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## QUALITATIVE STUDY OF STUDENTS' OPINION ON DISTANCE EDUCATION

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ელენე ფაღავა, ირაკლი მჭედლიშვილი დისტანციური სწავლების შესახებ სტუდენტთა აზრის ხარისხობრივი კვლევა ეპიდემიოლოგიისა და ბიოსტატისტიკის დეპარტამენტი, თბილისის სახელმწიფო სამედიცინო უნივერსიტეტი, საქართველო

# რეზიუმე

რესპონდენტებთან მოხდა წინასწარ მომზადებული საკითხების განხილვა და მათი ნებართვით აუდიოჩანაწერის მომზადება. შემდეგ ეს აუდიოჩანაწერი იყო ტრანსკრიბირებული და გაანალიზებული. გამოვლენილ იქნა ონლაინ სწავლების გარკვეული დადებითი და უარყოფითი მხარეები, აგრეთვე ის მხარეები, რომელზედაც ონლაინ სწავლება არ ახდენდა გავლენას.

მიღებული შედეგები ზოგადად თანხვედრაშია ლიტერატურაში მოცემულ ტენდენციებთან: არსებობს საგნები სამედიცინო განათლებაში, რომელთა ონლაინ სწავლება სრულიად დაუშვებელია, როგორიცაა კლინიკური საგნები. ჰიბრიდული განათლება, რომელიც მოიცავს როგორც საკლასო ოთახში, ასევე ონლაინ გაკვეთილებს, ფართოდ გამოიყენება განათლებაში, მაგრამ, რამდენად შესაძლებელია ასეთი მიდგომის გამოყენება სამედიცინო სპეციალისტის მომზადების კურსში, საჭიროებს უკეთ შესწავლას.

**Background:** Distance education is quite popular, especially in postgraduate studies [8-11]. It has not been adapted for bachelor studies until recently, due to the situation with COVID-19. The online education during the pandemics permitted to maintain the continuous level of education in different specialties and in medicine as well [1,2,6,12-14]. Some studies have evaluated introduction of blended and distance education in epidemiology and biostatistics [3-5]. At the Tbilisi State Medical University (TSMU) the subject of Epidemiology and Biostatistics has been always taught face-to-face in class, but during the COVID-19 pandemics the online mode of education was implemented.

**The aim** of the study was to explore the opinion of the TSMU students regarding the experience of online learning in general and specifically for the subject of Epidemiology and Biostatistics.

Materials and Methods. The qualitative research method was used. 9 students of the Faculty of Public Health of the Tbilisi State Medical University that have studied epidemiology and biostatistics both in class and online participated in the semi-structured interview through Zoom. A list of topics was based on the literature review and researchers' interests [7]. The students have been explained the purpose of the study and asked for permission to record the session. Afterwards the anonymized audio files have been transcribed and analyzed. The duration of audio interviews was from 5.5 to 18 minutes.

**Results.** During the interview a list of prepared topics was discussed. The interviewer was just proposing the topic and encouraging the interviewee to elaborate on it.

The topics discussed were:

- General ideas on distance education
- ❖ Advantages and disadvantages of distance education
- Impact of distance education on communication with peers
- ❖ Impact of distance education on communication with the pedagogue
- Understanding the material (epidemiology/biostatistics)
- Quality of remote teaching (epidemiology/biostatistics)

- Quality of responses (epidemiology/biostatistics) when delivered remotely
- Marks and exam
- ❖ Attendance of the distance education classes
- ❖ Ability to combine the online classes with other activities such as work, exercising, etc.
- ❖ Health issues hypodynamics, vision, etc.
- ❖ Social aspects grooming, flirting, etc.
- ❖ Time aspects travel time, ...
- ❖ Financial resources travel money, ...

In general, the students were happy with opportunities that online classroom had given them. Most of them were working part time and they were able to adjust their working routine and find time to attend the classes at least to get marks. Of course, they missed the social aspects of the class attendance, but major advantages of the online setting for them was economy of time and money. All respondents denied any health-related effects. They assessed teacher's performance unchanged as well as their own academic achievements.

It is interesting that there was one respondent (male) who said that his motivation towards study had decreased dramatically because the special ambiance, characteristic to the in-class learning could not have been recreated online and that had been affecting his motivation to study, to attend online classes. Indeed, his marks have deteriorated in comparison with presential studies. Though, nobody else corroborated this stance.

The main advantages and disadvantages named by the students are presented in Table 1.

Table 1. Advantages and Disadvantages of Online Education

Advantages	Disadvantages
o more opportunities	o social drawbacks
o flexibility	o motivation to study decreased
<ul> <li>ability to combine with work</li> </ul>	
o higher attendance rate	
<ul><li>sparing time</li></ul>	
<ul><li>sparing money</li></ul>	

It is interesting that some aspects have remained unchanged and were assessed equally by the students during online and presential classes. The students assessed effect on health as the same. Notwithstanding the fact that majority of the students used their mobile phones for the classes, they have not noted that their screen time increased and this has affected their eye health. Unanimously, the students have assessed the teachers' teaching capabilities unchanged. According to the respondents their academic achievements in general also remained unchanged. The question about decreases of social interactions due to the fact that the students were not seeing each other in the classroom was also marked as mostly unchanged. This has been explained that they still managed to stay in touch with friends.

**Discussion and conclusions:** Observed results are in line with the global data [3-5]. There are subjects that can be taught better in the class. We cannot teach students how to palpate the patient at distance. Hybrid education comprising both presential and online components is a modern approach to the education, but whether it is advisable to be used for medical education still needs further exploration.

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## **SUMMARY**

The paper presents the results of the qualitative study that aimed to study the opinion of the students of the Faculty of Public Health regarding online education of epidemiology and biostatistics. Online classes were held in the period of COVID-19 pandemics. The respondents (n=9) have attended online as well as presential classes (before the pandemics). The study was performed by means of the structured interviewing and all the students were explained the purpose of the study. The interviewees discussed a list of the beforehand prepared topics and the audio records of the interviews were prepared following their permission. Afterwards these audio records have been transcribed and analyzed.

Advantages and disadvantages of the online education were identified, as well as the topics which remained unchanged while online vs presential classes in epidemiology and biostatistics. Obtained results are generally in line with the global trends: there are some subjects in medicine that absolutely cannot be approached by online education. Hybrid education comprising both presential and online components is a modern approach to the education, but whether it is advisable to be used for any subjects of medical education still need further exploration.

Keywords: epidemiology, biostatistics, students, online, hybrid education, qualitative research

