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RESEARCH ARTICLE

TRANSFORMATION OF NATIONAL HEALTH SYSTEMS IN TIMES OF COVID-19: THE EUROPEAN RESPONSE

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Abstract

Objective: *T*he COVID-19 pandemic caused new challenges worldwide. One of these was the necessity of the transformation of the National Health Systems in order to deal with it. The purpose of this study is to present the challenges faced by the NHS in Europe and around the globe, focusing on the priorities they have set in order to be able to provide effective, timely and patient-centered services.

Methodology: For the needs of the research, the relevant decisions of the European Commission and the European Parliament were studied together with the reports of international organizations, such as the World Health Organization (WHO) and the European Centre for Disease Prevention and Control (ECDC). The existing literature has also been examined.

Results: In order to help the European countries be prepared for cross-border health threats, such as coronavirus, the European Parliament voted in March 2021 the largest health programme in the European Union, with a total budget of 5.1 billion Euros, which is called EU4Health programme. However, the programme has broader goals, that it will seek to achieve, combining the European level with the national and global level of health policy. Its three main goals for the period 2021-2027 are: (1) increasing medical supplies for eventual pandemics, (2) creating reserves of medical staff and experts and (3) improving the surveillance of health risks.

Conclusion: The EU4Health programme is one of the most important European Union's responses to the recent pandemic, aiming to assist in the transformation of NHS. The basic keys for achieving this objective are to focus on prevention through Public Health and Primary Health Care and at the same time to use the benefits provided by e-Health.

Keywords: COVID-19, National Health Systems, health policy, EU4Health programme

1 | INTRODUCTION

During 2020, the National Health Systems in Europe and around the globe faced many new challenges and difficulties because of the COVID-19 pandemic [1, 2]. The novel coronavirus epidemic, which was named SARS CoV-2 or 2019-nCoV, originated in China, as it first broke out in Wuhan [3, 4]. However, it rapidly spread worldwide [5, 6]. As a result of the pandemic, the healthcare organizations ought to reshape their priorities and be transformed.

In this context, they had to deal with a new health situation, providing more effective and more efficient health services [7, 8]. Moreover, there is a great need for offering timely services with high-quality and less cost to the patients-users of health services, especially to children and to vulnerable groups as well as the chronically ill, patients with heart disease or oncology patients. As Begun and Jiang have noticed (2020), another challenge for hospitals and clinics during this pandemic is to manage capacity, financial loss and also care redesign [9]. As they point out, for example, in 2018 hospitals at the 25th percentile had -4.4% operating margins and 7.6 days of cash on hand (compared with median values of +2.0% and 53.4 days, respectively).

The purpose of this article is to present the main challenges faced by the National Health Systems. This study focuses on the one hand on the priorities they were called upon to set and on the other hand on the solutions they chose to implement in order to deal with the consequences of the pandemic.

2 | MATERIALS AND METHODS

The methodology followed consists of a review of the existing literature, printed and electronic, that is related to the subject. Also, for the needs of the research, the relevant decisions of the European Commission and the European Parliament were studied, together with the reports of international organizations, such as the World Health Organization (WHO) and the European Centre for Disease Prevention and Control (ECDC).

3 | RESULTS

3.1. The transformation of National Health Systems: challenges and priorities

In this effort to be transformed, the National Health Systems understood the necessity to focus on the prevention through Public Health, thus improving population health. Furthermore, they trayed to develop the operation and function both of the hospitals and the other local health centers. At the same time, they wanted to ensure the resilience and their capacity to recover quickly from difficulties by monitoring and evaluating health care services, which they offer to their patients [9]. It was also important to have as priority the Primary Health Care and at the same time to use the benefits provided by e-Health.

The role of information and communication technology is extremely important in order to successfully address the various challenges of modern hospital management. According to the World Health Organization (2016) and the European Commission (2015), e-Health refers to a wide range of products, systems and tools, which build their operation around the advanced Information and Communication Technologies (ICT), aiming not only at the better management of health, but also the applied lifestyle on the whole [10, 11]. The e-Health applications like the Electronic Health Record, the electronic prescription, telemedicine or mobile Health (m-Health) are addressed both to health professionals and patients-users adopting a philosophy of a holistic approach, as they handle the prevention, diagnosis, treatment and later monitoring.

As well as these objectives, e-Health applications are looking to strengthen existing Healthcare Systems

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and at the same time make medicines and medical equipment more affordable and accessible. Furthermore, e-Health wants to transform the traditional ways of providing services by health professionals, aiming both at the rationalization of the expenses and the satisfaction of the patients-users of health services [12]. Nevertheless, the key elements which prejudge its success are the measurable results, the guarantee of a broad consensus, as well as the leadership's commitment to implement it.

In Europe, the use of e-Health systems has been generalized in most European countries like Denmark, the Netherlands, Great Britain, Estonia, Sweden, Finland and Germany. More specifically, according to the European Commission [13], the countries that perform best in the implementation of e-Health in hospitals are Denmark (66%), Estonia (63%) and closely followed by Sweden and Finland (62%). In the digitization of medical files, the best performance has been made by the Netherlands (83.2%), followed by Denmark (80.6%) and Great Britain (80.5%), while Estonia stands out (100%) in e-prescription followed by Croatia (99%) and Sweden (97%).

At the Greek National Health System, the utilization of e-Health applications is a national priority for a number of reasons, such as the economic crisis that broke out in Greece during 2009 and also the arrival of waves of migrants and refugees in the country the previous years. On the other hand, the thousands of Greek islands make the traditional form of medical care practically very difficult [14].

3.2. The EU4Health Programme

At a European level, the EU4Health programme is one of the most important European Union's responses to the recent pandemic of COVID-19. Probably this is the largest health programme in monetary terms till now, as it has a global budget of more than 5 billion Euros [15]. The EU4Health programme is adopted in March 2021 by the European Parliament for the years 2021-2027. The fist aim of the programme is to help the European countries be prepared for cross-border health threats, such as coronavirus [16].

In order to achieve this goal, the EU4Health programme trays to coordinate the three different levels of making health policy: the national level, the European level and the global level. In this effort, it grows a closely cooperation with the National Health Systems and at the same time with the World Health Organization in order to increase medical supplies for eventual pandemics, to create reserves of medical staff and experts and also to improve the surveillance of health risks [16]. All these measures are very important, as they highlight the great importance of the prevention in Healthcare Systems.

4 | DISCUSSION

However, according to the European Commission [15], the EU4Health programme is not just about supporting National Health Systems in order to find the appropriate solutions for fighting pandemics. It also wants to focus on various pressing health issues, like cancer treatment, anti-microbial resistance, proliferation of vaccination centers and improving vaccinations rates of the citizens. In this way, the EU4Health programme invests to a total protection of the European population.

5 | CONCLUSION

In any case, from our point of view, the transfer of knowledge between the health professionals and between the National Health Systems around the Europe and the whole world will be a key subject for the post-Covid period, in common with the interoperability of electronic systems and the digital transformation of Healthcare Systems. The leadership commitment, the continuous efforts of both national and international multi-sectoral bodies and also the global cooperation of the international community are crucial factors in tackling the pandemic of COVID-19.

Declaration of Conflicting Interests

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