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CURRENT CHALLENGES FOR THE HEALTH CARE SYSTEM DUE TO THE LACK OF MEDICAL STAFF AND THE CONTINUOUS PROFESSIONAL DEVELOPMENT OF DOCTORS

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ABSTRACT

The aim: Research of the ways of adequate solving of problems with understuffed healthcare system and problems with continuous professional development of doctors.**Materials and methods:** We have used a official statistical data for the period from 2009–2020 years. This data was analyzed with usage of systemic approach and statistical epidemiological analysis.**Results:** According to the data from Ministry of Health of Ukraine during the first year of the pandemic (2020) the quantity of our doctors has diminished by 6.9 thousands, and quantity of nurses – by 22,5 thousands which is much bigger deficit then in period of 2018–2019 years. The insufficiency of pediatric doctors in Ukraine has reached 1000 vacancies, general physicians – 1700, family doctors – more than 3000 vacancies, surgeons – more than 950 vacancies. It is also important to involve medical experts and medical associations and unions in the process of accreditation and licensing of providers of continuous medical education.**Conclusions:** Existing deficit of medical personnel should be replenished by increasing of medical education of students in medical universities and colleges funded by government. Existing system of continuous professional development of doctors requires a lot of changes (additional activities, new technologies) which must be implied with the help of professional medical associations and unions.**KEY WORDS:** medical staff, continuous medical education, COVID-19

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INTRODUCTION

There is a great insufficiency of medical personnel in Ukraine due to pandemic of Covid-19, war conflicts and natural disasters. No doubt that such situation has a great influence on people's access to the medical help, especially in countries with low or middle low economy [1, 2]. Emergency care and pediatric healthcare system are suffering most from those factors. According to the WHO analysis, financial investments of the government are crucial for efficiency of healthcare system in case of different emergency situations and pandemic COVID-19 [2].

Also it is important to establish a adequate system of continuous medical education which includes medical and non-medical trainings, communicative and management skills [3, 4]. Such necessity was declared by doctors themselves. But quite often such continuous medical education is limited by insufficient of time or financial resources of doctors in Ukraine [5].

In European countries continuous professional development of doctors (CPD) is strongly supported by government laws. It is important because the quality of CPD has a direct influence on quality and accessibility of medical help in the country.

A positive progress in development of continuous professional development of doctors in Ukraine was in its connection with

European accreditation council of continuous medical education (EACCME). Such direction of development of a system of continuous medical education must be discussed with professional medical associations and different unions of Ukrainian medical doctors for creating a common policy for establishment and providing a proper quality of continuous medical education.

THE AIM

Research of the ways of adequate solving of problems with understuffed healthcare system and problems with continuous professional development of doctors.

MATERIALS AND METHODS

We have used a statistical data from Center of medical statistics of Ministry of Health of Ukraine for the period from 2009–2020 years. This data was analyzed with usage of systemic approach and statistical epidemiological analysis.

RESULTS

Ukraine take a 38th place in European region by the level of sufficiency of doctors and nurses in hospitals [6]. This situ-

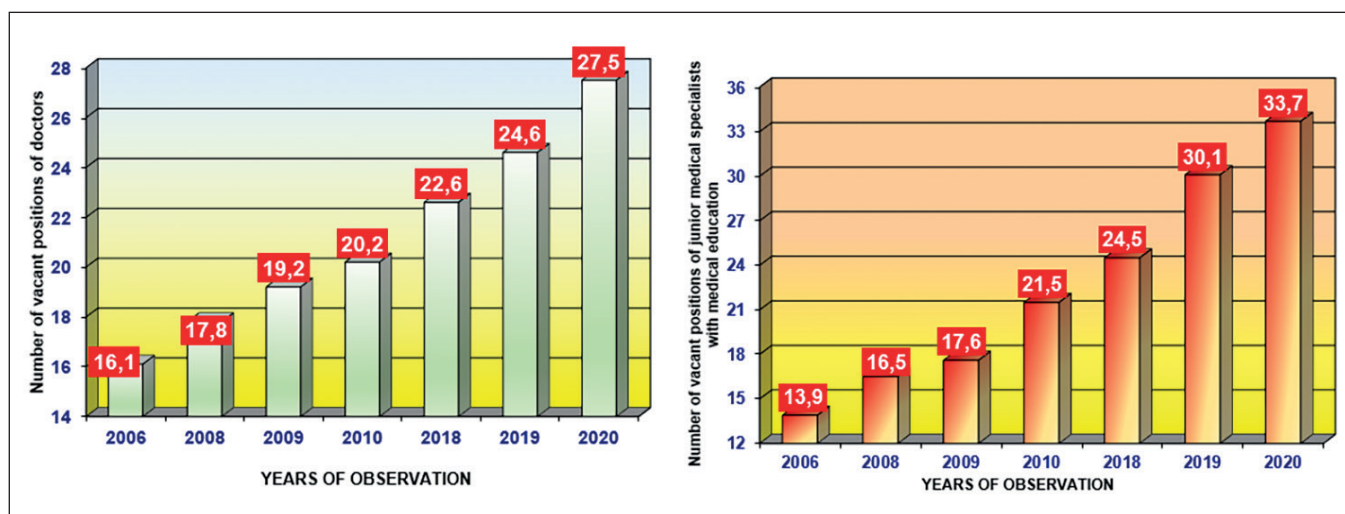


Fig. 1. Increasing of personal deficiency of doctors and nurses in period from 2006 till 2020 (in thousand).

ation is engraved with decreasing of education of medical personnel in medical universities and colleges throughout last 5 years. It is explained by creation of additional difficulties in admission of medical students in universities for so-called «improvement of quality» of future doctors.

According to the data from the center of medical statistics of Ministry of Health of Ukraine on 31.12.2020 we have 147361 doctors and 273526 lower medical personnel working in our healthcare system [7]. But during the first year of the pandemic (2020) the quantity of our doctors has diminished by 6.9 thousands, and quantity of nurses – by 22,5 thousands which is much bigger deficit then in period of 2018-2019 years (pic. 1). Statistical gap between existing vacancies and physically existed working medical workers is 34537 persons. Quantity of medical staff working additional medical vacancies is 7004, with coefficient 1,1.

The level of sufficiency of medical doctors on 10,000 of population is 35,6, which is decreased on 1.4% in comparison with 2019. The level of sufficiency of nurses in Ukraine is 66.0 on 10,000 of population (in 2019 – 70,9). Sufficiency of working medical personnel in Ukrainian hospitals is 81.0% which is less in comparison with data from 2019 (82,7%). This tendency is describing a decreasing of medical personnel in Ukrainian hospitals very clearly. The same tendency also includes decreasing of nurses to 88.5%, which is less for 0,7% in comparison with data from 2019.

The quantity of physicians, who are directly involved in providing of medical care for the population (excluding administration, dentists, statistical workers) was 100436 or 24,3 on 10000 of population (in 2019 – 24,7). Such level of quantity of physicians is quite similar to same level in USA, but lower than the level in Europe. For example at 2017 a quantity of doctors in Sweden and Finland was nearly 33 for 10000 of population, in France and Germany – 34, in Italy – 37, in Norway – 38, in Latvia – 31, in Great Britain – 23 and in Poland – 20 [7].

The insufficiency of pediatric doctors in Ukraine has reached 1000 vacancies, general physicians – 1700, family doctors – more than 3,000 vacancies, dentists – more than 1,000, surgeons – more than 950 vacancies.

The most difficult situation with understuffed hospitals is in the east cities of Ukraine, where still exists a danger of a war conflict. This has led to a decreasing of access and quality of medical care in those cities.

Coefficient of comparison in quantity of doctors and nurses in Ukraine is 1:1,9, which is lower than the same coefficient in European countries (1:2,4). This could be easily explained by decreasing of education of students and migration from cities, ravaged by war.

In 2020 in medical universities of Ukraine were studied 56.4 thousand of students. Only 23.5 thousand of them were sponsored by government and 32,9 thousand were funded by private institutions or persons (mostly dentistry and pharmacy faculties). In 2020 from Ukrainian medical universities where graduated 11.8 thousand of young specialists (in 2019 – 11,3 thousand). In 2021 only 160 students where accepted at the first course of pediatric faculties of Ukrainian medical universities.

In 2020 in specialized medical colleges were studied 49 thousand of students, which is less then in 2019 (52 thousand). In 2020 where graduated only 15.6 thousand of nurses (in 2019 – 16,8 thousand) [7].

DISCUSSION

The direct citation from article “Personnel resources of healthcare system of Ukraine. Systematic analysis. Project USAID”: “The reserve of the students of such specialties as “general medicine” and “nursing” is insufficient for sustaining quantity of workers in healthcare system when old doctors will be retired. There is only one currently studying student for three retired doctors. The same situation exists in case of nurses: one student per 4 retired nurses. On other hand, we are observing an increased quantity of nostrification applications in our medical universities for the specialists who has departed in foreign countries [8].

So we can come to conclusion that current status of healthcare system in Ukraine has such features:

- Decreasing quantity of walking doctors and uncontrolled immigration and retirement of medical specialists;

- Decreasing of prestige of medical and nursing specialties;
- Decreased amount of students in medical universities and colleges of Ukraine;
- Decreased amount of doctors and nurses in rural regions;
- Increased imbalance between different medical specialties and quantity of doctors and nurses in big cities and rural regions.

All those problems with additional negative influence from pandemic situation with Covid-19 and war conflict have become a great danger for our state. They should be solved by raising a prestige of medical specialties, increasing salaries of doctors and nurses and proper modern continuous medical education.

According to the data from WHO, general quantity of medical care workers in European region was 12.7 million. Analytical prognosis for 2030 predicts an increasing of this quantity to 16.8 million of medical care workers [9].

Answering the challenges of pandemic situation, some countries from Organization of economic cooperation and development (OECD) already created different policies which allow facilitated migration and accommodation of medical workers from other countries to cover their deficiency in medical personnel. But such policies do not answer the question about functioning of Healthcare systems of countries from where is ongoing emigration of doctors.

Without stabilization of deficiency of medical personnel and increased amount of medical students in medical universities and colleges of Ukraine, we cannot create a proper and accessible medical care for our people. Also it would be very hard to provide proper medical care in case of different pandemics or any other emergency medical situations.

Current pandemic situation due to Covid-19 has created different difficulties for education of medical students because of necessity of distant education, but in the same time it promotes a development and implementation of modern technologies in educational process in medical universities of Ukraine. During the time of pandemic situation with Covid-19 medical universities and colleges have established new technological approach for distant educational process [10]. But level of education of young medical specialists will be quite low without proper medical practice and offline practical lessons [11]. It is unacceptable in our age of modern medical technologies and high expectations of our people for proper adequate medical help.

There are different approaches to continuous medical education throughout the world [5,9,12,13]. In Ukraine and in some other European countries doctors could be accepted for prolongation of their license only after accumulation of necessary quantity of points (credits) of continuous medical education. Search points are received by participation of doctors in different educational activities, medical conferences, educational medical courses etc. All those activities are needed for increasing the proficiency of doctor and his level of competence in his specialty. In Ukraine this process is controlled by the Ministry of Health, while in Europe it relies on professional medical associations and unions.

Modern continuous medical education must be individualized and directed on self-improvement of a doctor. According to the data from Ministry of Health of Ukraine (2019) the doctors were interested mostly in such educational activities as congresses, conferences, seminars, simulation trainings, clinical stages, distant online courses and courses of thematic improvement.

No doubt, that the main part of continuous medical education relies on individual education and self-improvement of a doctor, which must be connected with his own necessities and interests in medical education and acquiring new qualifications and competencies. That's why doctor's feedback is quite important for continuous medical education providers to create a proper medical content [12, 13].

Another part of continuous medical education is connected with necessities of hospitals (opening of new units, acquiring of new medical technologies).

Modern continuous medical education includes a lot of new modern forms of studying such as master-classes, simulation trainings, thematic schools, seminars, discussion clubs, and long educational courses with involvement of distant digital technologies. There is also a possibility to study with the help of internet resources, different web channels, YouTube channels etc [14]. Modern popular educational courses may include technology of modeling of situations [15].

We must admit, that part of this educational activities are funded by doctors themselves which has its own influence on a motivation for participation in such activities of continuous medical education.

We have come to conclusion that the most important thing in continuous medical education is its practical efficiency without necessity for mindless collection of CPD/CME certificates. That's why accreditation and licensing of different providers of continuous medical education is quite necessary.

It is also important to involve medical experts and medical associations and unions in the process of accreditation and licensing of providers of continuous medical education. Plus, such evaluation must include different other factors such as individual self-evaluation, checking of CPD portfolio and examination of practical skills of a doctor.

CONCLUSIONS

1. Existing deficit of medical personnel should be replenished by increasing of medical education of students in medical universities and colleges funded by government.
2. Existing system of continuous professional development of doctors requires a lot of changes (additional activities, new technologies) which must be implied with the help of medical experts and representatives of professional medical associations and unions.

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