Research Paper:

Challenges of Virtual education During the Pandemic of COVID-19: A Qualitative Research

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ABSTRACT

Background & Aims Coronavirus epidemic, along with other countries around the world, in Iran, also raised the need for social distancing and home quarantine. As a result, the continuation of face-to-face education was disrupted and virtual education was chosen as a strategy for not stopping education in schools and universities. Alternatively, virtual education was adopted in order not to stop education, thereby causing new challenges for students and universities. This qualitative study aimed at investigating the experiences of university professors of the problems of virtual education during the COVID-19 pandemic.

Materials & Methods This qualitative study was conducted using conventional content analysis. The aim of this study was to answer the question "What is the experience of university teachers about the challenges of virtual education during COVID-19 pandemic?". Participants were 24 university teachers in different fields whom were selected with purposeful sampling. Teachers of different disciplines at the university with a master's degree or higher who also had at least three years of teaching experience were included in the study. Semi-structured interviews with open-ended questions were used to collect data. Analyzing data was done through conventional content analysis with Lundman and Graneheim methods with Maxqda.

Results The descriptive results of the study revealed that the age range of the participants was from 30 to 50 years old. 62.5 percent of the teachers were female. Their teaching experience varied from 3 to 26 years. In terms of academic degree, 58 percent were assistant professor, 20 percent were instructor, 16 percent were associate professor, and 6 percent were full professor. Additionally, 66 percent of them were teaching at state universities. The results obtained from the qualitative part of the study included Technology-related problems with 3 subcategory, Problems with the teaching process with 5 subcategory and Poor interaction with 3 subcategory.

Conclusion Due to the long closure of universities and the long-term use of e-learning Managers and policymakers in the education system need to design programs to address these issues.

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Extended Abstract

Introduction

The emerging COVID-19 disease with forced closures around the world, all aspects of society including economy, education, culture and ... faced a serious challenge, and has introduced a new lifestyle to people around the world. But the change she made in the field of education was very remarkable in Iran disrupted face-to-face education in educational centers due to social distancing and home quarantine. The movement of teachers from traditional education to virtual learning, despite the lack of adequate preparation and appropriate infrastructures of e-learning program in the second semester programs of 2019-2020 and subsequently in the first semester of 2020-2021 was implemented throughout the country. Alternatively, virtual education was adopted in order not to stop education, thereby causing new challenges for students and universities. This qualitative study aimed at investigating the experiences of university professors of the problems of virtual education during the COVID-19 pandemic.

Materials and Methods

This qualitative study was conducted using conventional content analysis. The aim of this study was to answer the question "What is the experience of university teachers about the challenges of virtual education during COVID-19 pandemic?". Participants were 24 university teachers in different fields whom were selected with purposeful sampling. Teachers of different disciplines at the university with a master's degree or higher who also had at least three years of teaching experience were included in the study. In this method, the researcher used participants who had rich experience about the subject and were willing to participate in the research. In order to follow the social distancing, all interviews were conducted virtually via Skype, Whatsapp, at intervals of 45 to 60 minutes by an experienced interviewer. Interviews were continued until the data saturation and not reaching the new code in the last three interviews. Semi-structured interviews with open-ended questions were also used to collect data. Finally, the interviews were typed, and read several times to extract the original codes. Analyzing data was done through conventional content analysis with Lundman and Graneheim methods with Maxqda. To check and ensure data trustworthiness and credibility, in addition to spending enough time to gather and analyze data, the gathered data were examined by the research team after running the interviews and codifying them. To check confirm ability, the analyzed interviews were given to two teachers who participated in the study. Then, an experienced person (who had experience in qualitative research and virtual education) was requested to look into the interviews, codes, and extracted themes. Further, to check credibility and trustworthiness of data, two external supervisors were employed. To check transferability of data, sufficient qualitative data were provided so that readers would be able to evaluate data in other aspects.

Results

The descriptive results of the study revealed that the age range of the participants was from 30 to 50 years old. 62/5 percent of the teachers were female. Their teaching experience varied from 3 to 26 years. In terms of academic degree, 58 percent were assistant professor, 20 percent were instructor, 16 percent were associate professor, and 6 percent were full professor. Additionally, 66 percent of them were teaching at state universities.

The results obtained from the qualitative part of the study included Technology-related problems with 3 subcategory (Infrastructure defect, Low quality of Internet, Lack of supprot for class-related problems), educational problems with 5 subcategory(Limitation in conveying the full lesson content, Limitation in using different teaching methods, Feeling of superficial education, Learners' demotivation (lack of active participation by students), Lack of deep learning achievement) and Poor interaction with 3 saucategory (Lack of knowing students, Lack of relationship with students, Weak interaction with colleagues).

Conclusion

The present study's findings showed that teachers were forced to face infrastructural and educational problems in virtual learning condition. Several factors such as unfamiliarity of professors and students with online education system and lack of adequate preparation of educational organizations for effective implementation and adequate and timely support caused these problems. Regardless of the cause of the problem, These problems directly and indirectly negatively affect the final outcome of education, which is student learning. Due to the long closure of universities and the long-term use of e-learning Managers and policymakers in the education system need to design programs to address these issues.

Ethical Considerations

Compliance with ethical guidelines

Ethical permission for this study has been received from the Ethics Committee of Iran University of Medical Sciences with code IR.IUMS.REC.1400.189.

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Authors' contributions

Supervision, data analysis, draft writing, project management, editing and finalization: Hanieh Gholamnejad and Solmaz Mousavi; Research and review, methodology, data collection and data analysis: Shahin Raofi, Fatemeh Hassan Shiri, Fatemeh Ghofrani.

Conflict of interest

The authors declared no conflict of interest.

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