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## CHALLENGES IN ONLINE LEARNING OF INTERNATIONAL STUDENTS AT THE MEDICAL UNIVERSITY OF KARAGANDA

In March 2019, due to the pandemic situation globally, the Medical University of Karaganda changed its teaching format from offline to online learning. Indeed, this was the experience of other educational institutions in Kazakhstan as well. Although the university administration has supported online learning in diverse ways, students have had to overcome challenges on their own by converting to a distance-learning model. Providing access to licensed platforms to conduct online meetings was only a tiny portion of the solution. Instead, students' preparedness for independent learning was the main hurdle to cross. In light of this, the aim of the study was to explore international students' challenges within taking courses online.

In this quantitative study, a constructive grounded theory approach was used to analyze open-ended student responses from a survey. Hence, axial coding was employed to build a comprehensive story by aligning extracts of student responses with one another. Overall, 147 students between the second and fifth years of their studies took part in this study. The survey consisted of 16 questions, three of which were demographic, and was distributed through a link to google forms.

Students have recommended reducing the time spent in online meetings and providing them with the opportunity to practice medical skills in real-life situations.

**Key words:** online learning, international students, challenges, constructive grounded theory, Kazakhstan.

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### Қарағанды медицина университетіндегі шетел студенттерінің онлайн оқудағы қиындықтары

2019 жылы наурызда әлемде орын алған індетке байланысты, Қарағанды медициналық университеті оқыту формасын оффлайн режимінен онлайн режиміне өзгертті. Шынында да, бұл Қазақстанның басқа оқу орындарының тәжірибесі болды. Университет әкімшілігі қашықтықтан оқыту режиміне көшу арқылы онлайн-оқытуды әр түрлі жолмен қолданғанына қарамастан, студенттер қиындықтарды өз бетімен жеңуге мәжбүр болды. Шын мәнінде, онлайн режимінде кездесулер өткізу үшін лицензияланған платформаларға қол жетімділікті қамтамасыз ету, шешімнің кішкене бөлігі ғана болды, ал студенттердің дербес білім алуға дайындығы басты кедергі болды. Осыған орай, аталған жұмыстың мақсаты шетел студенттерінің онлайн оқудағы қиындықтарын зерттеуге бағытталды.

Бұл сандық зерттеуде студенттердің сауалнамаға берген ашық жауаптарын талдау үшін конструктивті негізделген теория әдісі қолданылды. Демек, аксиалдық кодтау оқушылардың жауаптарының үзінділерін бір-біріне сәйкестендіру арқылы тұтас түсінік құру үшін қолданылды. Жалпы, бұл зерттеуге екінші және бесінші курс аралығында 147 студент қатысты. Сауалнама 16 сұрақтан тұрды, оның үшеуі демографиялық және google нысандарына сілтеме арқылы таратылды.

Зерттеу нәтижесі студенттер интернеттегі кездесулерге кететін уақытты қысқартуды және оларға өмірлік жағдайда медициналық дағдыларды қолдану мүмкіндігін беруді ұсынды. Сондай-ақ, студенттердің жауаптарының жиілігі олардың Интернетке қосылу сапасы үлкен кедергі болғанын көрсетті.

**Түйін сөздер:** онлайн оқыту, шетел студенттері, қиындықтар, сындарлы негізделген теория, Қазақстан.

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### **Трудности в онлайн-обучении иностранных студентов Медицинского университета Караганды**

В марте 2019 года, в связи со сложившейся пандемией в мире, Карагандинский медицинский университет перешел с офлайн на онлайн формат обучения. Действительно, этот путь был выбран учебными заведениями по всему Казахстану. Несмотря на то, что администрация университета различными способами поддерживала онлайн-обучение, перейдя на дистанционное обучение, студентам пришлось самостоятельно преодолевать трудности. Фактически, предоставление доступа к лицензированным платформам для проведения онлайн-встреч было лишь малой частью решения, а готовность студентов к самостоятельному обучению была главным препятствием, которое необходимо было преодолевать. В связи с этим, целью данной статьи является изучение трудностей студентов в процессе онлайн-обучения.

В этом количественном исследовании был использован конструктивный теоретический подход для анализа открытых ответов студентов на анкету. Следовательно, аксиальное кодирование использовалось для создания целостной концепции путем сопоставления отрывков ответов студентов друг с другом. Всего в исследовании приняли участие 147 студентов со второго по пятый курс. Опрос состоял из 16 вопросов, три из которых были демографическими, и распространялся через ссылку на Google Form.

Студенты рекомендовали сократить время, затрачиваемое на онлайн-встречи, и предоставить им возможность практиковать медицинские навыки в реальном режиме.

**Ключевые слова:** онлайн-обучение, иностранные студенты, трудности, конструктивно обоснованная теория, Казахстан.

#### **Introduction**

The situation related to COVID-19 has turned the education system towards a new direction as almost all higher educational institutions in Kazakhstan transferred to online learning. This transition has created anxiety among students and faculty, and administrative members, as echoed in the international experiences, too (Bird et al., 2020:22; Gonzalez-Remirez et al., 2020:41).

One of the more significant issues was related to the learning management system (LMS). Free platforms, such as Zoom, were limited in the time allotted to each meeting and caused tensions when attendees tried to finish them on time. Moreover, scholars refer to countries' governments to endure providing safe services employing it (Long & Khoi, 2020: p.208). In other words, its' underdeveloped security level might cause impediments within the learning process. Nevertheless, in those universities where platforms did exist before COVID-19, the system sometimes slowed down or froze completely due to overloading. For example, in the experience of the Medical University of Karaganda, we have lost tasks uploaded by students onto the Moodle and Platonus LMSs during classes, and it took a while to reload the system. To overcome this drawback, files had to be exchanged via email. Moreover, submission deadlines remained unchanged because

students continued their studies based on a set and confirmed schedule that was based on offline learning. Hence, the experience of offline learning was extrapolated upon for the process of shifting to its online equivalent.

Online learning has revealed a major issue related to the practice of student-centered learning in a medical university. Ideally, student-centered learning has been practiced in Kazakhstan's higher educational institutions for decades. This means that students studying in these institutions are aware of their strengths and weaknesses and only need the guidance of faculty members to complete their tasks. However, possibly due to the rapid shift to a new format, students became confused. In our new online practices, we found that some works were being submitted using sources from the Internet without even having been paraphrased. This could be aligned with deadlines of other subject matters for medical students. Hence, it made sense for us to question students' independent learning skills that would have been nurtured through student-centered learning.

However, online learning for international students at the Medical University of Karaganda incurred two drawbacks. The first relates to the term at a distance meaning to study from home, while the second refers to a lack of practice in medicine (Alekseeva & Balkizov, 2020:16; Khalil et al.,

2020:7). Due to studies conducted based on offline schedules being extrapolated to online schedules, we are unaware of the ways students are dealing with online learning at their homes. Therefore, this study aims to explore the challenges of international students in online learning. Accordingly, the following research question was developed. How are international students experiencing online learning at a distance?

The article is structured as follows. The first section provides a literature review on the challenges faced by students around the world during online learning. The second section provides the methodology used in the research, particularly, the methods employed to collect data and how the data were analyzed. Then the third section describes the analysis results, and the fourth discusses the findings as they relate to the literature and existing knowledge. Finally, the conclusion explains challenges that students face and further study implications arising from the study.

### **International Experiences of Shifting to Online Learning**

The problems of transitioning to distance learning during COVID-19 have been discussed among scholars. Such issues are related to challenges faced by students, the advantages and disadvantages of distance learning, students' perceptions of online Learning, and student satisfaction of online Learning (Aleshkovskiy et al., 2020; Mikhailov & Denisova, 2020; Sokolovskaya, 2020).

The greatest obstacle faced by students is related to technical issues, mainly entailing the absence of specific details ranging from minor components like an earphone to the lack of a personal computer. In addition, such obstacles have been compounded by poor internet connections (Muthuprasad et al., 2021:6; Zeshan, 2021:60). This experience has been discussed in the study by Aleshkovskiy et al. (2020:88), which was based on the responses of 31 423 students in diverse fields of study across the Russian Federation. In this study, 24,4 % of the respondents highlighted the challenges they confronted due to network speed and the absence of technical devices (Aleshkovskiy et al., 2020: 93). Hence, this study also might replicate data pointing to the technical problems with international students connecting from their home country.

Student satisfaction with online Learning can act as a major indicator of the quality of the instruction provided. Although university authorities have made efforts to equip students with the necessary devices,

satisfaction seems to entail intangible ingredients from faculty and staff support (Almusharraf et al., 2021:261). The study conducted by Sokolovskaya (2020:52), where 25% of student respondents were satisfied and 13% sufficiently satisfied, emphasized the importance of positive relationships between faculty members and students and students' interest in learning despite the online format. Hence, student satisfaction relates to productive communication and the purpose of Learning.

The dilemma of benefits versus drawbacks is an essential part of the discussion of online Learning. It is not a secret that working from a distance saves time and travel expenses and provides an opportunity to be connected from anywhere. Nevertheless, sitting at home for a long time restricts daily physical activity, which is indispensable for active people (Faize & Nawaz, 2020:505). The points regarding the pros and cons of an active versus static state of being during COVID-19 were highlighted by Mikhailov (Mikhailov & Denisova, 2020:67-69) in their study. In addition, the study undertaken by Gafurov (Gafurov et al., 2020:107) emphasized disadvantages mentioned by students that included an overloading of tasks, endless deadlines that led to copy-pasting, stressful situations among spouses, and a lack of time for their children. Therefore, this kind of study signals the necessity of examining the conditions of students during online Learning.

Online, in contrast to offline Learning requires additional preparation. This implies further contemplation of the learning process needed for both students and faculty members that are supplemental to video conferencing. For instance, in their study, Olkhovaya (Olkhovaya & Poyarkova, 2020:150) stated that students need to be equipped with reflexive learning skills as this is imperative to independent Learning. In addition, Melezhik (Melezhik et al., 2020:52) indicated that faculty members also need this skill to diversify their curriculum. Moreover, Donskikh (Donskikh, 2020:61) pointed out that there is sufficient literature on various subjects; however, self-motivation and independent learning skills are necessary to enable learners to utilize those skills accordingly. Hence, nurturing reflective learning becomes an essential mandate to the practice of online learning.

For medical students, practicing clinical skills during a pandemic has been almost impossible. Indeed, this has created tension for graduate students required to demonstrate practical skills at the culmination of their studies (Khalil et al., 2020:7). In their paper, Alekseeva (Alekseeva & Balkizov, 2020:18) referred to alternative ways such students

can take to form clinical skills at the early stage of learning through the use of standardized and virtual patients as well as simulation technologies. Solutions such as these allow students to continue practicing their skills in at least a virtual way to avoid falling behind. Nevertheless, practicing clinical skills for medical students has remained possible despite the restrictions caused by the pandemic.

To conclude, in universities worldwide, the experience of online learning has revealed challenges related to technical issues and ineffective network connections. Overall, students have been satisfied with the organization of online learning to a certain extent. The perception of online learning being aligned with benefits such as connecting from home is offset by the resultant lack of physical activity. Besides mastering their technical device, students are also required to gain reflective learning skills to help them deal with information acquired in their courses. Nevertheless, for medical students, the means to practice clinical skills remain inaccessible, though alternative ways of doing so have been suggested.

## Methodology

This study used a quantitative approach, in particular cross-sectional survey design as it helps to obtain participants' experiences of online learning while practicing it (Creswell, 2012:377). Survey questions were open-ended to avoid imposing on students certain existed labels about online learning. It is helpful to investigate the issue from the standpoint of participants as they have experienced the process of online Learning. Otherwise, predetermined answers might mislead us in our attempts to understand this phenomenon. That is why the quantitative approach was suitable for examining this particular issue. Hence, the following research question was developed: How are international students experiencing online learning at a distance?

A survey was the single method that was used to collect the data. It consisted of 16 questions, three of which were demographic. The remaining 13 questions were open-ended and had been constructed to enable us to examine factors that impede the smooth continuation of learning processes during online Learning. This method was deemed the most convenient as all students were in India. Regarding ethical norms, it is worth mentioning that we asked the international student dean's office to distribute the survey among all international students. Hence, the members of the dean's office had access to

students' responses. However, from the responses, it was difficult to identify students' names and email addresses. Therefore, we could protect students' names from being disclosed.

In total, 147 responses (28 [19%] female and 119 [81%] male) were accumulated from students in their second to fifth years of study. Their age varied between 18 and 28. There was no elimination of responses due to an absence of misconduct. However, some students' responses were irrelevant to the question asked. In such situations, the responses were coded as "an irrelevant response." We used a constructive grounded theory approach to analyze the open-ended responses. First, open responses were read by both authors independently. Then they have created categories as themes were related to each question. Both authors discussed categories and subcategories to ensure consistency in building them. In the first stage, general categories were built, whereas, in the second stage, an in-depth examination of categories revealed subcategories (Sharmaz, 2014:147). Each question elicited at least five categories and several subcategories. Once open coding was completed, through axial coding, students' responses were crossed with one another in order to build a comprehensible story about their experiences (Seale, 2012). Moreover, this approach has allowed us to build a theory related to the experiences of international medical students in Karaganda based on the Kazakhstani context (Sharmaz, 2009:129).

## Research Results

Research results were analyzed in two formats. The first involves the statistical analysis of closed responses and short open-ended responses. The second was an analysis of more extended open-ended responses to **five questions** based on the constructive grounded theory approach.

### *General Information*

The responses of the short open-ended questions brought up that almost all participants have one to three siblings who study at diverse universities in each family simultaneously. This question was intended to seek whether the number of children at home has influenced the need to share a room, technical devices, and Internet speed. When asked about their study space, 115(78%) respondents answered that they had a private space at home for studying, whereas 32 (22%) did not. Moreover, concerning accessibility to electronic devices, 134 (91%) respondents were equipped with their own, whereas 9 (6%) did not own any while 4 (3%) had

difficulties responding to this question. We asked respondents about the approximate percentage of their parent's income spent to cover internet fees and found that this varied from 2% up to 10%. However, some respondents commented that the amount of money spent did not improve their internet connection.

Regarding respondents' background education, 86 (59%) graduated from college and 61 (41%) from regular schools. This question was designed to understand the challenges that respondents might face, as, after college, students might be more matured than in regular schools. Out of 147 respondents in total, 96 (65%) stated that they were satisfied with online learning, 32 (22%) mentioned that they were barely satisfied and 19 (13%) of these students were unsatisfied. Overall satisfaction of students might be related to their year of study as at the early stage they study social sciences and some pre-clinical courses whereas senior students' dissatisfaction might be caused due to their relation to clinical practices. In the study conducted by Al-Salman et al., (2021), students majoring in art and humanities were satisfied with online learning compare to their counterparts majoring in science where practicing skills in reality were pivotal. Respondents spend approximately eight hours in front of a computer, three to four of which were allocated to online classes with the remaining going towards preparations for their classes. They spent 10 hours per week on their daily sport activities.

#### *Grounded Theory Analysis*

The analysis, conducted by constructive grounded theory, has revealed several categories and subcategories for each question. **The first**, a long open-ended question aimed to explore the daily schedule of international students. According to their content, the responses were categorized into five groups: (1) "experiences" where students wrote about their experiences at length. For example, here one of the responses: "*Our classes held by the schedule, our teachers give lectures about the particular topic then in the next class they will ask about that. According to our answers and our active participation, we get our grades and teachers' feedback about our performance and participation in the class. We interact via online platforms during this pandemic. We interact via online platforms during this pandemic (Student\_43\_Female\_20\_years\_old)*"; (2) "general perceptions" where responses briefly described a feature of online learning as "*Everything is good (Student\_101\_Female\_22\_years\_old)*"; (3) "critical points towards experiences" where students criticized certain aspects of online learning, for

instance, "*Learning is not word, only completing the timetable, class start half-hour checking attendance, then teachers start PPT, during time many time internet problem, then students speak so not clear voice, I say online contact are easy with teacher and group mates but learning is not, yes online study is good for students how doing time pass. In one word worst (Student\_139\_Male\_22\_years\_old)*"; (4) "experience in a word" where responses were provided in one word like "time pass," "vigilant," and "6<sup>hours</sup> day" or "*Daily work (Student\_91\_Male\_19\_years\_old)*"; (5) "irrelevant responses" where students provided an answer, though they did not respond to the posed question, as we can see from this response "*University is doing good (Student\_8\_Male\_23\_years\_old)*". The frequency of the students' responses for each category is provided in Table 1.

**Table 1.1** – Students' Daily Online Schedule\_ Stage\_1

|   | Categories                          | Frequency | %   |
|---|-------------------------------------|-----------|-----|
| 1 | Experiences                         | 71        | 48  |
| 2 | General perceptions (good, bad)     | 39        | 27  |
| 3 | Critical points towards experiences | 19        | 13  |
| 4 | Experiences in a word               | 12        | 8   |
| 5 | Irrelevant responses to a question  | 6         | 4   |
|   | Total                               | 147       | 100 |

Further from Table 1.1, we can see that the category "Experiences" was scrutinized in-depth; as a result, there emerged 71(48%) responses demonstrating the diverse experience of students. The first subcategory, "Listing online platforms," has identified three ways of student-teacher interaction: for their daily class meeting, they used WebEx, Zoom, and Teams; to see their grades, students use Platonus; and finally, to interact with their peers and faculty they used WhatsApp. For example, "*Our classes schedule was delivered one day before on WhatsApp, and next day our teacher met us on an online platform like Zoom, Microsoft teams, etc., over feedback grades shown on Platonus system by a teacher, by WhatsApp we all interact with each other's (Student\_14\_Male\_21\_years\_old)*." The remained respondents referred to their activities and this subcategory entitled "Describing interaction processes." They mentioned online platforms or video calls; however, they emphasized their interaction with a teacher, discussion, preparation of PPT, learning the topic. For instance, here one

of the extracts *“Seriously the process of KMU is quite excellent, apart from studies they are first able to develop our personality, we tend to study a lot of subjects which are extracurricular important in one’s life, classes are arranged regularly from Monday to Friday with weekends being off, and for grades we either give answers to teachers’ questions in class, or we upload a task on Platonous, and then we get grades, interacting with group mates and teachers is directly through messages on WhatsApp, we direct message them, as I being a group leader talks and ask everything on behalf of my group, and I make my group mates understand then easily (Student 51\_Male\_19\_years\_old)”*

To sum this category up, we can see that students’ experiences of online learning were divided into two focus types. The first group of students (45%) highlighted the platforms they utilized during their online learning as WebEx and Microsoft Teams for daily conferences, WhatsApp for communication with faculty members and groupmates, and Platonus to monitor their grades and rating. A study conducted by Pal (Pal and Vanijja,2020) confirms the usefulness of Microsoft Teams. Furthermore, in the study conducted by Almusharraf (Almusharraf & Khahro, 2020), systematic employment of particular platforms led to students’ satisfaction with learning. Hence, using platforms that students have mentioned might be one of the reasons why 65% of them remained satisfied with online learning. The second group (55%) emphasized the process of learning, in other words, the way classes were conducted. It included daily interaction between faculty members and students discussing topics and giving presentations. According to the students’ descriptions, some faculty members manifested check-in control behaviors, which irritated them due to their time consumption. A study conducted by Rafique (Rafique et al.,2021) reports the necessity of controlling students alike to their presence rather than their actual involvement and active participation. In terms of emotional features, out of 39 (27%) responses, we can see that 31(80%) respondents perceived online learning positively, whereas 12% found it satisfying, while 8% experienced it negatively.

A similar pattern has been done with the following two categories. An in-depth investigation found that the category “general perceptions” 39 (27%) contain three subcategories while “critical points towards experiences” 19 (13%) contain five subcategories, see in Table 1.2 and 1.3.

**Table 1.1** – Students’ Daily Online Schedule \_Stage\_2\_ Category\_Experiences

|   | Category Experiences             | Frequency | %   |
|---|----------------------------------|-----------|-----|
| 1 | Listing online platforms         | 32        | 45  |
| 2 | Describing interaction processes | 39        | 55  |
|   | Total                            | 71        | 100 |

**Table 1.2** – Students’ Daily Online Schedule \_Stage\_2\_ Category\_General\_Perceptions

|   | General Perceptions | Frequency | %   |
|---|---------------------|-----------|-----|
| 1 | Positive            | 31        | 80  |
| 2 | Satisfied           | 5         | 12  |
| 3 | Negative            | 3         | 8   |
|   | Total               | 39        | 100 |

**Table 1.3** – Students’ Daily Online Schedule \_Stage\_2\_ Critical\_Points\_Towards\_Experiences

|   | Critical Points Toward Experiences | Frequency | %   |
|---|------------------------------------|-----------|-----|
| 1 | Decline of self-motivation         | 1         | 5   |
| 2 | Concern regarding grading          | 3         | 16  |
| 3 | Lack of interactions               | 7         | 37  |
| 4 | Poor network connection            | 6         | 31  |
| 5 | Negative impressions               | 2         | 11  |
|   | Total                              | 19        | 100 |

Further analysis of such critical responses by students revealed that 37% attributed this to a lack of interaction with faculty members and groupmates, whereas the significance of collaboration between teachers and students during online learning was highlighted by other scholars as well (Baber, 2020; Gonzalez-Ramirez et. al., 2020; Faize & Nawaz,2020; Pasaribu & Dewi,2020). At the same time, 31% attributed their discontent to poor internet access. It seems that poor Internet connection becomes a major obstacle that most of the students face during the online study (Muthuprasad et al., 2021; Zeshan, 2021). Interestingly, only 5% of student respondents referred to a diminution of self-motivation due to a lack of interactions and proper environments for studying. Al-Kumaim (Al-Kumaim et al.,2021) pointed out that students’ motivation dropped due to intensity in completing homework and other tasks.

The next open-ended question was developed to examine the challenges faced by students. The analysis of the resultant responses revealed five categories. Yes and no without explanations; yes and no with explanations; and irrelevant responses (see Table 2).

**Table 2** – Challenges Faced During Online Learning\_Stage\_1

|   | Categories              | Frequency | %    |
|---|-------------------------|-----------|------|
| 1 | Yes (no explanations)   | 7         | 5    |
| 2 | Yes (with explanations) | 59        | 40   |
| 3 | No (no explanations)    | 49        | 33,6 |
| 4 | No (with explanations)  | 30        | 20   |
| 5 | Irrelevant responses    | 2         | 1,4  |
|   | Total                   | 147       | 100  |

**Table 2.1** – Challenges Faced During Online Learning\_Stage\_2

|   | Category “Yes, with Explanations”   | Frequency | %   |
|---|-------------------------------------|-----------|-----|
| 1 | Network issues                      | 47        | 80  |
| 2 | Lacking proper learning environment | 12        | 20  |
|   | Total                               | 59        | 100 |

As shown in Table 2, 45% (66) of students have faced challenges during online learning, whereas 54% (79) have not. The analysis of an in-depth investigation of responses with explanation has identified two major obstacles (see Table 2.1). First, 80% of the responses referred to network issues. It has been aligned to the geographical position of students, e.g., remote areas, and the quality of internet speed in those areas. For instance, see the following extracts: *“Yes...internet connectivity is not good...and sound quality is not good so can't listen to teachers (Student\_78\_Male\_22\_years\_old); Yes, because I can't have alone space and here in my village, I'm facing network problems. Internet doesn't run properly (Student\_63\_Female\_21\_years\_old).”* Second, 20% of the responses focused on issues related to the inconveniences of the learning environment, which has been related to disturbances and noises at home, resulting in a lack of space for an individual to take online classes such as no practice for 4<sup>th</sup>-year students, less motivation of studying alone; doubt in session; health issues, eye problems, disturbance at home. For instance, we can see from this response *“Yes, place problem, then home disturbance, network problem, for this I*

*go every day to another place like park (there also public disturbance) (Student\_147\_Male\_22\_years\_old).”* Similar challenges were reported in the study by Al-Kumaim (Al-Kumaim et al., 2021).

The third open-ended question aimed to examine the role of the university administration, where five categories emerged. The first two are brief responses such as “yes, supported” or “no, nothing,” and the categories were titled accordingly. The third category, “explanations,” was based on 94 (64%) responses. Two more categories were related to critiques of students, where students express their discontent with the process, for example, *“They can't support us properly, but yes they understand our problems like bad networks or network problems (Student\_57\_Female\_18\_years\_old).”* Finally, irrelevant responses of students to the posed question.

Further, in stage 2, the category “explanations” was investigated in-depth, and the responses were divided into two subcategories. First, “Learning platforms” where respondents have listed the following applications: WebEx, teams, WhatsApp, and email. For example, *“Providing all materials on various platforms like WhatsApp or Teams which teacher explains in class (Student\_13\_Male\_21\_years\_old).”* The second subcategory, “Provided access to learning materials,” where respondents mentioned teachers’ support, eBooks, conferences, test, syllabus, activities, following schedule. Here is an extract of one respondent *“They [teachers] provide us with the best method of teaching and other curriculum activities like conferences and all (Student\_83\_Female\_22\_years\_old)”*

**Table 3** – Describe Activities Provided to Support Online Learning\_Stage\_1

|   | Categories           | Frequency | %   |
|---|----------------------|-----------|-----|
| 1 | No/Nothing/No one    | 25        | 17  |
| 2 | Yes, supported       | 16        | 11  |
| 3 | Explanations         | 94        | 64  |
| 4 | Critical points      | 6         | 4   |
| 5 | Irrelevant responses | 6         | 4   |
|   | Total                | 147       | 100 |

To conclude this question, we can state that 75% of respondents felt supported by the administration and by faculty members. They referred to activities conducted during classes, access to information resources, and regular tasks. Scholars found that online learning requires creativity in design-

ing a course to engage and interest students (Male, et al., 2020). However, despite how hard the university supported them, a poor internet connection and other local issues were beyond the university's scope. Therefore, students had to deal with and accept those challenges at a local level. As a result, 21% of students mentioned an absence of support.

**Table 3.1** – Describe Activities Provided to Support Online Learning\_Stage\_2

|   | Category "Explanations"               | Frequency | %   |
|---|---------------------------------------|-----------|-----|
| 1 | Learning platforms                    | 22        | 23  |
| 2 | Provided access to Learning materials | 72        | 77  |
|   | Total                                 | 94        | 100 |

Ultimately, we were interested in students' opinions about what they would recommend from their experiences of these challenges. The frequency and percentage of the emerged categories have been presented in Table 4. The responses related to the "no" answer amounted to three, albeit in three formats.

**Table 4** – Recommendations\_Stage\_1

|   | Categories             | Frequency | %   |
|---|------------------------|-----------|-----|
| 1 | No                     | 20        | 14  |
| 2 | No, everything is good | 40        | 27  |
| 3 | No, negative points    | 12        | 8   |
| 4 | Recommendations        | 69        | 47  |
| 5 | Irrelevant responses   | 6         | 4   |
|   | Total                  | 147       | 100 |

First, "no" is given but without explanation. Second, "no" responses followed positive sentences such as "everything was good." Third, "no" responses were followed by negative points like "offline learning better."

Then we had a category called "recommendations," where students shared their suggestions generously. Following the previous stage, we have analyzed 69 (47%) students' responses that contain recommendations (see Table 4.1).

As it can be seen, it was divided into five areas; first, to ensure better software, in other words, students suggested using other platforms, for instance in this extract "Use better software to provide online classes. (Student\_2\_Male\_20\_years\_old)." The

second area of recommendation is reducing face-to-face class hours, for example this extract "Limit the hours of classes because not every student is comfortable with it as they live in villages and they don't have much internet to take 5-6 hours of video call classes. As in India, the normal data plan of the internet is like 1.5Gb/day and it gets finished in between the class. Then the teacher put absent and if students tell this to the university, then the university says it is your problem (Student\_41\_Male\_22\_years\_old)." This kind of recommendation to decrease class hours to 30 minutes was proposed by students in the study of Faize (Faize and Nawaz, 2020:505). Another alternative was provided to form small groups for online sessions (Milicevic, et al. 2020). The third area of recommendation was probably raised by senior students who worried about their practical skill, for instance, as we can see from this extract, "Offline class must have to start because 5<sup>th</sup>-year student also needs some practical experience which is now absolutely 0% (Student\_128\_Male\_21\_years\_old)." A study conducted by Khalil (Khalil et al., 2020) confirms this necessity in practicing skills, however, suggests employing virtual models. This leads to faculty cooperation to create online class to practice clinical skills (McQuirter, 2020) and the availability of those online platforms to foster practical training skills (Blizak et al., 2020). Some respondents recommend returning to offline learning, for example, "Face to face interaction teacher and student (Student\_132\_Female\_21\_years\_old)." Fourth, recommendations were made in diverse areas. The following extract shows the necessity of improving student-teacher interaction: "Please understand the network problems like sometimes automatically ours disconnects and teachers, they do not understand our situation and marks absent or reduces the marks (Student\_117\_Female\_22\_years\_old)." The final category goes to "irrelevant responses," meaning that students responded but not to the question posed.

**Table 4.1** – Recommendations\_Stage\_2

|   | Categories on "Recommendations"          | Frequency | %   |
|---|--|-----------|-----|
| 1 | Better software/Network issues           | 17        | 24  |
| 2 | Reduce hours of study/give written task/ | 16        | 23  |
| 3 | Focus on medical subjects                | 8         | 12  |
| 4 | Return to offline                        | 9         | 13  |
| 5 | Need further improvements                | 19        | 28  |
|   | Total                                    | 69        | 100 |



To sum up the fourth question, according to students' recommendations, we can say that students need more interaction with faculty members and their peers in their professional field. The poor quality of the Internet and noises from some participants' side, tiredness from sitting in one position for a long time, restricted communication among participants. Indeed, a resolution of these issues would decrease the tension of online learning. Nevertheless, there is a feeling of nostalgia for the days of offline learning among students as it was reflected in the study by Male (Male et al., 2020).

Finally, students were asked to choose between online and offline learning. In Diagram 1, we can see that student responses were divided almost equally, with a slight fluctuation towards offline learning. Specifically, 56(38%) of students supported online learning. This group of students joined 14(10%) students emphasizing that this was due to reasons caused by the COVID-19 situation. In contrast, 38(26%) voted for offline learning, and 34(23%) claimed 'no' for online learning. Overall, 48% of students supported online learning compared to 49% who were in favor of offline learning.

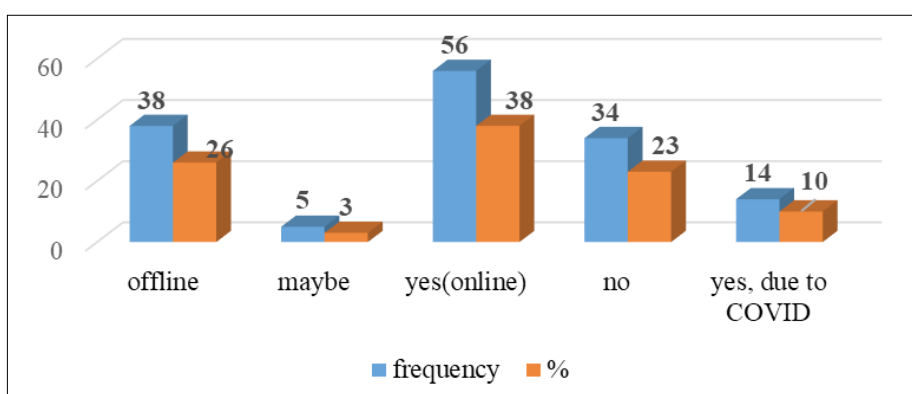


Diagram 1 – Students Opinion on Following Online Learning

## Discussion

This study found three points that are closely related to studies conducted by scholars at the international level. The major issue almost every international student face during online learning is network issues. According to students' responses, this was easier due to students' disposition in remote areas or to the speed of network packages per paid dues. The research conducted among scholars pointed out that most of the students face technical and network issues during online learning (Aleshkovskiy, et al., 2020; Zeshan, 2021; Faize & Nawaz, 2020; Gonzalez-Ramirez, et al., 2020). Therefore, this study confirms the existing knowledge related to network issues during online learning.

The second point that most students refer to is lack of communication. It emerged in the categories of the two questions, "daily schedule of students" and "recommendations." It seems that interactions during online meetings were insufficient as in offline studies, students could talk with each other and with local students during breaks and consult with their faculty members. The necessity of

communication and interaction of students with faculty members was highlighted by scholars as well (Sokolovskaya, 2020; Pasaribu & Dewi, 2021). Hence, this study echoes the sentiment that communication remains a key to students' satisfaction with online learning.

The third point was related to medical subject matters. Due to the study engaging students in diverse years of their studies, senior students mentioned that they were deprived of practical skills in medicine. Scholars in medicine have claimed that, during the pandemic regime, it has been almost impossible to practice clinical skills (Alekseeva & Balkizov, 2020; Khalil et al., 2020). However, their suggestion that we could support our students by having them practice in virtual formats is also a solution to this problem. Hence, this study confirms that medical students face challenges in experiencing clinical skills.

## Conclusion

To conclude, this study highlights the following experiences of international students at the Medical University of Karaganda:

Students were equipped with licensed platforms such as WebEx and Microsoft Teams to meet regularly for lecture and practical classes by the university. Despite that, 80% of responses in the category “experiences” referred to network issues. Statistical data shows that from two to ten percent of parents’ income was spent to cover internet connections. However, students recognize that these poor networks were caused by complete services, regardless of expenses incurred for these services.

Students visited daily classes, and they referred to positive interactions with faculty members and peers. However, they were irritated by the process of check-in control conducted during the offline learning experience, long class hours, and noises

during the meeting. As a result, they suggested reducing class hours and changing the format of tasks towards written ones in the recommendation section. It also requires a revision of the curriculum and the format of teaching in online learning.

In the future, this study could be further explored to determine how students are building their independent learning skills. Statistical data pointed out that 86 (59%) respondents have graduated from college and 61 (41%) from regular schools. However, this study could not cover the alignment between background knowledge and independent learning skills at the university. Therefore, their active engagement in employing those opportunities remains unexplored.

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