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## SOCIAL ADAPTATION OF INTERNATIONAL STUDENTS IN THE CONDITIONS OF TRAINING DURING COVID-19 PANDEMIC

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### **Резюме**

**Introduction.** *Social adaptation is an important part of adjustment of international students to training at educational establishments. Better academic achievements among international students are associated with the University membership and a high level of cross-cultural relations. All the components of social adaptation in the conditions of training during COVID-19 pandemic naturally have undergone substantial changes. It is also reflected on psychological state of students, since every country of residence introduced certain quarantine regulations at different times. Some of these regulations were rather strict including curfew and prohibition to leave the house. Under such conditions worries of parents concerning incidence of COVID-19 at home and the country of residence cannot be excluded, as well as intensification of nostalgia due to impossibility to cross the border and return home etc.*

**Objective of our research** was to study the main components forming social adaptation of international students in the conditions of quarantine caused by COVID-19.

**Materials and methods.** *Our study involved 220 junior students of the 1st-3rd years of training at Bukovinian State Medical University (BSMU). In order to obtain maximum objective and reliable results, the survey was anonymous and randomized involving every third student of a corresponding year of studies. The whole list of questions was arranged into one questionnaire. A student had to give a positive or negative answer. Social adaptation of international students was assessed by means of the Student Adaptation to College Questionnaire (SACQ) developed by Robert W. Baker and Bohdan Siryk (1989, 1994) with the author's changes and modifications. About 85% of students involved in the survey were from India, about 4% – from Ghana, the rest 11% of the students were from other countries of Asia, Europe, Africa and USA.*

**Results.** *Under conditions of transfer to the distance learning under pandemic conditions due to COVID-19 the components of social adaptation of international students remain on rather high levels. Thus, the level of general social adaptation under the above conditions remained on the highest and high rates among 55% international learners of higher education, and the rate of social distancing and communication with other people was in 41,4% of foreigners. Nostalgia level was maximum among 55,5% of international students under quarantine conditions of studies, and the rates of social adaptation to the environment remained on the highest levels practically among 80% of respondents.*

*At the same time, direct interrelations of a moderate and strong levels are found between general social adaptation and social distancing with other people, nostalgia, social adaptation to the environment, between social distancing with other people and nostalgia, social distancing and social adaptation to the environment, and between nostalgia and social adaptation to the environment.*

**Conclusions.** *One of the important components for successful academic progress of international students is their social adaptation.*

*At the same time, all the major components of social adaptation in the form of general social adaptation, social distancing and communication with other people, nostalgia and social adaptation to the environment remain on the highest or rather high levels among the prevailing majority of international applicants of higher medical education under conditions of new forms of training during pandemic caused by COVID-19.*

**Key words:** *Social Adaptation; International Students; Education, COVID-19.*

### **Introduction**

Social adaptation is an important part of adjustment of international students to training at educational establishments. Better academic achievements among international students are associated with the University membership and a high level of cross-cultural relations [1].

One of the factors influencing on social adaptation is a command of a foreign language (the language of the country of temporary residence) [2]. The majority of international students choose English as the language of international communication and professional training. A number of authors of Arabic origin prefer lingual dualism: training by means of the language of the country of temporary residence and mastering professional English terminology [3].

Social adaptation comes under the influence

of cultural differences and ideological values [4]. Social adaptation level is improved by the available university community of international students who cooperate with each other and enjoy communication with people of similar origin, cultural values, language etc. [5]. Thus, in this respect Japanese researchers indicate that students in ethnically diverse regions, as a rule, are more interested in health care of Japan, and admission of international students to local universities only improves academic performance [6].

All the components of social adaptation in the conditions of training during COVID-19 pandemic naturally have undergone substantial changes. It is also reflected on psychological state of students, since every country of residence introduced certain quarantine regulations at different times. Some of

these regulations were rather strict including curfew and prohibition to leave the house. Under such conditions worries of parents concerning incidence of COVID-19 at home and the country of residence cannot be excluded, as well as intensification of nostalgia due to impossibility to cross the border and return home etc.

More than 2 000 international students were studied during the 2019-2021 academic year at pre-graduation stage at Bukovinian State Medical University in English as a language of instruction in the area of Medicine and academic degree of Master.

Therefore, to study the level of social adaptation of our international students considering their general adjustment to the University training, social distancing and communication with other people, nostalgia and adaptation to the environment under conditions of education during COVID-19 pandemic was important for us.

**Objective** of our research was to study the main components forming social adaptation of international students in the conditions of quarantine caused by COVID-19.

### Materials and methods

Our study involved 220 junior students of the 1st-3rd years of training. In order to obtain maximum objective and reliable results, the survey was anonymous and randomized involving every third student of a corresponding year of studies. The whole list of questions was arranged into one questionnaire. A student had to answer positively or negatively every question. The results obtained were statistically processed according to the common rules considering mean, the error of the mean, absolute and relative values, minimal and maximal indices, correlations between the results obtained.

The study was carried out according to the basic bioethical principles of the Council of Europe Convention on Human Rights and Biomedicine (dated 04.04.1997), the Helsinki Declaration of the World Medical Association on the Ethical Principles of Scientific Medical Research with Human Participation (1964-2013), the Order of the Ministry of Health of Ukraine №690 (dated September 23, 2009). The Committee on Biomedical Ethics of the Bukovinian State Medical University did not reveal any violations of moral and legal norms during this scientific research (Protocol №2, dated October 20, 2022).

Social adaptation of international students to studies at the medical university during COVID-19 pandemic in our research was assessed by means of the Student Adaptation to College Questionnaire (SACQ) developed by Robert W. Baker and Bohdan Siryk (1989, 1994) with the author's changes and modifications [7].

General adaptation to training was assessed by the following data: feeling at ease in the university environment, involvement in social activities of the university, good adjustment, availability of several close social relations and sufficient social skills providing a successful joining the ranks of the university environment, satisfaction in social participation and social life at the university.

Social distancing and communication with other people were described by means of 7 items: desire

to meet new people and make friends, available informal contacts with teachers, good relations with room-mates, feeling difficulties in communication at the university, poor relations with group-mates of an opposite sex, self-perception unlike others, presence of good friends able to discuss issues with you.

Nostalgia included: missing relatives and home, desire to be at home, feeling of loneliness.

The level of adjustment to the environment included 3 questions, determining a positive solution concerning studies at the university, satisfaction with living conditions at the hostel and events organized after classes.

About 85% of students involved in the survey were from India, about 4% – from Ghana, the rest 11% of the students were from other countries of Asia, Europe, Africa and USA.

### Results

Statistical processing of the answers and general questionnaire findings allowed us to obtain the following results.

116 (52,7%) out of 220 respondents were males, and the rest – 104 (47,3%) were females.

Minimum age of the first-year students was 18 years. There were 28 (12,7%) of them. 32 individuals (14,5%) were 19 years old, and the majority of students were 20 years of age – 83 (37,7%). The age of students from the 2nd-3rd years of studies increased gradually, but the number decreased. Thus, 38 students (17,3%) at the age of 21 were questioned, at the age of 22– 24 students (10,9%), at the age of 23 years – 6 students (2,7%) and at the age of 24-27 years – per 3 students (1,4%) only.

The majority of international students were urban residents – 183 persons (83,2%), and the rest of them lived in the suburb – 21 individuals (9,5%) and country – 16 ones (7,3%).

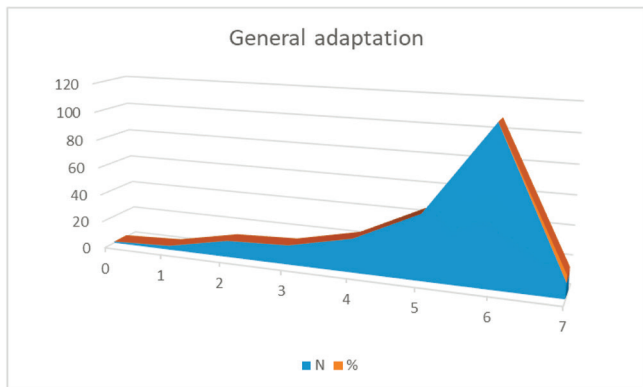
The majority of students originated from families with 4 family members – 81 individuals (36,9%) and 5 family members – 69 individuals (31,5%); there were only 20 (9,1%) students from the families with 3 family members, 34 students (15,5%) from the families with 6 and 9 students (4,1%) from the families with 7 family members. Only 2 students (0,9%) were from the families with 8 family members, and there was 1 student (0,4%) in every family consisting of 2, 9, 10, 12 and 14 family members.

By the results of examination of separate components of the social adaptation among international students and their levels the following was obtained.

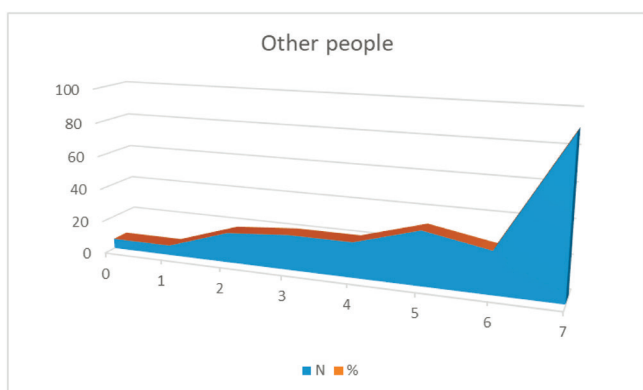
Practically 50% students (109 individuals) demonstrated a high 6-point level of general social adaptation by the 7-point scale. 11 foreigners (5,0%) demonstrated the highest, 7-point level of general social adaptation. Distribution of all the students by the value of decrease of the above parameter is illustrated in Figure 1.

The level of their social distancing and communication with other people was maximum 7-point in 41,4% students (91 individuals), then it decreased gradually to 2-points with inconsiderable differences in absolute and relative values. Minimum parameters (0-1 point) in communication with other people were found among 6 foreigners respectively

(per 2,7%). Distribution of all the examined group of students by this parameter is presented in Figure 2.

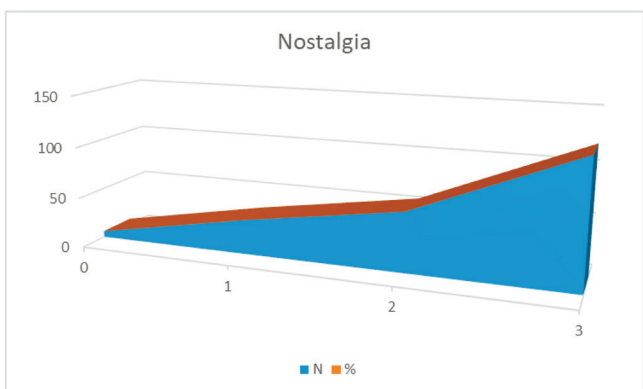


**Fig. 1. Distribution of international students by the level of their general social adaptation**



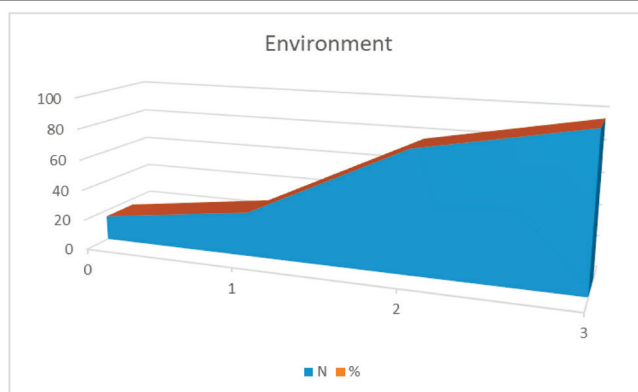
**Fig. 2. Level of social communication of international students with other people**

Maximum 3-point level of nostalgia under quarantine conditions of training was demonstrated by 55,5% foreigners (122 individuals). Distribution of the rest of students by nostalgia rate is presented in Figure 3.



**Fig. 3. Nostalgia level of international students**

Social adaptation of foreign citizens to the environment was assessed by Social Environment index. It was the highest 3-point in 44,1% students (97 individuals), and 35,5% students (78 individuals) demonstrated the next, 2-point level of social adaptation to the environment. Figure 4 shows distribution of all the students by the above rate.



**Fig. 4. Level of social adaptation of international students to the environment**

Results of the examination of correlations between separate components of social adaptation of foreign citizens appeared to be rather interesting.

Thus, moderate direct correlation was found between general social adaptation and social distancing with other people ( $r=0,56, p\leq 0,05$ ), nostalgia ( $r=0,58, p\leq 0,05$ ), social adaptation to the environment ( $r=0,48, p\leq 0,05$ ).

High direct correlations were found between social distancing with other people and nostalgia ( $r=0,64, p\leq 0,05$ ), a moderate - between social distancing and social adaptation to the environment ( $r=0,43, p\leq 0,05$ ), and between nostalgia and social adaptation to the environment ( $r=0,44, p\leq 0,05$ ).

### Discussion

Due to pandemic caused by COVID-19, the majority of the world universities transferred to distance learning for various terms, which could not but left its imprint on the level of social adaptation of international students studying at them.

Transition to other forms of training is a complicated task even in socially developed countries [8].

At the same time, virtual courses, elements of distance learning, simulation technologies are rather interesting for foreign citizens, since they are keen on them and appreciate [9].

Thus, for example, at the universities of India up-to-date technologies are introduced in order to assess efficiency of stimulators and the use of multimedia to master practical skills in resuscitation [10].

Our University experience is indicative of the fact that during transition to distance learning technologies and training in the conditions of pandemic caused by COVID-19 the components of social adaptation of international students remain on rather high level. Thus, the level of general social adaptation under the above conditions remained on the highest and high rates among 55% international applicants of higher education, and the rate of social distancing and communication with other people was in 41,4% of foreigners.

Maximum, 3-point level of nostalgia among 55,5% of foreign citizens under quarantine conditions is understandable.

The fact that the rates of social adaptation to the environment remained on the highest levels practically among 80% respondents under conditions of distance learning caused by COVID-19 pandemic

is considered positive.

At the same time, direct interrelations are found between general social adaptation and social distancing with other people, nostalgia, social adaptation to the environment, between social distancing with other people and nostalgia, social distancing and social adaptation to the environment, and between nostalgia and social adaptation to the environment.

### Conclusions

One of the important components for academic success of international students abroad is their social adaptation.

At the same time, all the major components of social adaptation in the form of general social adaptation, social distancing and communication with other people, nostalgia and social adaptation to the environment remain on the highest or rather high levels among the prevailing majority of international

applicants of higher medical education under conditions of new forms of training during pandemic caused by COVID-19.

### Prospects for further research

In this respect further research of the components of social adaptation, psychological and physical elements of the personal-emotional adjustment and development of programs to promote them is rather promising.

### Compliance with Ethics Requirements:

"The authors declare no conflict of interest regarding this article".

"The authors declare that all the procedures and experiments of this study respect the ethical standards in the Helsinki Declaration of 1975, as revised in 2008(5), as well as the national law. Informed consent was obtained from all the patients included in the study". "No funding for this study".

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## СОЦІАЛЬНА АДАПТАЦІЯ ІНОЗЕМНИХ СТУДЕНТІВ В УМОВАХ НАВЧАННЯ ПІД ЧАС ПАНДЕМІЇ COVID 19

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### Резюме

**Вступ.** Соціальна адаптація є важливою складовою адаптації іноземних студентів до навчання в закладах освіти. Кращі успіхи у навчанні у іноземних студентів пов'язані з почуттям належності до університету та високим рівнем міжкультуральної взаємодії. Зрозуміло, що всі складові соціальної адаптації в умовах навчання під час пандемії

COVID 19 зазнали суттєвих змін. Це все знайшло своє відображення й на психологічному стані студентів, адже кожна країна перебування на той чи інший термін запровадила певні карантинні обмеження, більшість з яких були досить суттєвими аж до введення комендантської години й заборони виходити з дому. В таких умовах не можна виключати й переживання з боку батьків, за темпами поширення COVID 19 на батьківщині та у країні навчання, посилення ностальгічних почуттів через відсутність можливості перетину кордону та повернення додому і т.п.

**Мета.** Метою нашої роботи було дослідження основних складових, що формують соціальну адаптацію в іноземних студентів в умовах карантину, спричиненого COVID 19.

**Матеріал і методи.** Дослідження включало 220 іноземних студентів, які навчалися на 1-3 курсах. З метою об'єктивізації та підвищення достовірності результатів, опитування проводили анонімно в рандомізованому порядку, що включав кожного третього студента зі свого курсу навчання. Увесь перелік запитань був скомпонований в одну анкету-опитувальник, на кожне з яких студент мав надати позитивну чи негативну відповідь. Соціальну адаптацію студентів іноземців до навчання у медичному університеті під час пандемії COVID19 досліджували з використанням опитувальника адаптації студентів до коледжу (SACQ),

розробленого Baker and Siryk (1989,1994) з авторськими змінами та модифікаціями. Біля 85% з опитаних іноземців були вихідцями з далекої Індії, біля 4% – з Гани, решта 11% іноземних студентів прибули на навчання з інших країн Азії, Європи, Африки та США.

**Результати дослідження.** При переході на дистанційні освітні технології та навчання в умовах пандемії через COVID 19 складові соціальної адаптації іноземних студентів залишаються на досить високому рівні. Так, рівень загальної соціальної адаптації в таких умовах навчання зберігся на найвищому та високому рівнях у 55% здобувачів вищої медичної освіти з числа іноземних громадян, а рівень соціального дистанціювання та спілкування з іншими людьми максимальним був у 41,4% іноземців. Рівень ностальгії був максимальний у 55,5% іноземців у карантинних умовах навчання, а показники соціальної адаптації до оточуючого середовища зберігалися на найвищих рівнях у майже у 80% опитаних.

При цьому існують прямі кореляційні взаємозв'язки середнього та сильного рівнів між загальною соціальною адаптацією та соціальним дистанціюванням з іншими людьми, ностальгією, соціальною адаптацією до оточуючого середовища, а також між соціальним дистанціюванням з іншими людьми та ностальгією, соціальним дистанціюванням та соціальною адаптацією до оточуючого середовища і між ностальгією та соціальною адаптацією до оточуючого середовища.

**Висновки.** Однією з важливих складових для успішного навчання іноземних студентів за кордоном є їхня соціальна адаптація. При цьому всі основні складові соціальної адаптації у вигляді загальної соціальної адаптації, соціального дистанціювання та спілкування з іншими людьми, ностальгії та соціальної адаптації до оточуючого середовища зберігаються на найвищому або досить високому рівнях у переважній кількості здобувачів вищої медичної освіти з числа іноземних громадян в умовах нових форм навчання під час пандемії, спричиненої COVID 19.

**Ключові слова:** соціальна адаптація; іноземні студенти; навчання, COVID 19.

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