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Master Thesis

Topic: **«EASE OF ACCESS TO HEALTH CARE SERVICES BY FOREIGNERS IN KYIV, UKRAINE »**

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Ease of Access to Healthcare by Foreigner Students in Kiev

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ABSTRACT

While international students form an increasing population of higher education students in Ukraine, there is limited empirical evidence about their health services utilization. The study aim was to investigate healthcare access among a group of international students studying in Kyiv city and identify potential barriers that affect full healthcare utilization.

Data from a total of 20 international students from foreign countries was studied. The study was conducted from December 2021 until June 2022.

Of the study population, 80.6% accessed the general practitioner (GP), 40% accessed the student health centers, and 11.4% were admitted to the hospital at least once. About 80% of international students reported changing their views to access healthcare more because of the COVID-19 pandemic.

Lack of awareness of healthcare support systems, perceived stigma associated with mental health services, and language barriers were the main barriers affecting healthcare access by international students. Study findings indicate the need for education of international students on available healthcare, targeted health promotion, and training of health providers on effective communication.

Keywords: *health, international, student, Kyiv, healthcare, Ukraine*

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LIST OF ABBREVIATIONS

USD: United States Dollars

OECD: Organisation for Economic Co-operation and Development

ANOVA: Analysis of Variance

BMC: BioMed Central

GP: General Practitioner

GDP: Gross Domestic Product

WHO: World Health Organization

NSHU: National Health Service of Ukraine

CI: Confidence Interval

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INTRODUCTION

Actuality of the Research

The importance of this research is to examine and study the healthcare systems of Kyiv, the foreign students in Kyiv for the various educational pursuits and the relationship between these aspects. More precisely, to target how reliable healthcare services can be provided and accessed by these foreign/international students in Kyiv. What policies are established in place to ensure a suitable study environment for the international students studying in Kyiv, Ukraine.

Ukraine, one of the largest states formed on the rubble of the Soviet Union, is widely perceived as a country that has lost its opportunities. Being devastated by corruption, it shows incapable to modernize and enter the economic path of sustainable growth. Similarly, in the health care system no deeper reform efforts have been taken in the entire post-soviet period, leaving the system in bonds of ineffective solutions taken out of the Soviet era.

The healthcare sector is responsible in playing a very important and vital role in seeing that these provisions are met, in order to keep the country's name at high echelon.

Background

In 2011, 4-year-old Christina Babiak from Kherson Oblast was diagnosed with congenital aplastic anemia and needed an urgent bone marrow transplant. As such a treatment was only available abroad, Christina's parents appealed to the Ministry of Health, which granted them almost USD200,000 for Christina to receive the procedure at Debrecen Scientific University in Hungary. Christina's parents were later told that the procedure was to take place at a municipal clinic in Miskolc that was affiliated with the Debrecen Scientific University and they reluctantly agreed to the treatment. It turned out that the clinic and university were not affiliated at all and Debrecen Scientific University was in fact not equipped to perform pediatric bone marrow transplants. The ministry had employed a mediator to arrange the treatment and handle

the funds. The clinic received approximately USD160,000 and the rest went missing. Three days after the botched procedure Christina died [1].

There is no shortage of literature describing the failure of the Ukrainian health system to provide for its citizens. Historically, modern Ukraine's political system has been described as a kleptocracy and earned Ukraine the title of being "the most corrupt country in Europe". In the health sector, rampant corruption has resulted in poorly maintained, funded, staffed and supplied health institutions, and high levels of out-of-pocket and informal payments across all levels of care. Unsurprisingly, Ukrainians were recorded as having the second lowest life expectancy compared to all other European countries after Moldova [2].

In addition to corruption within health institutions, the medical education system was also infamous for corruption schemes, including students paying bribes for study entry, exam results, and qualifications. According to OECD, unlike other higher education institutions, applicants to medical universities did not have to complete so-called External Independent Testing, which was successfully used in other university subjects to ensure students were accepted based on independently verified merit. Rather, applicants to medical universities wielded their social and financial capital in order to be accepted to the coveted, state-funded positions at medical universities by paying bribes to those responsible for admissions [3]. This problem also traveled beyond borders, as Ukraine educated many medical students from other countries, including India, Nigeria, Ukraine [4].

Chapter 1

LITERATURE REVIEW

1.1 Introduction

Kyiv is the capital of Ukraine, one of the largest states formed on the rubble of the Soviet Union. Its most recent history is marked by a series of dramatic events and drastic turmoil. Currently, Ukraine is widely perceived [5] as a country that has lost its opportunities. Highly industrialized, with all the advantages allowing it to create also a modern agricultural system, it has become stagnant in the transformation process, making virtually no step forward for the entire period of transformation. The country is devastated by corruption [6], and all attempts to modernize it and push it to the economic path ensuring competitiveness in global markets are hampered by the interests of private individuals who have appropriated a large part of the economic system in the course of privatization process carried out in an unfair way. Hale and Orrtung [7] stressed that plutocratic oligarchs, and the economy patrimonialism have strong latent influence on the lack of reforms in Ukraine and constitute fundamental contextual challenges.

Currently, the country is characterized by considerable differences in the level of income and tensions between supporters of close ties with Russia, pro-Western forces and nationalists. The armed conflict, or ‘hybrid war’, on the territory of the eastern regions of the country, the annexation of Crimea by Russia and the internal tensions that we observe over the past few years, has deepening the difficult economic and social situation of the country [8].

As in the Ukrainian economy the changes occur in a slow and uncontrolled manner, similarly in the health care system no deeper reform efforts have been taken in the entire post-soviet period. As a result, from the legal standpoint the Ukrainian system is so far formally functioning in accordance with the organizational assumptions of the Semashko model, with central budgetary financing, lack of pro-effective solutions in the financing of medical services (global budgeting of health units), hierarchical organizational structure, and dominance of public sector. In the context of transition, it

is expected that the European post-communist states would develop health insurance model, eradicate informal payments and transform the outdated highly centralized health care system [9]. While the other post-communist countries undertook an effort to meet these expectations, the Ukrainian health system remained in a virtually unchanged form throughout the entire period after the collapse of the Soviet Union. Any changes that were applied, were actually apparent and inferior. The process of decisional decentralization was based on the structures of governmental administration, which made it superficial and only partial: there was a shift or responsibilities regarding the ownership over health care facilities to the level of local authorities, on a limited scale the private sector was allowed to participate in the health system, but outside of the scheme of public financing, based on direct patients' out-of-the-pocket payments, mostly informal. Within the framework of public services provision system patients theoretically had the right to choose a doctor and facility. In practice, however, this was an apparent right, and the way how the system was constructed and acted treated their needs and rights without due attention.

At the same time in both these spheres – the economy, and the health system – activities have been undertaken in the last few years to stabilize the situation and bring Ukraine to the path of stable and long-term growth and normalization. The severe circumstances seem to favor the introduction of radical solutions that might lead to a rapid change in the organizational paradigm of the economic system, as well as in health care and other areas of State's activity in the field of social policy. The introduction of pro-efficiency solutions seems to be a necessary factor, without which, in turn, increased financing of the health sector will not provide improvement on a scale that would be adequate to the social expectations, as well as would be in line with the assumptions of the decision-makers who decided to implement the reform [10].

In August, 2014 Ministry of Health of Ukraine initiated the development of National Strategy on Health Reform to revitalize and speed up the process of reforms in health sector through elaborating strategic approaches to improve the quality and access to health care and ensuring the mitigation of financial risks for population [11]. In 2016, the Cabinet of Ministries of Ukraine approved the Concept of Reforming of the Health

Care Financing. In 2017, a few legislative documents adopted by the Verkhona Rada (Parliament) of Ukraine, as well the orders adopted by the Cabinet of Ministries of Ukraine has opened the process of the re-shaping the Ukrainian health care system providing a new approach to the financing of healthcare institutions and individual healthcare practitioners. The introduction of a new system on the primary level is planned for 2018, while the whole reform would be incrementally conducted until 2020.

In this research we highlight the key features of the health reforms in Ukraine. We look at the needs assessment and problem analysis within the health care system of Ukraine. We later on review the previous attempts to deal with the existing problems and lessons from the past. Then we present the key features of Ukrainian health system reform and identifies several challenges for it, each representing a possible stalemate between vested interests of the actors involved. Taken together, these locking-ins may block the course of reform in given direction thus increasing the tensions in the health system as a whole.

1.2 Cultural and Educational Attractiveness of Kyiv, Ukraine

Ukraine is one of the cheapest European countries and this makes it one of the best options for studying abroad. Kyiv has always been an important city in Eastern Europe. It was the cultural center of the historic East Slavic civilization, played a key role in the Christianization of Kyivan Rus, and was of strategic importance to the Soviet Union. Due to its interesting history, Kyiv has a number of fascinating historical sites, including the Saint Sophia Cathedral, which is a UNESCO World Heritage site, and the Kyiv Pechersk Lavra (the Monastery of the Caves). Many of Ukraine's museums and galleries are located in Kyiv, and in 2009 they drew 4.3 million visitors to the city. The most famous are the National Art Museum of Ukraine and the Museum of the Great Patriotic War. Kyiv is also home to famous farmer's markets, most notably the Besarabsky Market, which is located in the city center. The city is famous for its green spaces, and is home to many botanical gardens and public parks. The city center, which

is full of restaurants, bars, and clubs, attracts many young visitors during the summer months [12].

However, one question that often weighs on the minds of international students is whether it is safe to study in a country such as Ukraine. Ukraine is a very safe country to live and study in provided that you remember some basic personal security measures such as avoid walking alone late at night in dark or poorly-lit streets, keep any valuables and cash safe and out of sight, especially in crowded areas, tourist spots and public transport and so forth and to always make sure that you always have personal ID with you [13].

Most importantly, the greatest worries usually come from doubts as concerns the cases of bribery and more seriously, the cases of access to healthcare and healthcare facilities, especially to them the foreign students.

Kyiv City State Administration is the national-level branch of the Government of Ukraine that administers Kyiv, the capital of Ukraine. The current Head of the Kyiv City State Administration is Vitali Klitschko; Klitschko is also the current Mayor of Kyiv [14].

Kyiv is a "city with special status" within Ukraine compared to the other administrative subdivisions of the country with the most significant difference being that the city is subordinated directly to the national-level branches of the Government of Ukraine, skipping the regional level authorities of Kyiv Oblast [15].

Local government is carried out by Kyiv City Council and district councils, headed by their chairpersons who are elected from among the councilors. Although Kyiv is Ukraine's capital, the city also serves as the administrative center for Kyiv Oblast (province). The oblast entirely surrounds the city, making it into an enclave.

According to Erudera College News, an international student in Ukraine spends an average of 6 to 8 thousand dollars on education on a yearly basis, the Ministry of Education and Science of Ukraine has found, based on Ukrainian State Center for International Education calculations. According to the report’s data, international students in Ukraine are an important source of income of the country.

Since January 1, 2020, a total of 80,470 international students from 158 different countries pursued studies at Ukrainian universities with a great fraction of this number in Kyiv alone.

Similar to the public-school system, higher education is also free in Ukraine, and is provided to citizens on a competitive basis. The main universities in Kyiv are the Kyiv National Taras Shevchenko University, the National Technical University (also known as Kyiv Polytechnic Institute), and the Kyiv-Mohyla Academy. Higher education is usually taught in Russian or Ukrainian, but some universities may offer courses in English. However, it is always best to check with the university before applying.

1.3 Healthcare in Kyiv, Ukraine

Expatriates living in Kyiv are entitled to use the free Ukrainian healthcare system. However, although the standard of care is higher in Kyiv than many other places in the country, Ukraine's state healthcare system is not of the same quality as many other Western countries. Additionally, many of the staff and doctors do not speak English or any other foreign language, so communication can be an issue [12].

As such, many expatriates working and living in Kyiv tend to take out private health insurance, as the private system has a higher standard of care and better facilities. The best private hospitals include the American Medical Center, Medikom, and the Oxford Medical Clinic. The majority of private doctors should be able to speak English or another foreign language. Some expatriates even leave Kyiv for major operations and instead seek treatment in nearby Western European countries, or in their country of origin.

The Healthcare in Ukraine is part of a universal health care system being a successor of the Soviet healthcare system. The Ministry of Healthcare implements the state policy in the country in the field of medicine and healthcare. As of March 2009, the Ukrainian government planned on reforming the health care system, by the creation of a national network of family doctors and improvements in the medical emergency services. Ukrainian Prime Minister Yulia Tymoshenko wanted (in November 2009) to start introducing a public healthcare system based on health insurance in the spring of 2010.

Ukrainian healthcare should be free to citizens according to law, but in practice patients contribute to the cost of most aspects of healthcare [16].

When expats and global nomads were asked about the quality of medical care in Kyiv, they replied:

"I don't know if I can give advice concerning medical centers as long as I need medical help not that often. Here I can share my experience in medical treatment in Kyiv. For me it was necessary whether the clinic works with International insurance companies and in which way. I was suggested to pay myself and then make the reimbursement of the expenses. I was given all the necessary documents and didn't have any trouble with my insurance company," said an expat in Kyiv [17].

"If you travel in Ukraine make sure you have real good international health insurance. I had a kidney stone attack and had to fly to New York for my surgery at the V.A. (Veterans Hospital) which the service is totally free. I am receiving 100% disability from the V.A. so all my medicals costs are paid by the V.A. including medicines," commented one expat living in Kyiv, Ukraine [17].

These reviews obviously do not speak well about the healthcare systems in Kyiv and Ukraine as a whole, which is why foreign students might find the need to seek international healthcare insurance policies such as the Overseas Student Health Cover (OSHC) amongst others. This type of cover assists international students to meet the costs of medical and hospital care they may need while overseas.

1.4 Needs for changes in the Ukrainian health care system

A measure for a collapse in the Ukrainian health system is the epidemiological situation of the country's population, as well as changes that have occurred in its health status since the end of the Soviet era. The Health for All database [18] reveals that mortality due to cardiovascular diseases in 1990 amounted to 589.03 deaths per 100,000 inhabitants in Ukraine. In the later period it has increased, amounting to 634.59 deaths per 100,000 inhabitants in 2015. For comparison, in the post-communist countries that became Member States of the European Union (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia) the average

value of this measure amounted to 625.73 deaths per 100,000 population in 1990, and by 2015 it has decreased to the level of 362.5 deaths per 100,000 population. Thus, in this group of countries we observed an improvement by 42%, while in Ukraine in the same period the mortality has increased by almost 8%. What's important, in the initial period mortality in Ukraine has been lower than in most of the other countries included in the comparison group. Additionally, in some of them in the first half of 90's, and in some others – in the second half of the first decade of transformation, there was the increase of the mortality rate observed. These are the cases of Romania, Latvia, Bulgaria and Estonia. Nonetheless, all of them experienced clear and generally regular drop in subsequent years, while in case of Ukraine there is the increase observable up to 2005, and only in the recent years the country notice some improvement, although having the result worse than any of the comparison countries individually. The negative trend is even more evident in case of data for ischaemic heart disease, where in the Ukraine over the period considered the mortality increased by over 36%, although in the group of "new" EU Member States at the same time similar was the percentage of decrease in the average value of mortality rate.

In the Ukrainian health system, the failure of its efficiency, both in terms of treatment, and preventive interventions, is also well illustrated by other epidemiological data. Mortality due to infectious and parasitic diseases between 1990 and 2015 increased from 11.78 to 21.67 deaths per 100,000 population. In the adopted reference group at the same time there was a decrease from the level of 8.76 to 7 deaths per 100,000 population. This difference is even more striking in case of tuberculosis, where in 2015 mortality in Ukraine amounted to 9.89 cases per 100,000 population, while in the reference group – 1.77 deaths per 100,000 population.

Finally, in Ukraine we can observe a substantial drop in the proportion of infants' vaccination. For example, the percentage of children vaccinated against measles, although yet in the previous decade exceeded 90%, in recent years has drastically dropped to the level of 42% in 2016. A similar situation applies to vaccination against tuberculosis – from a level exceeding 90% to as much as 39% in 2015.

Ukraine has over 2200 hospitals and over 400,000 hospital beds (5,22 hospitals and 890,7 beds per 100,000 population) in the public sector. In per capita terms, this is more than in EU countries. But the facilities have outdated equipment and very few are able to provide complex care. Until now, Ukraine's healthcare financing mechanism was based on a general taxation system, in which expenditures were split between state (national) and regional budgets. In 2015, public financing of the healthcare system reached 71 billion UAH (around 3.2 billion USD) or around 3.5% of GDP, while total, public and private, expenditures constitute 7.4% of GDP. Due to low value of Ukrainian GDP, these expenditures, although they may seem quite high in relative terms, translate into severely low level of per capita spendings, amounting to less than USD 300 in 2012. The primary health care receives about 10% of health care financing, and the major share of costs goes to highly specialized care.

It is worth to mention that the distribution of funds for the health care is carried out according to the existing infrastructure, and not to the real needs defined by the structure and levels of morbidity of Ukrainian population [19] . Most recent results of the national household surveys Health Index. Ukraine proves that the access to medicines remains a significant problem for Ukrainian population. Households spent nearly 11% of the average total expenditures to purchase drugs. According to the other household survey, 92% of the population is afraid of getting into financial difficulties and of catastrophic expenditures in case of illness. There is evidence for limited access to diverse categories of health services. Studies revealed that up to 75% of people with common mental disorders and alcohol use disorders in Ukraine do not access care. Barriers to care include stigma and shame, fear of psychiatry and lack of trust in the health system, but also, they derive from system deficiencies, like lack of information and awareness, high cost of treatment, fear of having a public record as being diagnosed with mental illness, and geographical distance.

Aggregated data on the health system outcomes also show relatively poor progress in the last three decades, as well as significantly worse results compared to the average for the entire group of post-communist countries [20].

1.5 The previous course of health reform processes

During the period after the fall of communism, there was a systematic increase in financial burdens on the side of the patients. The system formally declares a very wide and universal range of services guaranteed to patients under public funding, but in practice an ineffective structure and very limited financial resources allocated for this purpose make it a purely legal right. In recent years, private spending have reached the level of 45% of total expenditure on health care. A huge part of the funds from this source is absorbed by the pharmaceutical sector, which is practically completely deprived of public financing, and at the same time has not been provided with solutions to rationalize expenditures. As a result, the burden on patients on this account is extraordinarily large. Although in 1996, the government took an effort to normalize the situation and the official rates of fees charged to patients for the provision of services not covered by public guarantees had been established, in practice this mechanism was a fiction, and the boundary between paid and free benefits remains highly unclear. An additional complicating factor is the widespread mechanism of informal payments, which is a substitute for missing official mechanisms that would rationalize the system and ensure its financial efficiency. Funds allocated to health through this channel are a very heavy burden on patients' home budgets. What should be emphasized, is that all this takes place in conditions of a relatively high level of total expenditure on health, amounting to 7.6% of GDP in 2012. This is an evident testimony of far-reaching inefficiencies in spending funds in the health system [21].

In the previous decade, in order to improve the functioning of the system, public authorities undertook certain activities aimed at the increase of popularity of additional health insurance – both in commercial form, and through the so-called sickness funds, whose role is analogous to commercial insurers, with the only difference that they act as a non-profit basis. The popularity of these solutions, however, remains low, not exceeding 2–3% of the country's population in total for both formulas. Following the traditional solutions of the Semashko model, the Ukrainian system is also characterized by a number of parallel system solutions for some groups of the population. Such systems absorb a large part of the public funds allocated to health care, all the more

hindering the implementation of equal and uniform solutions. Some of these parallel systems were created already in the period after the fall of communism, referring somewhat to the classical Bismarckian solutions. In such categories the insurance system for employees in the transport sector might be considered [22].

The Ukrainian system is undoubtedly one of the weakest among post-communist European states. It is characterized by organizational and financial inefficiency, inadequacy to the population's health needs and the lack of deeper reform efforts throughout the post-communist transition period. All those that took place and were aimed at modernizing the existing solutions (introducing the model of family medicine in primary care, changing the methods of financing services, introducing additional financing mechanisms) were purely initial in nature, being introduced only in some areas of the country, or as a kind of trial mechanism. All this is reflected in the low level of response to the health needs of the individuals and groups, which in turn translates into poor health status of the country's population. The system is characterized by low ratings not only in the sphere of health outcomes, but also in terms of access to services, where one of the main barriers is the financial issue, equality and equity, as well as lack of implementation of activities aimed at positive stimulation of the health potential of the country's population. The difficult political and economic situation of the country are additional factors that produce obstacles to effectively improve the efficiency of the system. The low level of GDP does not provide adequate financial support, and the geopolitical and economic turbulence of recent years have additionally led, as should be supposed, to the collapse of the sector of some services.

1.6 The projected scope of reforms

The most recent political revolution in Ukraine (2014) once again opened the chance to implement a deep modernization project of the Ukrainian state. The will to conduct such an ambitious project was clearly declared by political leaders, and one of the symptoms of such engagement was the desire to replace decision-making elites. The way to achieve this aim was intensive recruitment of individuals from other countries

for the managerial positions in public administration and other centrally managed entities.

This reforming enthusiasm also applies to the anachronistic structure of the health system. In 2015, as an initial step of reforms, Ukraine handed procurement of vaccines, medicines, and medical equipment to international agencies: The United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), and the UK nonprofit entity Crown Agents. In the same year, the Ministry of Health lead by Georgia-born Alexander Kvitashvili and then by USA-born Ulyana Suprun has proposed a reform package based on five main pillars [23].

The first pillar of the Ministry's concept was about reorganization of the system of financing health services, where the main change is to shift the previously applied model of financing facilities to financing the patient's needs, in accordance with the popular wording "money follows the patient". This is a change which should be seen as an attempt to apply solutions previously implemented in other post-communist countries. Its main assumptions imply the need to change the relationship between the payer and entities that deliver the health services, where the latter are forced to adapt to the conditions proposed by the payer. These, according to assumptions, should be derived from real population's needs. In other words, the range of services provided by the providers and their quantity should be derived from diagnosed health needs, as well as a resultant of consumer decisions regarding the choice of facility, which in turn opens the Ukrainian system to internal competition [23].

The second Ministry's pillar was the introduction of the medical specialization in the field of family medicine. Family doctor on the one hand should become the main coordinator of the patient's health care process, and on the other hand – will be subject to patient's choice on an individual decision basis, in contrast to the current construction, which is based on the reionisation system originating from the Soviet era. In addition, the financing of the family doctor is to be based on the per capita rate, where the doctor's income depends on the number of patients declared to be under his care. This is also a solution referring to projects previously implemented in other post-communist countries [18].

The next pillar within the Ministry's concept was that the State undertakes to clearly define the scope of its financial responsibility in health care, which should be treated as tantamount to introducing a package of guaranteed benefits. According to the declaration of the Ukrainian Ministry of Health, the full range of reimbursement is supposed to cover family medical services, palliative care, emergency medicine, and pharmaceutical treatment for cardiovascular diseases, bronchial asthma and type 2 diabetes. Finally, the full scope of State's responsibility is also to cover childbirths, rare diseases and oncological treatment. Such solutions were expected to help to clarify the financial responsibility of the state, but also to limit the phenomenon of informal payments, commonly appearing in the health system [18].

In other areas, not included in the package of fully guaranteed service, a co-payment system is projected to be implemented, including tariffs approved by the State and remaining within its scope of regulation, and the complementary insurance system. At the same time, a certain range of services is to be completely excluded from the range of publicly financed benefits (eg aesthetic medicine). And this idea constituted the forth pillar of the Ministry's concept [18].

The last key element of the Ministry's reform vision referred to the characteristics and quality of services provided, where, most importantly, physicians operating within the system are to be obliged to implement procedures in accordance with current international standards, instead of the present ones, which are outdated and inadequate to the current state of medical knowledge. The procedures applied hitherto are also susceptible to fraud and corruption – treatment of certain diseases with expensive and inadequate medicines results not so much from the actual health needs, but more from informal arrangements that give financial benefits to specific persons (including government officials deciding on the application of a given procedure). The problem is also related to the reform of the medical education, first of all by providing access to the most recent achievements in the field of medical sciences, but also by eliminating the corrupted system of granting the right to practice the medical profession and providing an objective, external system of competence assessment of graduates [18].

Among the assumptions related to the systemic changes the Ukrainian government plans to implement, there are also ones located cross-sectionally among the above-mentioned strategic goals. One of them is an assumed change of the distribution model and the implementation of vaccination. Currently the supply is based on ad hoc purchases, which is supposed to be replaced with a three-year planning system. On the one hand, such a solution should increase the availability of vaccines for patients, and on the other – eliminate abuses related to purchasing vaccines. The Ministry of Health plans also to modernize facilities providing health services and apply widely computerization of the health system, which should include the possibility for patients to use on-line registration. In addition, Ukraine declares its will to implement the public health perspective in policy evaluation applied in other sectors of State's activity, including the area of fiscal policy and using its instruments to stimulate health behaviors [18].

The changes in the organization of the system of service provision require to reorganize also the area of management and control over the financial resources. The Ukrainian government has taken intensive action to achieve this goal. In 2018 the works started to implement new organizational scheme with the main focus on the central body, the National Health Service of Ukraine (NSHU). The new institution is supposed eventually to act as a public agency responsible for contracting health service providers. Simultaneously, the process of implementation of a new financing scheme has been initiated, in the first place at the level of primary health care. Except for the change of money flows, the reform allows also private providers to be contracted by public payer. The use of new financial mechanisms is planned to come into force in the area of specialist treatment in 2019, whereas in 2020 the implementation of solutions for guaranteed access to services is supposed to take place. Some ad hoc investments are also being applied to improve the supply of medicines and vaccines, as well to ensure general improvement of the infrastructure of service provision (Ministry of Health of Ukraine, 2018).

This Ministry's concept had been supported by the numerous international organizations, including WHO, UNDP, USAID etc. These organizations have been

constantly pressing for faster reform in Ukraine. At the same time, not all ideas of the Ministry of Health were accepted by the Ukrainian politicians, especially by the opposition groups. The opponents of the changes, including many members of the Parliament and media, had built up their messages around the idea that the reform could leave the poorest with no healthcare. The campaign was also supported by the medical lobbyist groups who may want to preserve their control over the flows of informal payments and corrupted drug procurement system [24].

On October 19, 2017 the Ukrainian Parliament finally passed a law that will start medical reform in Ukraine [25]. Right after passing the law on financing healthcare, the Ukrainian parliament approved two other related bills: one is aimed to provide people in remote areas with access to medical services, including telemedicine, and another that amends the financial code of Ukraine. The law stipulates a series of changes to be made by 2020, including the introduction of an insurance system financed by the government, and a mechanism to allow patients to choose doctors and hospitals themselves. A nationwide e-system for tracking patients' health history will be implemented, starting in 2019. In addition, the new system should reduce the problem of self-treatment in Ukraine — the patient will be incentivized to seek treatment from a doctor, since reimbursement will only be provided upon the prescription of the healthcare professional. However, the Ukrainian parliament didn't cast votes in favor of co-payments for health care services, as this idea is highly unpopular among patients and medical staff [26].

1.7 Conclusion

Both the planned scope of changes in the Ukrainian health system, as well as the way it is scheduled, along with consistency in the implementation of subsequent reform stages, give promising prognosis regarding the final effect of the reform. An important feature of the government's project is a focus on satisfying the most urgent and most pressing needs identified in the system, which are related to the access to services and medications supply. It goes in line with views on distribution of health care and using the solidarity type of social policy instruments [27] and at the same time reflects

changes of social policies in post-communist states where state-planned economy gradually transforms to the capitalist system [28] [29].

The second key aspect of the system deficiencies that are money-related is the scale of State's involvement in health care, where, as mentioned, a large scale of financial burden of health expenditures lay on the side of patients themselves, which constitutes a serious barrier limiting the possibility of receiving appropriate treatment. As such, this problem may be a strong limitation to ability of achieving the assumed aims of the reform in the epidemiological dimension. The generally low level of affluence of the Ukrainian population may be also a factor limiting the popularity of proposed complementary instruments of protection, which will finally cause the real reform only apparent.

Except of the financial aspects, there are other factors as well, which may constitute a threat to the final success of the reform. One of them is the late moment of taking corrective actions, which resulted with consolidation of different kinds of pathologized processes substitutive to the inefficient formal public system. This substitutive instruments of regulating access to services and health financing has produced a set of habits observable on the side of providers as well as patients. These habits may turn out to be difficult to be eliminated, particularly when they affect vital interests of influential lobbying. For this reason, the reform leaders must take into account the possibility that the process of change in the short term will have limited effect, and full implementation of its objectives may be a long-term process. Even in this long-term perspective the final success relies on the full consequence of actions taken by the political decision-making center in implementation of the chosen reform path. Failures of previous reform attempts, which were largely based on similarly defined priorities, can be seen as additional evidence of the uncertainty of the final outcome and its susceptibility to undesirable influences of disruptive factors.

Chapter 2
METHODOLOGY

2.1 Introduction

International students face challenges while adapting to a new country, which affects their physical and psychological health and wellbeing. They consider their health challenges as minor compared to other challenges they face [30]. Consequently, these students do not fully benefit from local healthcare services. Moreover, international students face barriers in accessing healthcare services in many countries, often do not sufficiently benefit from available healthcare, and delay seeking healthcare services when they are ill [31]. Delays in seeking healthcare services may result in severe health outcomes and have a potentially negative effect on public health, especially when considering infectious diseases such as COVID-19. Furthermore, fear derived from perceived stigma prevents these students from seeking health services [32]. A study conducted by Takeuchi J. and Sakagami Y. (2018) demonstrated that some international students hesitated to access mental healthcare services because of perceived stigma [33].

On the other hand, health service providers in the host countries experience challenges in providing healthcare to international students due to linguistic discordance, cultural differences, and resource constraints. To ensure successful education completion, capacity growth, and productivity of international students, their health and well-being need to be monitored. While there are several studies regarding the utilization of healthcare services by migrants in Ukraine, evidence of healthcare access and utilization among international students is limited. The aim of this study was to expand the current knowledge of the extent of healthcare utilization and potential barriers that affect full healthcare access among a group of international students enrolled in 3 public universities in Kyiv, Ukraine.

2.2 Research Design

Research design guides a research work from start to the end. Zikmund, (1994) defined research design as a master plan that stipulates the processes and methods for collecting and analyzing the needed information [34].

I used a qualitative in-depth interview method to explore foreign students' perceived barriers, difficulties and drawbacks towards access to healthcare and healthcare facilities in Kyiv. Though not necessarily a phenomenological inquiry, this study is conducted to reveal the significance of the perceptions of this population of foreign students in Kyiv who might have had any difficulty or any noticeable situation as regards the access to healthcare during their stay in Kyiv. Particular important agents towards the accomplishment of this study include international students in Kyiv and health workers.

A number of research questions were tabled, which effectively guided this study and these include the following:

Research Question 1: What are some of the various common health issues that overseas students tend to face while studying in Kyiv?

Research Question 2: How do some of these common health issues faced by the foreign students come about?

Research Question 3: What are some of the possible solutions or strategies towards solving these problems in Kyiv?

Research Question 4: How flexible is the healthcare system in Kyiv, with respect to the access to these by the foreign students living and studying there?

I specifically decided to use the interview method even though I considered other methods of qualitative inquiry but deemed them to be less effective like the interview method in providing the necessary insights to understand the flexibilities and difficulties in the access to health care by foreign students in Kyiv.

2.3 Aim

1. To assess the perception and personal experiences of foreign students in Kyiv towards the various common health issues they might have encountered or seen someone encounter during their stay in Kyiv.
2. To explore and understand how some of these common health issues experienced by them foreign students in Kyiv come about in the first place.
3. To identify the perceived, suggested and already available solution methods towards solving such health issues experienced by the foreign students in Kyiv.
4. To do an in-depth assessment of the available mechanisms put in place for the access of healthcare by these foreign students in Kyiv.

2.4 Participants of the study

Due to known circumstances, it was particularly difficult to collect data for the research. This therefore allowed us to conduct our research based on cabinet studies and secondary data from which we had required data 20 participants. I purposefully selected and did the study on one major group of participants which are the foreign students who attend the Universities and colleges in Kyiv. As an additional group of participants in contribution to the study, there was consideration on a few non-foreign students who had experience on how foreign students got access to healthcare while in Kyiv, and this was dependent on their willingness to participate in the study.

2.5 Sources of Data

As earlier mentioned, data for the research was obtained through cabinet means of study, and through secondary data collection mechanisms. The data obtained through this means, at the time when it was collected, comprised of interviews which were appropriate as it was extremely flexible and had the prospective to make available data of great intensity and depth that was of course, not easily obtainable in documents.

2.6 Instrument of data collection

An online-based survey was conducted from the first of March to the tenth of April [35]. The study population consisted of international students aged 18 years and above living in Ukraine for at least 1 year and enrolled in undergraduate or postgraduate programs in three public universities in Kyiv. A non-probabilistic sampling procedure was used due to logistic challenges involved in the random selection and access to some international students. Thus, the selection was non-probabilistic and by convenience sampling. However, this selection was made in a controlled basis, trying to guarantee the representability of the sample with respect to gender, nationality, university, and level of study. An online questionnaire prepared by the researcher was sent to the target group through an online survey platform; Google Forms. The Computer and Information Systems expert received the electronic questionnaire and uploaded it to the Google Forms platform.

The open-ended, interview questions to elicit data from each participant included:

1. What is your perception/experience on healthcare in Kyiv as a foreign student?
2. What factors do you think could increase the possibilities of developing a more efficient and systematics healthcare system in Kyiv?
3. How do you stay informed with current healthcare advancements?
4. What kind of care does a foreign student in Kyiv commonly needs?
5. Do foreign students in Kyiv receive adequate healthcare while undergoing studies in Kyiv?
6. What do you think about the Kyiv healthcare sector on a general perspective?
7. Have you already been faced with a difficult situation where you did not get important or urgent healthcare attention which you needed? How did you manage the situation, and what was the outcome?
8. What are the factors that motivate you and or other students to continue your studies in Kyiv?
9. In your own opinion, what are the barriers that hinder an effective healthcare system in areas in Kyiv?

10. As a foreign student, what are the tactics and approach you use to survive or maintain your health status and manage health issues you tend to experience while studying in Kyiv?

2.7 Method of data collection and survey instrument

The survey instrument used was a validated semi-structured questionnaire. All information was self-reported. Sociodemographic information regarded personal attributes such as age, gender, marital status, nationality, education level, and length of stay in Ukraine. Health status information includes respondents' physical activity, eating habits, smoking habits, alcohol consumption, and chronic disease. Information on healthcare services utilization includes number and reasons for visiting the healthcare service as well as access to dental, optical, mental health, student health centers, and emergency services, and in-patient admissions. Questions on the frequency of healthcare services utilization were in a "yes/no" format. If the answer was "yes", then the respondents were asked the number of times they accessed the service.

The sociodemographic characteristics and health information were also considered as independent variables, whereas utilization of healthcare services was considered as dependent variables. The variables on access to healthcare services were defined as categorical variables with two categories (i.e. no access, and one or more visits). The questions were prepared in short answer or multiple-choice question type. The purpose of the research was included on the first page of the questionnaire, informing the participants about the purpose of the study, volunteering to participate in the survey, and confidentiality of their information. After reading the first page, respondents had to consent to participating in the survey before filling the questionnaire. The questionnaire was pretested on a convenience sample outside the target group to ensure clarity of interpretation and improve the validity of responses. Participants' responses regarding the completion time, clarity of questions as well as their suggestions on improvements of the questionnaire were received, and minor changes were made. The

survey instrument was validated and Cronbach's alpha test performed to assess the internal consistency of questions.

All secondary data used was obtained from Biomed Central Health Services Research article number: 311 (2021), titled "*Healthcare services utilization among international students in Kyiv, Ukraine: a cross-sectional study*" and published on 07 April 2021 (by Abednego, Bahar, Polet, Isreal and Kipkoech) [35], since it had some useful and similar data already collected. The secondary data obtained from this study was used alongside the collected data and the analysis carried out. The data obtained and studied from this research covered 20 participants with important and vital details pertinent to the scope of this research.

2.8 Method of data/statistical analysis

All statistical analyses were conducted using IBM SPSS statistics version 25. Discrete variables were presented with tables showing the number and percentage distributions. Continuous variables were described using mean, 95% CI of the mean, median, 25th and 75th percentiles, and the minimum and maximum values. Different groups within the study population were compared with cross tables. ANOVA and Chi-square tests (with Fisher's exact test) were used to compare variables and post-hoc used to identify the source when significant differences will be identified.

2.9 Ethical Consideration

Generally, in research, failure to address ethical concerns in such a study has implications for the validity of the study and may lead to the misinterpretation of the study [36]. Therefore, informed consents were given by all the participants whose data were used.

Chapter 3
RESULTS

3.1 Results

Of the total international students in Ukraine studying in three universities in Kyiv, 20 (28%) students from 3 countries completed the questionnaire. The sociodemographic characteristics of the participants are shown in Table 1. The mean age of the respondents was 25 years, with a minimum of 18 and a maximum of 39 years. The majority of respondents came from countries in Africa (49.2%), Middle East (24.4%), Asia (15.6%), and Europe (9.2%).

While all the respondents received health insurance, 45% (n = 9) did not have health insurance prior to studying in Ukraine. More male students had used tobacco products in their entire life compared to female students ($p = 0.019$). Of those who had used tobacco products, 5% (n = 1) smoked cigarettes daily while 10% (n = 2) had quit smoking. More female students (10%, n = 2) reported eating healthy compared to male students 5% (n = 1). On the other hand, more male students (50%, n = 10) reported being physically active compared to female students (30%, n = 6). Of those who had a chronic disease, a majority reported having chronic respiratory or cardiovascular diseases. Hospital admissions were higher among respondents with chronic diseases.

With regard to utilization of healthcare services, more female students accessed dental services compared to male students ($p < 0.001$). The bivariate analysis found that access to dental services was significantly higher among female students from European and Middle East countries and the lowest among male students from African countries (Model 2). Therapeutics, check-ups, and corrective interventions were among the most reported reasons for dentist visits.

Table 1: *Demographics of study population*

Characteristic	Male (n = 11)		Female (n = 9)		Total (n = 20)	
	N	N%	N	N%	N	N%
Married						
Yes	3	27.28	1	11.12	3	15.0
No	8	72.72	8	88.88	17	85.0
Age Groups						
< 19	0	0.0	1	10.6	1	5.1
20–24	5	45.45	4	49	9	46.2
25–29	3	27.28	3	28.2	6	28.4
30–34	2	18.18	1	11.4	3	15.2
35–39	1	9.09	0	0.0	1	5.1
Living with spouse in Ukraine						
Yes	1	9.09	1	82.6	4	53.9
No	2	18.18	0	0.0	1	26.1
Spouse/children Health Insurance						
Yes	1	9.09	1	84.2	3	65.9
No	0	0.0	0	0.0	2	34.1
Country of origin						
Africa	7	63.63	3	34.4	10	50.0
Middle East	3	27.28	2	24.6	5	25.0
Asia	1	9.09	2	23.8	3	16.6
Europe	0	0.0	2	23.8	2	9.2
Other regions	0	0.0	0	0.0	0	0.0
Economic status						
Good	2	18.18	2	28.6	4	22.2
Average	7	63.63	5	60.8	13	64.7
Bad	2	18.18	1	10.6	3	13.1
Level of study						
Undergraduate	5	45.46	5	53.9	10	50.0
Masters	3	27.28	3	26.9	6	28.2
Doctorate	3	27.28	2	19.2	4	22.3
Duration of stay in Ukraine (years)						
1	2	18.18	2	20.8	6	17.9
2	4	36.36	3	37.1	7	36.8
3	2	18.18	2	18.8	4	18.7
4	1	9.09	1	10.6	2	10.0
5	1	9.09	1	10.6	2	10.0
> 5	1	9.09	0	0.0	1	5.0

Percentages were calculated from the number of respondents to the questions

Only 40% (n = 8) of the students visited Student Health Centers. The main reasons for not visiting Student Health Centers included lack of information and language barriers.

Indeed, students who communicated easily when seeking health services and understood health-related instructions accessed Student Health Centers more compared to those who had language difficulties (Model 3).

Of the respondents, 30.0% (n = 6) reported having accessed the emergency department (ED) or taken someone they knew. The number of female students (33.3%, n = 3) who sort emergency services was higher compared to male students (27.27%, n = 3). Concerning doctor visits, no differences were obtained by gender. However, students with an extended length of stay in Ukraine accessed the GP, ED, and dental services more. Of the respondents, 80% (n = 16) reported changing their views to access healthcare more because of the coronavirus pandemic. Three-quarter of the respondents were satisfied with the healthcare services they received.

Chapter 4
DISCUSSION

4.1 Introduction

There are over seventy-five thousand international students in Ukraine. International students in Ukraine, like many other countries, are grappling with the reality of protecting their health during the coronavirus pandemic while away from their families. The findings of our study provide important information on access and utilization of health services by international students, and the data obtained help in providing essential health services to international students.

Findings from the study by Martin and colleagues [31] showed that the utilization of healthcare services among international students presents challenges mainly, financial and linguistic discordance. In the present study, communication barrier was reported as the main challenge for students who had difficulties explaining their complaints to healthcare providers. It was noted that economic status did not affect students' access to healthcare services. All study participants received health insurance, and this could have potentially resulted in a lack of association between the economic level of students and healthcare access.

Table 2*: Lifestyle habits of the study population*

Characteristic	Male (n = 11)		Female (n = 9)		Total (n = 20)		P values
	N	N%	N	N%	N	N%	
Chronic disease							
Yes	1	9.09	1	11.11	2	10.0	1
No	10	90.91	8	88.88	18	90.0	
Physical activity							
Active	6	55.6	3	33.33	9	45.0	0.001
Average	5	44.4	6	66.67	10	50.0	
Not active	0	0	0	0	1	5.0	
Eating habits							
Healthy	1	9.09	1	11.1	2	10.0	0.016
Average	5	45.45	6	66.67	9	45.0	
Unhealthy	5	45.45	2	22.22	9	45.0	
Tobacco use in entire life							

Yes	3	27.27	2	22.22	5	25.0	0.019
No	8	72.73	7	77.78	15	75.0	
Frequency of current smoking							
Everyday	1	14.4	0	0.00	1	12.5	0.487
Some days	1	14.4	1	17.7	2	14.6	
Rarely	4	34.5	5	43.7	9	36.8	
Do not smoke	5	36.7	3	37.2	8	36.1	
Alcohol use in entire life							
Yes	4	34.8	2	22.22	6	30.0	0.062
No	7	65.2	7	77.78	14	70.0	
Frequency of current alcohol consumption							
Everyday	2	17.8	3	28.3	5	21.6	0.241
Some days	5	47.5	4	50	9	48.9	
Rarely	4	34.7	2	20.7	6	29.5	
Do not drink	0	0.0	0	0.0	0	0	

Chi square test (with Fisher's exact test) were used to compare variables by gender

Previous studies have shown that international students hesitate to seek healthcare services and often delay healthcare visits when ill. Findings from the study showed that 55.0% (n = 11) of participants hesitated to visit hospitals when they were sick.

Table 3*: Access to healthcare facilities by study population*

Characteristic	Male (n = 11)		Female (n = 9)		Total (n = 20)		P values
	N	N%	N	N%	N	N%	
Had insurance before coming to Ukraine							
Yes	5	45.45	5	55.56	9	45.0	0.139
No	6	54.55	4	44.44	11	55.0	
Dentist visit							
> 1	3	27.27	4	44.44	6	30.0	0.002
No	8	72.73	5	55.56	14	70.0	
Doctor visit							
> 1	9	81.82	7	77.78	16	80.0	1
No	2	18.18	2	22.22	4	20.0	
Optical service access							
> 1	3	27.27	2	22.22	5	25.0	0.696
No	8	72.73	7	77.78	15	75.0	
Student health center access							
> 1	4	36.36	4	44.44	8	40.0	0.051
No	7	63.64	5	55.56	12	60.0	
Mental health service access							
Yes	0	0.0	0	0.0	0	0.0	1
No	11	100.0	9	100.0	20	100.0	
Emergency Services access							

Yes	3	27.27	3	33.33	6	30.0	0.01
No	8	72.73	6	66.67	14	70.0	
Hospital admission							
Yes	1	9.09	1	11.11	2	10.0	0.771
No	10	90.91	8	88.89	18	90.0	
Communicates easily when seeking health services							
Yes	8	72.73	7	77.78	15	75.0	0.311
No	2	18.18	1	11.11	3	15.0	
Did not seek health services	1	9.09	1	11.11	2	10.0	
Inquired on what GHI* covers							
Yes	3	27.27	3	33.33	6	30.0	0.943
No	8	72.73	6	66.67	14	70.0	
Coronavirus pandemic changed views on health access							
Yes	8	72.73	7	77.78	15	75.0	0.063
No	3	27.27	2	22.22	5	15.0	
Hesitate to visit hospital when ill							
Yes	6	54.55	5	55.56	11	55.0	0.114
No	5	45.45	4	44.44	9	45.0	
Unsure	0	0.0	0	0.0	0	0.0	

Chi square test (with Fisher's exact test) was used to compare variables by gender

~ ~ ***GHI*** - General health insurance

However, three-quarters of the respondents reported that if they suspected to have infections of public health concern, such as COVID-19, they would call an ambulance. Findings are consistent with a study by Skromanis and colleagues (2017), which demonstrated that international students regarded their health problems as minor and felt that they could manage their health challenges on their own [37]. When faced with serious health challenges, however, they prefer to seek health services.

We were also interested in analyzing the differences in international students' health and access to health services according to gender. While there was no significant difference between male and female participants on most outcomes of interest, more male students reported eating less healthy compared to female students (Table 2). Also, more female students accessed dental and emergency health services compared to male students (Table 3). These findings support findings by Skromanis and colleagues [37] that showed male students reported poorer health status and were less likely to seek healthcare services.

Studies by Augustinos and colleagues (2011) showed that a lack of knowledge of health system organization and cultural differences presented challenges to full healthcare access and utilization by international students [38]. Findings from our study showed that students who had lived in Ukraine for more than 5 years accessed ED, GP, and dental services more (Table 4). Students with a longer stay adapt to the social, culture, and language of the host countries. They have social support networks and understand the organization of the local health system. Therefore, these students access and utilize health services more compared to students who have a shorter stay.

Table 4: *Logistic regression of variables potentially associated with health access of study population*

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Hospital Admission		Access to Dentist		Access to SHC		Access to ED		Access to GP	
	$\chi2 = 72.48$, $p < 0.001$ (n = 20)		$\chi2 = 100.73$, $p < 0.001$ (n = 20)		$\chi2 = 84.24$, $p < 0.0001$ (n = 20)		$\chi2 = 70.49$, $p < 0.001$ (n = 20)		$\chi2 = 155.98$, $p < 0.001$ (n = 20)	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Gender										
Male	1		1		1		1		1	
Female	1.62	0.85 - 5.10	2.04	1.28 - 3.26*	1.41	0.93–2.16	1.59	1.02–2.48*	1.15	0.62–2.14
Age, continuous	1.2	1.05 - 1.37*	1.06	0.96 - 1,17	1	0.92–1.11	0.97	0.88–1.05	1.14	1.00–1.29*
Country										
Africa	1		1		1		1		1	
Asia	1.37	0.57 - 3.31	1.35	0.72 - 2.52	1.05	0.58–1.88	1.54	0.84–2.84	0.89	0.37–2.04
Europe	0.38	0.08 - 1.87	2.419	1.16 - 5.06*	1.03	0.52–2.06	1.39	0.66–2.92	0.79	0.30–2.10
Middle East	1.39	0.67 - 2.88	2.056	1.23 - 3.44*	0.78	0.47–1.27	2.45	1.49–4.07*	0.77	0.38–1.54
Other regions	3.67	0.65 - 2.05	1.51	0.32–7.19	1.12	0.25–5.00	1.62	0.36–7.41	0.74	0.10–5.64
Chronic disease										
No	1				1		1		1	
Yes	8.28	2.83 - 24.22*	–	–	1.46	0.60–3.60	2.56	1.01–6.49*	3.41	.65–8.04
Duration of stay										
1	1		1		1		1		1	
2	3.03	1.02–9.03*	1.74	0.89 - 3.40	1.25	0.66–2.40	2.08	1.09–3.96*	4.48	2.20–9.05*
3	1.95	0.60–6.36	2.74	1.31 - 5.73*	1.62	0.75–3.71	2.08	1.09–4.32*	4.28	1.18–10.09*
4	2.23	0.62–8.09	3.88	1.67 - 9.02*	1	0.44–2.30	2.1	0.88–5.00	9.08	2.28–36.15*
5	2.16	0.53–8.89	4.38	1.79 - 10.76*	0.37	0.15–0.93*	3.11	1.28–7.60*	3.17	1.06–9.45*
Ease of Communication										
No	1		1		1		1		1	
Yes	0.93	0.38–2.20	0.55	0.3 - 1.05	2.37	1.28–4.37*	0.58	0.32–1.04	1.71	0.78–3.74

SHC student health center, *ED* emergency department, *GP* general practitioner
**indicates P < 0.05 on comparison with the reference category*

4.2 Implications of the study

Barriers to healthcare access and utilization reported by international students in the current study, which need to be addressed in healthcare delivery programs and health promotion, include lack of awareness of health support systems, perceived stigma associated with mental healthcare services, and language barrier. In addition to the stress associated with the transition to university, international students often face stress associated with adapting to the local language, social, and cultural way of life. The mental wellbeing of international students is as important as their physical health. Participants in the study (25.0%, n = 5) reported fear of seeking mental healthcare because they were foreigners. Perceived stigma hinders access to essential health services and this affects the learning and wellbeing of international students.

To further support existing programs to improve the accessibility of health service delivery to international students, culturally specific health promotion programs reinforced consistently during the academic year could be introduced. International students experience less sense of community in general, which affects their well-being. Education providers have an essential role in monitoring the health and well-being of international students.

4.3 Strengths and limitations of the study

The strength of this work is in the diversity of the study population. Participants from Foreign countries were enrolled in the study. In terms of the country of birth and age, the study population was representative of international students in Ukraine. The study also managed to recruit a relatively large sample of both male and female participants. On the other hand, international students paying for their education expenses were not included in the study due to logistic challenges in data collection. The findings of this study provide information on healthcare access and utilization among international students in Ukraine on scholarship who receive healthcare insurance. To ensure that there were no potential systematic differences between respondents and non-respondent, we verified that the respondents were a representative of the target population with respect to university, nationality, level of study, and gender.

CONCLUSIONS

While international students form an increasing population of higher education students in Ukraine, there is limited empirical evidence about their health services utilization. The study aim was to investigate healthcare access among a group of international students studying in Kyiv city and identify potential barriers that affect full healthcare utilization.

The findings of our study not only contribute to the existing literature on health utilization but also reveal several challenges faced by international students in Ukraine. This study offers policymakers and hospital administrators with insight into the experiences faced by international students most of whom may not have a direct avenue to give feedback to key decision-makers. According to the survey results, the lack of awareness, language barrier, and fear caused by perceived stigma hinder these students from fully accessing health services. This may be disastrous in case a student with an infectious disease does not seek medical attention and ends up infecting other people. It can also be catastrophic on the patient if at all the disease could have been treatable during the early stages but they end up not seeking treatment. Therefore, the data obtained show the need for and will inform the provision of targeted health services to international students in Ukraine.

In particular, it calls for more awareness campaigns among international students on the how, when, where, and from whom certain health-related services can be obtained. Such support can be provided by a designated officer in the international students' office. Secondly, language barrier can be improved by having important information, documents as well as websites having alternative languages for international students to use. This is important in helping to avoid misinformation and miscommunication. Hospital emergency and information call centers can also benefit from optional languages that the callers can make in case of inquiry or emergency.

Lack of awareness of healthcare support systems, perceived stigma associated with mental health services, and language barriers were the main barriers affecting healthcare access by international students. Study findings indicated the need for education of international students on available healthcare, targeted health promotion, and training of health providers on effective communication.

That said, the efforts made by the Ukrainian government to include international students, especially those benefiting from the government-sponsored scholarships, into its national health insurance scheme is commendable and allows thousands of students improved access to healthcare.

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