools and comprehensive evaluation methods of the operation and quality of the services, to the benefit of the community.[11] In this context, research and evaluation of PHC can provide information on clinical practices, promote clinical reasoning, help improve the quality of services provided and increase patient satisfaction, encourage interprofessional collaboration, contribute to interdisciplinary education and generally support the health sector, by identifying areas that require change.[69,70]

The relationship between intervention and its application to the immediate environment depends on the evaluation of PHC services[71] with the use of support mechanisms and continuous evaluation as a tool for feedback, modification and redesign. Internationally, systematic research efforts have been made to create, develop and implement PHC evaluation tools, using quality indicators commonly accepted at a transnational level.[72–74] In most cases, the priority areas of research are set mainly by the various governments, guided the targeting of funding. The majority of the documented research concerns the quality, the security, the implementation, the efficiency and the effectiveness of PHC programs.

Greece, in comparison with other European countries, is characterized by a paucity of systematic and coordinated efforts for the evaluation and quality assurance of health services that would contribute to establishing priorities and decision making. Despite the fact that the legislative framework (law 2889/2001, law 3172/2003, law 2245/2004, law 3235/2004, law 3329/2005, law 4238/2014, law 4486/2017) covers provisions for the health services provided, evaluation *per se* of the services has not been a priority in Greek health policy and whatever efforts have been made to assess the quality of health services were fragmented, and characterized largely by the absence of central coordination.[16,75]

3.1. Obstacles to the achievement of effective evaluation

There appear to be several reasons (politics, interests of professional groups, business, and financial interests, etc.) why a coordinated evaluation system has not been applied over the past years in the PHC system, with most important reason being that the operation of an organized, consolidated and functioning PHC system has not, in effect, ever been implemented.[76]

In the cases where evaluation was applied, it had a distinct slant serving specific purposes, e.g., a financial evaluation aimed at financing or discontinuing funding. In the consciousness of many of those involved in PHC, evaluation has been identified as a technocratic, punitive, subjective and flawed process. This has created speculation and questioning of the motives of the evaluators, leading to doubts and resistance. Also, the definitions of evaluation *per se* often reflect binary interpretations, such as:

"Evaluation is a systematic technical process with a clear political character, as it includes planned actions which are connected (directly or indirectly) to the distribution and re-distribution of power and resources".[77]

The term evaluation means the systematic approach to measurement of the degree to which predetermined goals and objectives are achieved within a specific period of time. Efficiency, effectiveness, scientific and technical quality level, adequacy, aspect and impact are all taken into consideration, and, last but not least, the economic dimension which, however, should not be overestimated. The most commonly used types of assessment of health services considered effective and efficient are the cost-benefit analysis, cost-effectiveness analysis, cost-utility analysis, cost-minimization analysis, cost of illness and analysis of quality of life (QoL).[78]

While evaluation may be defined as a procedure of on-going research and data collection relevant to the activities, characteristics and results of the program, at the same time it permits assessment and contributes to the improvement and or decision-making for future development.[79] In other cases, evaluation concerns the qualitative assessment of activities, with the aim of redesign, and facilitates changes in political directions and planning. In the qualitative assessment of interventions, substantial ideological differences can be identified as some emphasize the preferences of the patients and others focus on the degree of coverage of their needs.

The dominance of neo-liberal ideas and policies, and the adverse impact of their application in the health sector, have created the necessity for changes that will be based on the concept of health as a social good. This will lead to the creation of public facilities that will reflect the universality of health care, serving the principles of World Health Organization (WHO) in practice, and not only in theory. In an era where the available fiscal space for health and health care organization is at the absolute minimum, particular emphasis should be placed on the unambiguous and multi-dimensional evaluation of governmental organizations, which should not be viewed as for-profit enterprises, as health should be considered a social good.

To this end, it is imperative for health systems to adequately respond to the new and growing needs of the population, which imposes the necessity for evaluation of the health services from the viewpoint of the patients, also, as reform of the health system comprises a major segment of the prevailing social essentials and values.[80] Assessment of health needs without population involvement is doomed to raise further inequalities in the health sector.

3.2. Health needs and health services

One of the goals of health care strategy is to ensure that the health needs of the individual and the population are covered, with the patient at the center of the strategy.[81] However, the need for health is a concept that is difficult to define and thus difficult to measure, and there is no clear, objective way to measure it.

The subjective view of what is a "need for health" is known as the "felt need".[81] People can approach health services and express a request for care, i.e., care-demand, as an expressed need. The demand for health services arises from the expressed needs, without always meaning the present existence of actual needs, and evaluation mainly depends on the perceived health need (felt needs), the behavior towards the disease, cultural factors, the clinical condition of the patient, the availability of provided services and the estimation of professionals.[82]

The reaction of the professionals to the individual care-demand plays an important role. If health professional decision-making or policy-making teams identify an appropriate and available intervention that can be applied with specific, potentially beneficial cost (i.e., which is cost effective), then that need is confirmed as a normative need.[82] The need that is determined through the consideration of several factors is defined as relative need[83] and refers to a level perceived by the population, rather than the individual.

The evaluation of health needs is a basic tool in the effort for social development, for health policy and for the design of provided programs and services. Designing a health need study requires interdisciplinary collaboration, and it enhances participatory research and community action.[84] Achieving the detection and effective coverage of the actual health needs requires a continuous, systematic feedback process, aimed at providing information for strategic planning. The design of interventions based on this information, and the assessment of the effectiveness of the interventions can identify specific areas of need and the factors that contribute to the perpetuation of problematic situations. This will help in setting priorities, defining criteria and creating solutions aimed at improving the health level of the population and offering the citizens enhancement of their QoL.[85,86] In Greece, to date, only minor initiatives in evaluation have been undertaken[75,87] and even less at central policy level in particular.[88]

3.3. Action research and its contribution to the promotion of change in primary health care

Action research may contribute to the improvement

of the quality of health care, and it encourages teams to define their needs.[89] The main characteristics of action research constitute a focus on change and improvement of the health services provided, involvement of the health professionals in the research procedure, provision of training for the involved stakeholders, and a focus on research questions arising from everyday practices. It consists of a circular process of data collection, data evaluation and feedback, a procedure that generates knowledge. This constructive organizational change emphasizes the ability of the participating health professionals to think critically about their own tactics.

Community-based health needs assessment constitutes an opportunity to create significant, sustainable change, with a positive impact on the health indicators of the community. Various current practices, however, limit the ability for change, leading to further isolation of patients in the community over time. Fragmented individual attempts at evaluation may lead to over- or under-estimation of needs, and even create an obstacle to the broad participation of the community. Adoption of the principles of community-based participatory research provides the community with the opportunity for real involvement in the process of needs assessment.[90]

Community involvement in the assessment of needs presupposes that the researchers suspend their hypotheses, enabling the participants, themselves, to discover their needs.[91] This approach offers a means to move from the use of pre-fixed questionnaires, without community involvement, to the implementation of a viable investment that will benefit both the community and the health system over time,[90] and may well lead to more equal forms of community participatory research.[92] In PHC, action research has been shown to improve clinical care, communication, teamwork and administrative work.[89,93,94]

3.4. Evaluation of PHC and development of services based on research

The main requirement of evaluation is to begin with the synthesis of the current principles and practices, in conjunction with a template for further improvement. An effective evaluation program may be defined as the systematic way to improve, taking into account health activities, including processes that are realistic, useful and in accordance with the ethics and morals code. The evaluation framework includes the subsequent actions that will take place and the principles that will be followed in order for the program to become effective, reinforcing the integration of the evaluation process into everyday practice.

It is of great importance to anticipate the evaluation process from the first stages of the planning procedure, in order to ensure its timely introduction and its economic viability, identifying the time periods at which it will be most useful. Identification of the dimensions of the evaluation process should be conducted in parallel with the definition of the objectives of the organization. In many cases, what is "common sense" for the evaluation is not obvious for the objectives of the organization and vice versa.

Scientific evaluation requires a careful mix of theory and method, quality and quantity, ambition and realism. As each method has its constraints and its biases, mixed methods are considered to be the most effective. The appropriate research procedures should be defined and integrated in the PHC development program (e.g., developmental research in PHC, clinical and epidemiological research, research on health needs assessment and use of health services by the population, efficiency and quality of services, patient safety, patient satisfaction, quantitative and qualitative evaluation of functions and procedures including involvement of patients, etc.).

Research procedures should involve the appropriate training of all the parties involved, according to the culture and the principles of the evaluation.[95,96] Assessment requires the promotion of a culture favorable to the evaluation procedure, in a program that allows the development of a positive attitude towards continuous data acquisition, leading to the prompt application of the basic research conclusions resulting from the program.[79] Justification of the value of the evaluation process, in combination with the perception that assessment programs examine the realistic problems of individuals (both health professionals and patients) rather than theoretical social constructs, is expected to encourage the participation of all the involved parties. Different groups of people will have different ideas or priorities related to the object of the evaluation, but the overall objectives should be common and valued by all, and the team dynamics and management should be taken into account, for ensuring the quality of the services provided.[97]

The evaluation process should collect valid and reliable information that will reflect the overall image of the program. The mandatory data entry in the electronic health file is judged necessary, along with the preservation of the patient's rights. The participation of the patients and the community in the design of the research protocol is essential, with consideration of the possible repercussions and understanding of the impact the research activity will

have on the health of the population and on the improvement of the quality of health services.

The efficacy of the operation and the quality of services of all the PHC facilities should be evaluated on a regular basis, from the input of both the health professionals and the patients. The participation of both individual patients and the community as a whole is essential for the adequate evaluation of population health needs,[75] and for the design of research programs related to PHC services and evaluation of health services.[3]

The development of internal operating regulations and procedures should be provided for each facility, which should describe clearly the operational constitution of the professional health team, with explicit definition of the duties of each member and the daily operational details; in the provisions of law 4238/2014 discrete roles and duties are not clearly described, leading to conflict and dissatisfaction.[76]

The promotion of the research results is an equally important, but sometimes hazardous task. In evaluation programs, it is not always easy to interpret the findings, either because the program objectives might have been initially broader, while the results are more limited, or because the interpretation of the findings is related to the generalization of a strategy supported by scientists but underestimated by the creators of the strategy.[98]

4. CONCLUSIONS

In conclusion, research in the evaluation of PHC requires a complete blueprint of the evaluation activities, from the estimation and planning of the health needs, through formulation of the research hypotheses and evaluation of the methodology, to the data collection and analysis and interpretation of the results, and culminating in the effective integration into real everyday practice. Exploitation of the research results should be disseminated to similar programs and used for planning effective policies and new measures. The close interaction between the researchers and policy makers is a constant challenge and an interesting methodological endeavor.

According to the above principles, the necessity for reform in PHC is highlighted, based on criteria of care effectiveness, and not only cost effectiveness or procedural criteria, in order to provide high-quality health services to the population as a whole. Ongoing evaluation and upgrading of PHC will contribute to the decongestion of secondary health care services and leading to reform of the health system.[3,5] Operational advancement and high quality of a state-of-the-art PHC system may enhance the ability of the health system to respond adequately and promptly to emergency and crisis situations, such as the case of the Mati fire tragedy and the COVID-19 pandemic.[99,100]

ΠΕΡΙΛΗΨΗ

Αξιολόγηση της πρωτοβάθμιας φροντίδας υγείας και βελτίωση των παρεχόμενων υπηρεσιών

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Η πρωτοβάθμια φροντίδα υγείας (ΠΦΥ) συνιστά κεντρικό πυλώνα των συστημάτων υγείας διεθνώς, βασιζόμενη στη θεώρηση της υγείας ως πανανθρώπινου και κοινωνικά θεμελιωμένου δικαιώματος. Οι υπηρεσίες της ΠΦΥ στην Ελλάδα χαρακτηρίζονται διαχρονικά από αποσπασματικότητα, αναποτελεσματικότητα και υψηλά επίπεδα κατακερματισμού και ανισότητας σε όρους πρόσβασης του γενικού πληθυσμού και γεωγραφικής κατανομής, υπό το πρίσμα μιας ατελούς υλοποίησης του συστήματος υγείας. Η συνεχιζόμενη οικονομική κρίση, σε συνδυασμό με τις οικονομικές πολιτικές της χώρας όσον αφορά στην περιστολή των δαπανών υγείας, ενέτειναν αυτά τα προβλήματα και διεύρυναν τις συστημικές αδυναμίες της ΠΦΥ στην Ελλάδα, όπως αποτυπώνεται στους δείκτες υγείας του πληθυσμού, στην οικονομική επιβάρυνση των ασθενών και στην επιδεινούμενη ποιότητα των παρεχόμενων υπηρεσιών. Τη διεύρυνση των κοινωνικών ανισοτήτων στην υγεία, όπως αυτές είχαν διαμορφωθεί τα προηγούμενα έτη, ήλθε να υπερτονίσει η εν εξελίξει πανδημία COVID-19. Μέσα από τις εν λόγω συνθήκες αναδεικνύεται η ολοένα μεγαλύτερη ανάγκη βελτίωσης των παρεχόμενων υπηρεσιών υγείας και προώθησης της στρατηγικής ανάπτυξής τους στη δημόσια υγεία. Η αναμόρφωση της ΠΦΥ μέσω της συστηματικής αξιολόγησης μπορεί να αποτελέσει απάντηση στις χρόνιες αδυναμίες της, διασφαλίζοντας παράλληλα την ικανότητά της να ανταποκρίνεται στις επείγουσες και διευρυμένες

ανάγκες υγείας του πληθυσμού που απορρέουν τόσο από καταστάσεις κρίσης, όσο και από το οικονομικό περιβάλλον ύφεσης της χώρας. Παρ' ότι έχουν ήδη πραγματοποιηθεί κάποιες προσπάθειες ανάπτυξης και εφαρμογής της ΠΦΥ, αυτές είναι αποσπασματικές και εκκινούν από τεχνοκρατικές αντιλήψεις για την αξιολόγηση, με αποτέλεσμα να καθίσταται η τελευταία ένα απλό χρηματοδοτικό εργαλείο. Αντίθετα, βασικό χαρακτηριστικό της συστηματικής αξιολόγησης αποτελεί η συνεχής επανάληψη μιας κυκλικής διαδικασίας συλλογής πληροφοριών, η αποτίμησή τους και η σύνταξη προτάσεων βελτίωσης και αλλαγής. Η συγκεκριμένη διαδικασία θα υποστηρίζει την καθολικότητα της φροντίδας και θα αναδεικνύει την υγεία ως κοινωνικό αγαθό. Αυτό προϋποθέτει τόσο τη διεπιστημονική και διεπαγγελματική συνεργασία όσο και την ενεργή συμμετοχή των πολιτών.

Λέξεις ευρετηρίου: Αξιολόγηση φροντίδας υγείας, Εκτίμηση αναγκών, Κρίση, Πρωτοβάθμια φροντίδα υγείας

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