REVIEW ARTICLE

CONTENTS

Current challenges in the healthcare sector and respective response measures

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ABSTRACT

Aim: To improve the classification of current challenges in the healthcare sector and specify the areas of appropriate response measures.

Materials and Methods: The work uses a systematic approach that enables the analysis of the study of individual challenges in the field of healthcare. The following scientific methods were used: analysis; dialectic; specification.

Conclusions: The classification of current challenges and mechanisms for responding to them in the field of healthcare has been improved according. Each of these areas of response to healthcare challenges is to some extent interrelated and therefore has a synergistic effect.

KEY WORDS: public health, social development, COVID-19, healthcare reform, areas of response

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INTRODUCTION

The scale of everyday priorities of the majority of the population is traditionally dominated by preserving life, ensuring safety, creating comfortable living conditions, caring for loved ones, as well as personal and professional development. For all this to become a reality, not only funds are needed, but also health – "which should be understood as reasoned judgments about the parameters of physical, mental, and social aspects of the state of a living organism, which largely determine its capabilities and place in the hierarchy among its peers" . Since health (like other values) needs to be "protected," states form and develop national healthcare systems. Despite their specificity, each system faces certain challenges that require an appropriate response. The key to this is the scientific substantiation of existing challenges in this area. The above-mentioned determines the relevance of this research.

AIM

The aim is to improve the classification of current challenges in the healthcare sector and specify the respective response measures.

MATERIALS AND METHODS

The paper uses a systematic approach that enables the analysis of the work of leading scholars who have studied current individual challenges in the healthcare sector. The empirical study was conducted in compliance with the principles of comprehensiveness, validity, and impartiality. The following scientific methods were used: *analysis* – to study the healthcare sector as a whole and its individual components; *dialectic* – to explain the relationship between social processes and challenges in the healthcare sector; *specification* – to study trends of major changes in this sector under the influence of current challenges.

REVIEW AND DISCUSSION

The generalisation of publications on this issue [1-20] and the results of the authors' own research helped to improve the classification of current healthcare challenges and respective response measures with a focus on the following criteria:

– *type* (problems, opportunities; medical, economic, social, psychological...);
– *level* (global, national, regional, local, individual);
– *origin* (internal, external; inherited, acquired);
– *field of manifestation* (healthcare, politics, economy, demography...);
– *form of manifestation* (aging of the nation, emergencies (COVID-19 pandemic), martial law, healthcare reform...);
– *consequences* (positive, negative; short-, medium- and long-term; medical, economic, social, political...);
– *response entities* (authorised public administration bodies, staff of healthcare facilities (HCF), representatives of related businesses, and the public);

– *response objectives* (prevention of threats, localisation of problems, elimination of their consequences, restoration of normal operation; utilisation and/or creation of opportunities, taking advantage of them);
– *response mechanisms* (administrative, economic, organisational, legal, psychological).

It is worth noting that most of today's challenges in the field of healthcare are interrelated, as they can:
– *condition each other: insufficient resource provision of HCF* – limited ability to generate income *(*both from the provision of paid medical services and from interaction with the National Healthcare Service of Ukraine as part of guaranteed medical care packages) – lack of funds for updating the material base of HCF and incentivise their staff;
– *overlap*: the continuous healthcare reform in Ukraine first in the context of the COVID-19 pandemic and later despite the full-scale military aggression of the Russian Federation;
– *replace one another*: interaction with the authorised public administration bodies on budget financing of healthcare facilities – autonomisation and commercialisation of their activities.

At the same time, these challenges are perceived differently by different actors. For example, the COVID-19 pandemic is mostly a significant problem for HCF, as it has led to higher costs and more complicated procedures for providing medical care (primarily due to epidemiological restrictions); however, COVID-19 is an opportunity for manufacturers of medical products (in particular, personal protective equipment, disinfectants, etc.), which have seen their revenues increase sharply due to extremely favourable market conditions. The same applies to the situation when, due to the optimisation of the healthcare network (including the closure of individual departments or HCF as a whole), patients (especially in rural areas) are forced to travel longer distances to receive medical care, while HCF in adjacent areas receive additional income. At the same time, there are many who do not recognise the lost "opportunity" as a "problem."

To minimise the negative and maximise the positive consequences, it is necessary to ensure that these challenges are appropriately addressed. In particular, when it comes to an individual, self-management is primarily used; when it comes to specific enterprises, administrative management is used; and when it comes to a particular industry/sector of the national economy, public management is used. The specifics of addressing the challenges in the healthcare sector are determined by their level: at the individual level, it all boils down to the degree of concern of the population (primarily of a particular person and his/her family) for their own health; at the local level, it is the redistribution of healthcare resources, depending on changes in the epidemiological situation and/or the market conditions for healthcare services; at the local (regional, national, global) level – targeted actions of authorised public administration bodies that respond to public demands related to existing and potential problems with public health and/or healthcare development within their competence.

The scientific community is characterised by the prioritisation of current healthcare challenges, primarily depending on their social significance. Most likely for this reason, the majority of recent publications have been devoted to the COVID-19 pandemic, which has generated four interrelated crises in this system that reveal and complicate its underlying problems and, coincidentally, point the way to reforms that could improve the ability not only to cope with possible future epidemics but also to meet the basic health needs of the population [4]. At the same time, the scientific debate has largely centred on the choice of priority areas and mechanisms for responding to the challenge posed by the COVID-19 pandemic.

The first such area was, in fact, national healthcare systems, as they were unable to cope with the abnormally large flow of "complex" patients who required immediate (and oftentimes complex) treatment. Thus governments were forced to ensure the sustainability of the healthcare system by establishing interaction in time and space between its micro-, meso- and macro-levels [3]. At the same time, governments' responses have largely focused on coordination through local health systems that rapidly adapt services and rely on expanding the roles of frontline workers [18], and have focused on recovery and reliability, but have paid less attention to sustainable adaptation, smooth scalability, monitoring, forecasting, and learning [3]. The ministries of health, together with the authorised local public authorities and representatives of HCF, were forced to take the following measures: develop, approve, and follow protocols for the treatment of patients with COVID-19; "forced to reorganise HCF" [13], which included a significant expansion of infectious disease beds, as well as the allocation of "red" (for infected patients and personnel who provided them with medical care) and "white" zones (for departments that continued to operate in compliance with the relevant requirements); approval of patient routes; provision of doctors, medical staff, and patients with everything they need (personal protective gear, medicines and equipment (in particular, the number of "oxygen points" has been significantly increased)); changes to the working conditions of doctors and medical personnel in the "red zones" (including a significant increase in their remuneration); mass vaccination of the population; introduction of restrictions on the provision of "planned" medical services by HCF; "development of Internet hospitals" [14], "further digitalisation of the healthcare sector, expansion of telemedicine and remote patient monitoring systems" [7], as well as "artificial intelligence" [14, 16] and "machine learning" [16]; organisation of training of healthcare personnel and exchange of experience... However, the effectiveness of the measures taken to combat COVID-19 was below the desired

level due to the following: insufficient resource provision of healthcare facilities; "burnout, physical and psychological disorders of doctors and medical staff" [18] due to their unpreparedness for such challenges; unwillingness of the population to comply with epidemiological restrictions; existing disproportions in the population's access to specialised medical care depending on the territory of residence, due to the lack of "insurance policies, racial and ethnic differences" [4], "belonging to marginalised, minoritized and low-income groups" [12], etc. In addition, the introduction of innovations, healthcare delivery, and other responses has been hampered by information asymmetries in crises and severe constraints on public services [15], as well as by the lack of a comprehensive, interdisciplinary understanding of how healthcare systems successfully respond to infectious agents [2].

The second area of response to the challenges posed by COVID-19 was society and the economy: allocating additional funding for the purchase of medical supplies, vaccines, etc.; providing benefits to manufacturers and/or suppliers of such goods, as well as to those businesses that have directly lost revenue due to mass diseases and restrictions; conducting public awareness campaigns on the need for vaccination; ensuring compliance with epidemiological requirements at enterprises and public places; imposing restrictions on the movement of the population and medical goods between territories...

The third area of influence is responding to "combined" challenges: "the dual epidemic of COVID-19 and Ebola in the Democratic Republic of the Congo" [14], i.e. situations where it is necessary to respond to challenges that are superimposed on each other; "the needs of modern elderly people" [20], which is consistent with the global trend of "ageing of nations"; health needs of civilians (women, children and adolescents) during the military conflict in Syria [2], which implies the need to address numerous medical, social, humanitarian and other problems (in particular, the destruction of HCF, reduction of its staff...).

It should be agreed that "the COVID-19 pandemic should push governments and scientists to reform national health systems" [4], ensuring their "resilience to such and similar challenges" [19], which involves anticipating threats and securing resources, responding appropriately to uncertainty and anticipating side effects, monitoring critical indicators to assess progress, and learning from practice [10]. This demands adherence to the following principles: "capture, analyze, and act on information in real-time; innovate, try new methods, and learn quickly from mistakes; incorporate anticipatory and proactive measures; possess a flexible organizational structure; maintain open lines of communication within and across functional units; respect personnel at all levels; maintain sufficient personnel, supplies, and resources to effectively respond to the crisis" [5]. Ultimately, all this will provide the population with access to quality healthcare, and the staff of HCF with appropriate (in particular, safe) working conditions and a fair level of pay.

CONCLUSIONS

The classification of current challenges and mechanisms for responding to them in the field of healthcare has been improved according to the following criteria: type, level, origin, area of manifestation, form of manifestation, consequences, responders, response objectives, and response mechanisms. Each of these areas of response to healthcare challenges is to some extent interrelated and therefore has a synergistic effect. The continuation of scientific research on this issue will contribute to the further development of the national healthcare sector, e.g., by improving the public management of this component of the national economy under martial law.

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CONFLICT OF INTEREST

The Authors declare no conflict of interest

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