Exploring Students' Experiences of E-learning in Midwifery Course: A Qualitative Study Involving Nursing Students Taking Midwifery Course at Rusangu University

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Abstract

Digital teaching and learning sprouted as sparks of fire at different points with the traditional method of teaching and learning stone walling its presence and its ability to be appreciated. Following an unprecedented burst of COVI-19 pandemic, institutions of higher learning embraced digital learning extensively and seemingly forever. This study was launched for the purpose of exploring nursing students' experiences of e-learning as they pursued Midwifery Course during the pandemic. The study used a cross-sectional design with a qualitative approach. A mixture of 60 third year and fourth year Nursing students taking Midwifery as a course participated in the study through 6 Focus Group discussions. The study found that students residing in rural places of the country faced challenges of poor internet connectivity due to weak signal strength. They could fail to participate during interactive virtual class due to uncharged electronic gadgets or interrupted session due to power outages. Some had neither Personal Computers nor a smart phone to enable them access learning materials. E-learning, in spite of institutions embracing it due to COVID-19 pandemic related reasons, it remains the quickest, widest and most efficient and effective way of teaching and learning with greater potential for being the future mainstay of learning. Telecommunication and electricity supply companies need to invest more in technology to enable lecturers and students access uninterrupted and reliable internet network because with technology advancement comes, a cultural shift from the traditional way of learning to the digitalized mode of learning.

Keywords: E-learning, students, COVID-19, experiences.

Introduction

Midwifery is an approach to care for women and their new born infants (ICM, 2017). Midwifery course is a pre-requisite in the training of a Bachelor of Science in Nursing (Rusangu BSc. Curriculum, 2018). The course consists of theory and practical components. Exposure to Midwifery course helps non-midwife nurses to provide aspects of maternal and new born care services once they graduate. This is in line with the recommendation of ICM (2017). The Midwifery course is taught through face-to-face mode at Rusangu University in Zambia. With the burst of Severe Acute Respiratory Syndrome Corona virus (SARS-CoV-2) at the global stage, which the World Health Organization pronounced as a pandemic on 13th March 2020, there was an abrupt change in teaching globally (Morcillo et al., (2020).

closed their educational institutions and suspended physical classes.

Zambia reported the first two cases of SARS-CoV-2 on the 18th of March, 2020 (Simulundu et al, 2020). In response to health authorities advise and/or mandate that come in recognition of the crucial role of social distancing, no mass gatherings, wearing of masks in public places, frequent hand washing and programmed lock-downs among others, in minimizing the spread of the virus among community members, the Zambian government enforced the World Health Organization (2020) guidelines, (Xinhua, 2020).

Like other countries in the global community, the Zambian government further declared closure of educational institutions, 'schools and Universities', and suspended physical classes on the 20th March 2020 (Xinhua, 2020). Due to these changes affecting the learning and teaching environments, implementation of e-

learning became the major need to provide new services and technologies in the field of teaching and learning (Parker, 2004).

Following mandatory closure of schools and Universities, Rusangu University, changed the mode of teaching from face to face to e-learning mode. Lecturers and students, a week after university closure, were oriented on e-learning mode of teaching and learning. They were oriented on how to use moodle platform, uploading and downloading educational material for e-learning. Use of Technology for e-teaching and e-learning has continued at Rusangu University. Little was known about students' experiences with e-learning at Rusangu University. The objective of this study therefore, was to explore nursing students' experiences of e-learning in midwifery course during the Covid 19 pandemic.

Materials and Methods

A cross- sectional study with a qualitative approach was conducted between September and November 2020 at Rusangu University, a Church- owned university located along approximately 220km from Lusaka, Zambia. Data was collected through Focus Group Discussions.

Simple random sampling method was used to draw out a sample of 60 students taking Midwifery course.

The sample was composed of 3rd year, 3rd Semester and 4th year 3rd semester nursing students taking midwifery course.

Each Focus Group Discussion session performed in this study, comprised 10 participants and was through watssup conference call. Participants were given a comprehensive explanation on the purpose of the study, consent, and audio recording. After obtaining consent from the participants, the researcher proceeded to collect demographic data. The study used a Sony audio recorder to record the discussion. The recorded information was replayed for clarifications and additions from participants. Each focus group discussion took 15 to 20 minutes. The audio recorded data were analyzed using thematic coding analysis.

Results

A total of 6 Focus Group Discussions were conducted, and each lasted between 15-20 minutes. Of the 60 participants, 89% were females and 11% were males. The ages of the participants were between 18– 45years. This study found that students residing in rural parts of the country faced challenges first with finances to enable them purchase internet bundles so they could access internet. Secondly, poor internet network connectivity characterizing rural areas. Thirdly, power outages (load shedding) for over 6 to 8hours affected online interactive classes as most of them could have uncharged phones and Personal Computers. The fourth point leans towards the most vulnerable students without a Personal Computer let alone a smart phone to enable them access e- learning material. The fifth point relates to unfavourable home environment for serious academic engagement. The study also found that students appreciated in-person (face –to-Face) learning because they were characterized by demonstration which demanded a return demonstration. Watching a demonstration of procedures through videos was not enough.

The following were participants' remarks. *E-learning mode is good because a student can be in class anywhere, anytime so long electronic gadgets are charged, active bundles are available and so is internet signal. The challenge I faced relates to problems with rural areas since I am a rural dweller. At home we do not use electricity therefore, charging of my phone to enable me join a virtual class or download learning materials was a problem* (Focus Group Discussion 1, Female student).

A female participant from the third Focus Group Discussion narrated:

Network connectivity really disadvantages me. To participate in a virtual class, I climb on a mole hill to access internet. Virtual classes called after sunset makes me fail to connect to Google meet or zoom for fear of stepping on snakes on my way up the mole hill. (Focus Group Discussion 3, Female student).

A male participant amplified the narrative on internet connectivity.

Power outages (load shedding) contribute to network problems. It is frustrating when you want to watch videos on second stage of labour, and mechanism of labour uploaded on the moodle platform and you are literally failing to download and watch the videos (Focus Group Discussion 4, Male student).

During the third Focus Group Discussion with 4th year students, one student explained an important point. She reported that midwifery is a 'hands on course'; *as students we need to be in the skills laboratory to practice that which we have learnt than just watching uploaded videos. We have to acquire competences which are essential part of any health sciences degree.* (Focus Group Discussion 3, female student).

Another 4th year student added saying, *I worry a lot that I may fail practical licensure examinations if I do not grasp the skill through practice in the skills laboratory. A student cannot know how to conduct a successful breech delivery by just watching a video. In-person demonstrations are very helpful because they require return demonstrations.* (Focus Group Discussion 3, female student).

Another male participant during the second Focus Group Discussion traced the moments where a home environment cannot be used for serious academic engagement.

It is not easy to study from home.

Home environment does not motivate me to study because of disturbing activities where you quarrel with siblings or others are singing while babies are crying for attention such sort of things.

When you are in a school environment you have a natural drive to study. (Focus Group Discussion 2, Male student).

Discussion

E-Learning has been on exponential rise especially within higher education and research in recent years. E-learning refers to 'the use of Internet technologies to deliver a broad array of solutions that enhances knowledge and performance' (Rosenberg, 2001). Rapid advancement in Information Technology has led to the emergence of using newer tools for transferring knowledge to students (Sarvestan et al., 2019). A study by Barker et al., (2013) in Nairobi- Kenya found that students felt that 'e-learning' is here to stay. Noorbhai (2020) observed that Education has evolved and adapted through the digital and electronic ages. The current COVID-19 pandemic has disrupted the operations of many sectors including education. The global world has reached a tipping point where higher institutions of learning are using digital means for teaching and learning.

This study found that students appreciated e-learning mode of teaching and learning because a student attends class anywhere, anytime so long the electronic gadgets are charge, have active bundles and internet signal is available.

This meant that learning was dependent on availability of funds to buy bundles, availability of uninterrupted power supply to ensure charged electronic gadgets and availability of sustainable internet signal. Similar findings have been highlighted in a study by Atack (2002).

In this study, Atack (2020) reports that some Nursing students had problems with gaining access to a computer due to uncharged computers. Success of e-learning would depend on availability of functional computers and smart phones. This study found that students residing rural areas faced insurmountable challenges to join virtual class sessions or download learning materials as their phones and laptop computers were not charged. To make up for the deficiency, they resorted on the use of borrowed solar powered batteries whose owners could grab back at any moment.

One of the participants narrated;

I use borrowed solar powered charging system. The owners can grab back at any moment. (Focus Group Discussion 1, Male student).

These findings are similar to those found by Sarvestani et al., (2019) in their study titled *Students' Experiences of E-learning Challenges; a Phenomenological Study* conducted in Iran. In this study, the scholars found a range of challenges that students faced. Barker (2013) recommends the availing of CDROMS and DVDs packed with learning material to students which are not dependant on internet access if e-learning has to be incorporated ethically in low resource settings.

This study also observed that some students expressed frustration as they could not hear the lecturer's voice during virtual class sessions. Instead, they depended on use of power point presentation lessons shared on moodle platform.

It's so frustrating. You join the virtual class and you are seeing your lecturer but cannot hear what she is saying (Focus Group Discussion 5, Male student).

These findings are in line with Atack (2002)'s study findings which revealed that many nursing students missed talking to their teacher and peers during virtual class meetings. The absence

of non-verbal cues in computer conferencing may leave participants feeling that they have been communicating largely with a machine rather than another human being (Atack, 2002). Mixing technology, such as video conferencing and the web, may help to alleviate some of the 'coldness' associated with solely web-based learning (Yangoz et al., 2017; Atack, 2002).

This study also found that power outages also posed a challenge in accessing learning material or attending a virtual class session for students.

A male participant explained:

It's difficult to access learning materials or to attend a virtual class session. (Focus Group Discussion 5, Male student).

With regard to methods of e-learning, this study found that students were not only exposed to the Moodle platform.

In addition, lecturers conducted virtual classroom sessions through Google meet classroom, face book classroom, zoom; video and audio recordings of lessons uploaded either on Moodle platform or class WhatsApp group forum. Class WhatsApp group was promoted strictly for academic material otherwise it could have been abused by students sending non-academic videos, audios and other staff.

Similarly, a study by Atack (2002) recommends a separate forum for social discussions for casual communications.

However, this study found that a home environment cannot be used for serious academic engagement. One of the students narrated;

It is not easy to study from home. Home environment does not motivate me to study because of disturbing activities where you quarrel with siblings or others are singing while babies are crying for attention such sort of things. When you are in a school environment you have a natural drive to study. (Focus Group Discussion 2, Male student).

On the other hand, Noorbhai (2020) reports that the health sciences domain consisting of both health sciences students and qualified health professionals frequently use their mobile phones when consulting with patients and in accessing learning material despite the environment.

Another study can be done to explore students' preferred E-learning mode.

Conclusion

E-learning, in spite of institutions embracing it extensively due to COVID-19 pandemic related reasons, it remains the quickest, widest and most efficient and effective way of teaching and learning with greater potential for being the future teaching and learning mainstay. Telecommunication and electricity supply companies need to invest more in technology to enable lecturers and students access uninterrupted and reliable internet network because with technology advancement comes a cultural shift from the traditional way of learning to the digitalized mode of learning. In this era of Covid 19, training institutions should consider investing time for demonstration of procedures of all practical courses such as midwifery before students are sent out for practical experiences. This will enable students acquire skills through exposure thereby boosting their confidence to attend to complications if they arise.
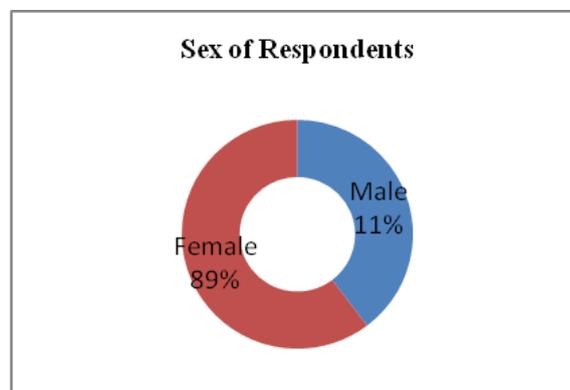
Figures

Figure 1. Sex of Respondents (n =60)

'Figure 1' shows that all 53 (89%) of the respondents were females while 7 (11%) were males.

This study also solicited information on the age range of the respondents. 'Figure. 2' below depicts the findings.
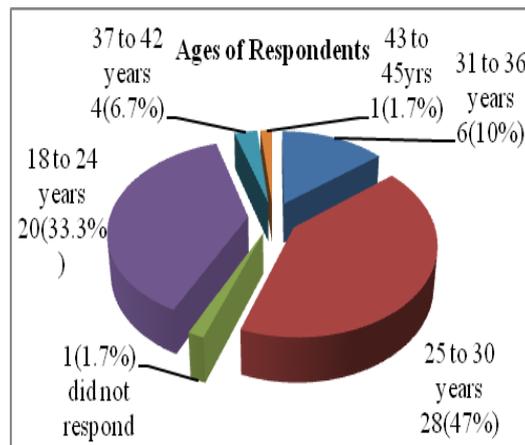

Figure 2. Ages of Respondents (n =60)

'Figure 2' above shows the majority, 28 (47%) of respondents with the age range of 25 to 30 years, 20 (33.3%) had an age range of 18 to 24 years.

Acknowledgements

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