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Possibilities of Nursing High Education in the Context of COVID-19 - Reality and Perspectives

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Abstract

Aim/objective: The Covid-19 pandemic has swept the world and affected our daily life in various ways. While this impact is often negative, it has pushed some areas for development, overcoming challenges, and generating new opportunities. This article reviews the problem, its triggers, consequences, and perspectives. **Background:** The education sector faced a challenge at the beginning of the pandemic of maintaining security and high-quality teaching simultaneously, especially since there was no online teaching experience. Healthcare faculties were at the forefront of such difficulties, as the training included not only theoretical but also simulation and practical teaching, the implementation of which was initially unimaginable. **Design and Methods:** The article reviews and describes the global situation through secondary data analyses published in SCOPUS and PubMed from 2020-2022. Also, an analysis of survey results conducting in May 2020 at the University of Georgia (UG) School of Health Sciences. **Results and Conclusions:** To formulate the main difficulties will be taken list: teaching, research, and communication. Along with education, the challenge was increasing Internet usage, which in many cases led to delays in the teaching-learning process. Creating virtual platforms and developing online pedagogy is undoubtedly a significant pandemic challenge.

Keywords: Nurse, Education, Nursing Program, Covid-19 Challenges, Nursing Education.

Introduction

The COVID-19 pandemic affected the development of many fields. The education system was no exception. If it is possible to divide the influence to a greater or lesser degree, there is no doubt that the educational programs in the health sciences are one where the impact and delay have occurred to a high degree. According to a survey completed by the International Association of Universities (AIU), which analysed the results of a survey of 500 universities in 112 countries, 43% of universities said about health care that the curriculum requires physical presence and is greatly affected by pandemics, while journalism, social sciences, mathematics, and statistics was -3%. (AIU, 2020).

Nursing education delays have faced the same challenges and problems around the world. According to an International Council of Nurses(ICN) survey, 73% of member-association countries reported delayed undergraduate nursing education. In addition, at the pandemic's beginning, many schools stopped face-to-face teaching and teaching. (Jennifer Chips, 2021). The same thing was happening in Georgian educational institutions, as well as in other countries.

Distance learning has been and continues to be a challenge to the education system, although this challenge has become widespread and, unfortunately, forced due to the Covid-19 pandemic. Information technology development facilitated online education's story long before the pandemic (Natriello, 2005). In 1998, Bulen noted in his study that students like the opportunity to evaluate other students' ideas and comments while learning online, which positively affects their involvement in the learning process. However, Knapper noted in his 1988 paper that compared to students studying in a traditional setting, students in distance learning have less motivation to learn and have difficulty developing learning habits. Lecturers' knowledge, skills, and attitudes are fundamental in distance learning. (Owens, J.&, Etc., 2009). In an online environment, teachers need to interact with students to achieve student success and teaching satisfaction. However, it is clear that online learning during the Covid-19 pandemic is a stalemate, compounded by a lack of experience in distance teaching; it is not easy to conclude. Learning the technologies, understanding the teaching principle, and developing new methodologies put the teachers in a stressful environment and carry risks regarding teaching-learning quality. It is important to note that nursing teaching includes both theoretical and simulation and practical training. Therefore, it is impossible to carry out fully distance learning in all directions.

The main focus of the universities since covid-19 pandemic inception was to develop a model of learning that would enable all students to acquire knowledge. At the same time, It was necessary to take care of the safety of the students and staff, breaking infection transmission by staying at home, and less in contact. Online and e-learning have been introduced in universities

worldwide and used by various digital platforms. All this required not only the development of teaching-learning skills but also the study and refinement of digital skills of students and professors. The change to online learning due to the pandemic was a reason for the suspension of nurse-student work in the clinics and full-fledged clinical practice. Transitioning to a new teaching model has posed many challenges for educational institutions. The main questions were maintaining qualifications, education and training quality, and achieving outcomes.

The first year of the pandemic declaration was universities' most significant challenge in recent academic years. Added to this is that the Covid-19 pandemic made the lack of nurses more apparent. The filling of medical staff in clinics, especially nurses, has increased educational institutions' responsibility, as accredited nursing programs are responsible for training qualified, competent new staff. Higher institutions have been and are facing a significant challenge. Providing nurse students and alums with clinics without reducing their credibility (Jennifer Chips, 2021).

The significant negative impact of the pandemic was on clinical practice. Learning from the natural clinical environment has shifted to virtual space. Based on a survey conducted by the International Council of Nurses (ICN), in the 20-21 academic year, 46% of countries cancelled or temporarily suspended clinical practices for nursing students. Furthermore, 41% said the clinical course was limited to specific regions (territories). For example, in Western Cape Nursing School, students could only undergo clinical practice after a loss of five months of clinical study time (ibid).

It is important to note that during the Covid-19 pandemic, integrating clinical skills and developing necessary competencies became the most extensive learning challenge for nursing programs in colleges and universities. After the transition to online teaching, nursing school teachers faced a shortage of training materials, mainly video resources. By topic, most of them needed to be updated according to the new guidelines or did not exist. Consequently, it increases the risk of competence in clinical skills could not being achieved. (Agu & Etc., 2021)

Because students need to achieve clinical skills, which is impossible in a clinical setting, it became necessary to change the curriculum to complete students' clinical practice. Changing included bringing the simulation environment as close to reality and enhancing simulation learning. The National Board of Nursing Councils of the United States (NCSBN) is reviewing legislation and clinical practice standards to make recommendations for greater use of high-precision simulation space, allowing students to replace clinical practice with a virtual experience. In contrast, students will spend more time gaining clinical experience in clinics in the future. (ibid).

The negative impact of the pandemic is increasingly affecting developing countries. Lack of nurses affecting clinical teaching, lack of technology for online training, lack of material and human resources required for simulation learning, lack of access to the internet, lack/unpreparedness of training video materials, and financial obstacles - this is an incomplete list of challenges affecting study processes in the universities of developing countries. It means that recommendations for improving teaching-learning do not 'fit all' (ibid).

A lot has changed compared to today's reality and two years ago. First of all, reducing the feeling of stress and insecurity in both students and professors has enabled us to plan and implement teaching more wisely. Of course, this made the availability of vaccines and the availability of vaccination more information about the virus, the means of an unlimited number of tests, and PPE.

Another challenge of the pandemic period that affected the education system was assessment and testing. According to a survey performed by the International Association of Universities (AIU), which analysed survey results from 500 universities in 112 countries, three-quarters (72%) of universities were able to take exams during the pandemic, using new assessment criteria for online / distance exams. Seventeen per cent were able to take the exams in the usual way, 7% were able to take the exams in part, some rescheduled, and only 4% postponed or cancelled the exams. It is also noteworthy that 60% of the universities participating in the study are public, and 40% are private universities. Of these, 68% have more than 10,000 undergraduate and graduate students 47% have up to 5,000 students.

In addition to teaching, the pandemic has had a greater or lesser impact on the internationalisation of universities. However, there were no significant negative results in this direction. In any case, no significant change not planned/ implemented. The delay affected most of the exchange programs. Collaborative meetings and conferences were mainly moved to the online space and held in the form of webinars.

One issue is that research that has experienced delays has affected research activity almost globally during the pandemic, with nearly two-thirds of universities surveyed reporting that investigation has been suspended or delayed. Of course, the reason is common - pandemic, but if we look, they are more or less different: 71% of universities cite border closures, travel bans, and delays in meeting planning as reasons; 66% of the surveyed universities stated that it was impossible to perform fieldwork and engage research; Interesting, that 61% of HEI explained that mainly engages the staff in training activities and curriculum development. In addition, 58% reported that the team did not have access to research laboratories and equipment. Reducing research activities is a common problem for educational institutions globally.

Although this is more pronounced in Africa and the Americas than in Europe, most higher education institutions have delays. (AIU, 2020).

Virtual exchanges and joint online learning, internationalisation and improvement of the curriculum, mobility of academic staff, and training of academic and administrative staff in global competencies are discussed and changed during the pandemic. Nearly every country has experienced this impact to varying degrees. It should say that it enhanced the curriculum in the fields listed above. On the other hand, the covid-19 pandemic negatively affected exchange programs and research. Nevertheless, it should note that it is in the field of healthcare that the research interest has increased. Let us analyse the "pandemic era" 's positive and negative effects on the education system. We can safely enunciate that the pandemic has stimulated the growth of the importance of virtual and online learning and the internationalisation of the curriculum. There was more opportunity for frequent contacts in terms of international communications, problem sharing and exchange of experience, and active and passive involvement in various webinars.

Methods

The article is secondary research and describes the global situation through secondary data analyses. The primary source of the article was the second edition of the Global Survey 2022 published by the Association of International Universities (AIU). This article analyses the problem, its triggers, consequences, and perspectives in the Global based on the research and recommendations made by the publications in 2020-2022 and an overview of various factors that affect nursing programs and the educational process. Choosing primary sources was based on the keywords and topics of the articles published in SCOPUS and PubMed since 2020. In addition, a descriptive analysis of the survey of lecturers and students of the University of Georgia (UG) School of Health Sciences, conducted in May 2020, was also used. Within the framework of the study were three target groups - English-speaking educators of the School of Health Sciences, international students of programs; students of Georgian language programs of the School of Health Sciences; professors and teachers involved in the implementation of educational programs within the School of Health Sciences. The study used quantitative methods of social research - the internet survey technique. The research instruments were a quantitative research questionnaire that included closed and open questions, collected through the Google Forms program. Links to the questionnaire were distributed through the mail and MyUG electronic system and were active for ten calendar days. The school's quality assurance staff prepared the questionnaire with the active participation of school and department heads. 270 out of 1094 students of English-language educational programs (medicine, pharmacy, nursing, dentistry) took part in the

survey. (Confidence interval - 5, Confidence level - 95% required number of answers 285); 61 out of 258 students of Georgian language educational programs. (Confidence interval - 5, Confidence level 95% required number of responses 155); 83 out of 124 lecturers (Confidence interval - 5, Confidence level 95% of necessary answers quantity 94).

Results

Georgia, as around the world, has taken into account the World Health Organization (WHO) recommendations and acted upon them since the pandemic was declared (PHEIC, 2020). Online study at the University of Georgia started in the spring semester of 2020, including clinical practices. With a 3-month delay, it was possible to enter the clinic and undergo clinical practice in the natural clinical field. The School of Health Sciences conducted a quantitative survey among Nursing teachers and students with online questionnaires in May 2020. The survey should identify several critical issues regarding the effectiveness of remote teaching. One of the main challenges named by the students was linked to the timetable of the online classes, the online platform for remote learning, the relevance of the visual materials used instead of practical lessons and the issue of students' access to good internet. At the same time, both the students and professors remark that the positive side of remote learning is saving time and the option of having a lecture recorded. In the case of maintaining a remote teaching regime, it is essential to have theoretical classes online while practical – on-site. Although 96.3% of surveyed international students were involved in the e-learning format (100% of surveyed Georgian students and lecturers were involved), and according to the teaching, 3.7% did not participate in the process, it is important to note 4 main reasons: they did not have information about the e-learning format offered by the university; does not consider e-learning to be a suitable learning format; No payment of tuition fees and the e-learning format is less costly; No internet connection and-or weak internet connection.

Since the beginning of the pandemic, it is already the 6th semester. What has changed throughout this period at the University of Georgia? First, there was much more clinical practice than the distance in each semester. Almost all clinical trials were conducted in the clinical space last two semesters. Most importantly, students' attitudes toward clinical practice have changed. If they were sceptical at the beginning of the pandemic, they were careful to go through training in the clinic because students did not think it safe. Now they are asking to enter the real clinical space and take experience. Such "self-confidence" allowed them to be fully vaccinated, gain more awareness about Covid-19, understand the reality and live with the virus, and, most importantly, analyse their profession's importance and priority.

Discussion

Soon after the emergence of the Covid-19 pandemic, new articles and research have been continuously published in academia addressing the challenges posed to nursing teachers, students and Nursing education in general during the spread of the new virus. As the pandemic period became a "new life norm," nursing training had to readjust and find new methods of teaching in different parts of the world. While the majority of the articles discuss the main obstacles experienced by both the nursing teachers and nursing students, they also invite us to debate how we can learn from the current reality and reinvent Nursing education to meet the needs of the population better.

Their article, *Nursing Teaching in Covid-19 Times: How to Reinvent in This Context?* Costa et al. (2020) discuss the impact Covid-19 pandemic on Nursing education in Brazil. According to the authors, right at the beginning of the virus outbreak, nursing tutoring immediately shifted to "emergency remote teaching", which gave rise to a new set of problems. One of such issues is the link between social inequalities and students' unequal access to online education. Because of this reason, the authors believe that Distance Teaching (DT) might have increased the number of school dropouts (Costa et al. 2020, 1). Other than that, although numerous countries in the world adopted the DT modules, applying the existing academic literature to the new way of teaching became quite challenging. Despite the problems caused by the pandemic, the authors pose the following questions: how can Nursing education be reinvented to fit the new global reality? What can we change or maintain in our current way of training Nursing students? Costa et al. propose to address the gap in remote teaching and make it more inclusive and accessible to students from any social setting.

Similarly to the abovementioned article, Dewart et al. (2020) also delve into the unique concerns of the nursing teachers and students in the time of the Covid-19 pandemic in Canada. According to their article, nursing educators are responsible for ensuring their students' safety as they may be directly exposed to the virus and risk their and their family's health. At the same time, because of the restricted clinical practices, many students were several courses away from completing their nursing degrees. While the pandemic poses multiple challenges to Nursing education and the health system in general, it is indispensable to come up with innovative methods to adapt the learning model to the new reality and think of long-term solutions to the occurred issues. As the Covid-19 pandemic is still ongoing, the authors urge universities and educators to learn from the past lessons concerning patient care, social justice, leadership and ethics.

In their article *Nursing education: challenges and perspectives in times of the COVID-19 pandemic*, Lira et al. (2020, 2) outline several weak points

of Nursing education regarding the Nursing students: lack of personal protective equipment; health insurance; supervision of the preceptor; adequate development of all the crucial skills required by the program. According to the authors, these challenges did not only temporarily emerge during the Covid-19 pandemic but also present longstanding problems that will remain even in the post-pandemic era. For this reason, it is indispensable to consider the adoption of educational technologies not in the form of emergency remote teaching, as it was during the pandemic, but in the form of intentional remote education, which is centred on the quality of learning. Furthermore, returning to the new normality has been associated with stress and anxiety for the students, as they fear getting infected by the virus. Such a study in Israel (Savitsky et al., 2020) suggests offering students new teaching strategies and supporting them during these times.

While it is crucial to critically analyse the issues related to emergency remote teaching during the pandemic, equally essential to consider the challenges of post-pandemic Nursing education. Carreño-Moreno (2021) talks about the problems that emerged from the suspension of students from on-site practical learning for about a year. While it posed multiple challenges to the Nursing educators and students, Carreño-Moreno also discusses what returning to on-site education can mean for the students in regards to their mental and physical health. The author highlights the importance of rethinking the traditional forms of Nursing training, adjusting the curricula to the new reality and developing more flexible educational methods focused on problem-solving and critical thinking. Moreover, a study based on the qualitative research conducted among Nursing students by Woo et al. (2021) in Singapore indicates that students wish to maintain some innovative teaching techniques that emerged during the Covid-19 pandemic, such as remote learning. While face-to-face teaching is slowly coming back to universities across the world, it is crucial to learn from the lessons and adopt technology that can address the gaps in Nursing education.

From different periods of studies analysis, distance learning has both positive and negative effects on higher education. Even though years, the result of this impact is almost the same since the challenges do not change. It should be noted, however, that it became more complicated during the pandemic as it affected nursing education and health sciences. Both online and hybrid learning put at risk and doubt the quality of knowledge and the achievement of results. The effect of the COVID-19 pandemic on the education system is apparent. The degree and impact of influence may vary according to the development of the countries. However, change and impact on the learning process have spread worldwide. Therefore, we can say that the smooth implementation of learning is partially overcome. However, the main challenge is still on the agenda, as the clinical practice component is still

problematic. Two years have passed since the declarative of the pandemic, the prospect of its completion is still in doubt, and going through practice in the clinical space is still questionable.

The Covid-19 pandemic was undoubtedly a significant challenge for the education system. Due to the specifics of the training, the areas of health care, including nursing programs, are particularly challenging in situations and tasks. When we talk about the impact of the Covid-19 pandemic on education, particularly on the teaching and learning of nursing students, we must take into account that there was no experience other than face-to-face teaching in this direction. In the beginning, it was unthinkable. If we look at the "pandemic era" of two years of experience, its impact on the education system can be divided into positive and negative. Undoubtedly, the positive aspects should be considered as the acquisition of technologies and skills training, the refinement of study materials, and the development of students' critical thinking and discussion skills. However, the negative affected an essential component, clinical teaching. The universities also had a positive impact, strengthening the simulation teaching as much as possible and bringing the simulation environment closer to reality.

It has been challenging for universities in developing countries to overcome the difficulties caused by the pandemic. On the one hand, the maximum mobilisation to maintain the quality of teaching. On the other hand, inexperience in dealing with the existing challenges puts them in a difficult situation. Regardless of the country's development, students should receive an adequate education.

Despite the existing "benefits" that positively solve new challenges given to universities, there are many questions. It mainly concerns the quality. How successful were the past two years? Has the learning curve been achieved to the same degree as before the pandemic?

Conclusion

After two years after the start of the "pandemic era", the problems remain, which raises a new challenge. In turn, the necessary search for solutions leads to the cyclicity of the issues. Although the problem of conducting clinical practices in the clinic is resolving, a new one has emerged related to regulations. The clinic's practice conditions, limitations, and attitude have changed. Restrictions are on the number of students to comply with Covid regulations. Patient safety concerning Covid-19 and patients' attitudes towards students, especially international students.

The biggest challenge that has unfortunately been being and probably will be the shortage of nurses. Unfortunately, it is affecting not only the clinical sector but also the education sector. The lack of nurses hinders the implementation of nursing education, as there is also a limited number of nurse

educators. In addition, the lack of teachers limits the number of students admitted to nursing programs.

Teaching, assessment, research, and communication - are the list of the issues and main difficulties. Along with learning, the challenge was increasing Internet usage, which in many cases led to delays in the teaching-learning process. What will happen next, tomorrow, the day after tomorrow? It is a question on which the answer is still open. Creating virtual platforms and developing online pedagogy is undoubtedly a significant pandemic challenge. Unfortunately, even two years after the pandemic started, we still do not have the answer to the question is when will we return to "normal" usual life? However, one is clear, and this is the fact that the Covid-19 pandemic made the problem of lack of nurses more apparent. The filling of medical staff in clinics, especially nurses, has increased educational institutions' responsibility, as accredited nursing programs are responsible for training qualified, competent new staff. Therefore, should need to learn to coexist with really pandemic challenges and continue strengthening the program so that the result is achieved with the university's high reputation maintained by preparing potentially qualified nurses.

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Conflict of Interest

There is no Conflict of Interest. The article protects the copyright of the used literature. The style is preserved; the author indicates the paraphrase used. The source information is not distorted, nor are the authors compromised.

Author contributions

Authors share copyright equally. She contributed to finding relevant publications, summarising and interpreting/analysing them, revising critically for important intellectual content, and writing the manuscript. By author's final approval, the version was prepared for publication.

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