

Research Article

# **Challenges of Open Distance Learning: Insights from Nursing Students at the National University of Lesotho**

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# **Abstract**

Background: The implementation of an E-learning pedagogical model of education for Bachelor of Nursing Science students presents obstacles, including delayed assignment completion, insufficient class participation, low competency, and job loss. Objective: To explore nursing students' challenges associated with open distance learning at the National University of Lesotho. Methodology: A quantitative cross-sectional survey design was used in this study. A structured questionnaire was used to collect data and was distributed to Participants online through google forms. The study was conducted for the period of three weeks in the month of May 2024. The data was analyzed descriptively using Statistical Package of Social Sciences. Results: A total of 58 students responded, out of which 93% experienced challenges during open distance learning while 7% did not. About 81% of Participants struggled with technology, while 71% complained about unreliable internet and personal issues that affected their study during open distance learning. Furthermore, environmental factors interrupted communications among learners and instructors. Issues of unreliable internet, impaired interaction, insufficient built-in support, institutional organization and personal factors that affected open distance learning were revealed. Conclusion: The research findings provide insight on the need to efficiently implement open distance learning for nursing students. Challenges experienced by nursing students that affected their learning include struggling with technology, requiring built-in support systems, and the need to secure an internet connection during open distance learning. Furthermore, prior planning for open distance learning is necessary for proper organization and management of personal issues affecting open distance learning.

# **Keywords**

Open Distance Learning, Nursing Students, Challenges, Obstacles, E-learning

# 1. Introduction

Open distance learning is described as a teaching and learning approach that offers open and flexible access to learning opportunities to anyone, anywhere, and at any time [1]. E-learning similarly, is an opportunity to learn without

being restricted by either geographical or time constraints and and is reported to improve the quality of learning, increase engagement and enhance students' motivation [2].

However, implementation of this pedagogical modal of

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education for Bachelor of Nursing Science students is believed to impose challenges prompting delayed completion of assignments, inadequate class participation, low competency, and job loss. The researcher was interested in explornursing students' challenges associated with open distance learning at the National University of Lesotho in order to improve efficiency of the program.

During nursing students group work at the National University of Lesotho, one of the students' team members raised a complaint of experiencing technical difficulties in adjusting to open distance learning mode which led to ineffective communication. "I don't know how to navigate this application," said the student. This student further emphasized poor internet connectivity and lack of motivation as she feels isolated. Surprisingly, other students confirmed the same complaints which prompted the researchers' interest in studying nursing students' challenges associated with open distance learning at the National University of Lesotho.

In many universities worldwide, open distance learning is increasingly becoming popular [3]. However, during the COVID-19 pandemic, students at a university in Malaysia indicated having faced challenges during open distance learning related to poor internet connection, lack of online educational resources, social distancing, and burnout from the workload of assignment [4].

Moreover, the study conducted in the United Arab Emirfound lack of privacy, connection problems, and communication difficulties with instruction were challenges of e-learning [5]. Once again, Langegard et al. stated that lack of social interaction was the major challenge during the pedagogical transition from campus learning to distance learning using digital tools [6].

In Africa, the study conducted at the University of Nafound practical components were not suitable for e-learning mode. There were issues relating to internet connectivity for student nurses, computer illiteracy, and limited skills for e-learning use. [7]. These findings had local, regional, and international implications in context that researcher needs to clarify in this study [7]. Once more, Ilonga, Ashipala, and Tomas reported late arrival of study materials, mostly when students get to the center of learning or when the year is almost gone [2]. In South Africa, more work needs to be done in Nursing education to address the challenges of adopting online learning preparations and safeguards [8].

Nyangu and Rathobei (2022) suggested that nursing students complete and submit procedure file books with adequate clinical skills training [9]. However, the study conducted at one of the universities in Lesotho, though it was not focused on nursing students suggested that learners face various challenges resulting from personal-related factors, pedagogical factors and institutional factors [10]. Furthermore, Matee, Motlohi and Nkiwane stated that lack of resources, clear instruction from the teaching staff and coordination (sic), internet connection issues and data expenses are stumbling blocks discouraging students engagement in virtu-

al collaborative learning [11]. The researcher was interested in exploring challenges that range from personal, employer, environmental and institutional for Bachelor of Nursing Science students in order to rectify and promote efficacy during the pursuit of study.

Concerning the impact of open distance learning on urban and rural areas, unstable internet connectivity and an unreliable power supply are challenges for students studying online in rural areas [12]. It is therefore, crucial to gain knowledge on the various challenges of open distance learning that affect both rural and urban areas for Bachelor of Nursing Science students at the National University of Lesotho in order to promote quality of learning and adopt this new system of learning.

## 2. Materials and Methods

# 2.1. Study Setting

This study was conducted at the National University of Lesotho located in Roma, about 34 kilometers southeast of Maseru. The University offers seven faculties amongst which the Faculty of Health Sciences has Bachelor of Nursing Science program studied through open distance learning mode in the Department of Nursing, where the study was conducted.

National University of Lesotho introduced Bachelor of Nursing Science as open distance learning through Institute of Extra Mural Studies in 2021. Therefore, this sparked interest into the researcher to explore nursing students' challenges associated with open distance learning from 2021 to 2023 at the National University of Lesotho.

#### 2.2. Study Design

A quantitative, cross-sectional survey was conducted. It efficiently gathered data from a large sample of Bachelor of Nursing Science students across different locations, providing valuable insights into their challenges associated with open distance learning at the National University of Lesotho.

#### 2.3. Study Population

The study population included all Bachelor of Nursing Science students who studied through open distance learning at the National University of Lesotho. The target population was composed of nursing students in their final year of study.

#### 2.4. Sampling

In this study, purposive sampling was used. The researcher used Sloin's formula to calculate sample size [13]. In this study, a sample size of 58 Bachelor of Nursing Science students was achieved.

The inclusion criteria in this study was as follows: Bache-

lor of Nursing Science students who were in their final year of study and were willing and consented to participate. Exclusion criteria included Bachelor of Nursing Science students who were not willing to participate in the study.

A pilot study was conducted on nurses at Tebellong Hospital to assess the design issues, study feasibility, practicality, and resources before the main study commenced. The researcher carefully studied planning, quality controls and implementation strategies to increase internal validity. The researcher ensured the credibility of the study with a confidence level of 95% of the study sample and engaged in persistent observation. The researcher used appropriate research methods. Standard procedures were followed. External factors that might create variations in study results were controlled by the researcher, such as the sampling error prevented by increasing sampling size to reduce the effect.

#### 2.5. Data Collection

A structured online survey questionnaire consisting of closed-ended questions were developed using google forms. These questions were in English language and covered various aspects related to the challenges faced by nursing students in open distance learning, such as personal factors, socio-economic factors, environmental factors, technological factors and institutional factors. Merits of online surveys include; quick and user friendly, allow anonymous surveys, have variety of features and they are able to gather inputs from members efficiently. Furthermore, online surveys are cost effective. However, disadvantages of online survey involve lack of key features like skip logic and question randomization.

Participants were recruited via the already existing class WhatsApp group and consent form sent through the same WhatsApp group. The researcher created another WhatsApp group for study participants where the survey link was distributed. The link was also sent to selected participants via email. Clear instructions on how to complete the survey was provided. A reasonable deadline for responses was set and communicated to Participants to ensure timely data collection. After obtaining informed consent from Participants, data was collected using google forms where Participants responded to questionnaires online. The data collected was kept in a confidential manner on a password-locked laptop of the researcher where only the researcher had access.

## 2.6. Data Analysis

Upon completion of data collection, the data was imported into Microsoft Excel and the researcher conducted the data cleaning process. The cleaned data was analyzed using Statistical Package of Social Sciences (SPSS) version 25 and findings were summarized using frequencies and percentages.

# 2.7. Ethical Consideration

Ethical clearance was obtained from the National University of Lesotho Faculty of Health Sciences Institutional Review Board and the Ministry of Health of Lesotho Research and Ethics Committee (ID: 168-2024).

#### 3. Results

The demographic information for Participants is presented in Table 1. Participants were mainly females (86%, n=50) compared to males (14%, n=8). Most Participants were within the age range of 31-40 years (66%, n=38).

Table 1. Demographic information.

Age groups	Frequency	Percentage
20-30	13	22%
31-40	38	66%
41-50	7	12.1%
Gender		
Males	8	14%
Females	50	86%
Employment status		
Employed	58	100%
Unemployed	0	0%
Educational status		
Undergraduate	0	0%
Postgraduate	58	100%

Table 2 shows the challenges associated with open distance learning. Ninety three percent (n=54) of participants were of the view that there were challenges they experienced when studying nursing through open distance learning. Also, 86% of the participants indicated that nursing students faced challenges in an open distance learning environment. About half (51%, n=30) of the students were of the opinion that the open distance learning program for Bachelor of Nursing Science at NUL was not organized. Most participants indicated having challenges such as personal issues that affected their studies (71%, n=41), an unreliable internet connection (71%, n=41), interaction between the instructor and other learners affected by social distancing (100%, n=58), and lack of built-in support for students who struggle with technology (81%, n=47).

*Table 2.* Challenges associated with open and distance learning.

	YES / NO	FREQUENCY	PERCENTAGE
Are there challenges you experienced when studying nursing through open distance learning?	YES	54	93%
	NO	4	7%
Is there built-in support for students who struggle with technology?	YES	11	19%
	NO	47	81%
Was your interaction between instructor and other learners affected by social distancing?	YES	58	100%
	NO	0	0%
Are you satisfied about studying nursing through open distance learning?	YES	45	78%
	NO	13	22%
Do NUL Nursing students face challenges towards open distance learning environment?	YES	50	86%
	NO	8	14%
Are there strategies that can be used to improve implementation of open distance learning?	YES	53	91%
	NO	5	9
Is the learning environment conducive for open distance learning?	Yes	35	60%
	No	23	40%
Is internet connection reliable during open distance learning?	Yes	17	29%
	No	41	71%
Do you find support from your employer when pursuing Nursing through open distance learning	Yes	33	57%
	No	25	43%
Is the open distance learning program for Bachelor of Nursing Science organized at NUL?	Yes	28	49%
	No	30	51%
Are there personal issues that affect your study during open distance learning?	Yes	41	71%
	No	17	29%

#### 4. Discussion

The findings of this study have shed insight into nursing students' challenges associated with open distance learning at NUL. The findings revealed challenges with built-in support for students who struggle with technology, interaction amongst learners and their instructor, challenges related to open distance learning environment, unreliability of internet connection, ODL program organization at NUL not being organized, and personal issues that affect study during open distance learning.

Even though several studies have found open distance learning to rely on technological devices [14, 18], in this study, 81% of nursing students struggled with technology because there were no built-in support systems, even though 19% indicated that there was built-in support for students who struggle with technology. Furthermore, 71% of partici-

pants affirmed that their internet connection was not reliable, while 29% reported reliable internet. Similarly, Ozkan et al. revealed that weak internet speed and frequent power cuts were the biggest barriers to distance education in rural areas [15].

The findings in this study revealed that 100% of participants indicated the interaction between instructors and other learners, including amongst peers, was affected by social distancing, which suggests that distance impacts communications and interactions in a virtual learning environment. Therefore, the issue of social distancing correlates with the Transactional Distance Theory in this study, which also suggests that communication and interactions are affected by distance during open distance learning [16].

In this study, 86% of nursing students face challenges in an open distance learning environment. Conversely, Mojarad et al. (2023) indicated that a lack of necessary infrastructure for the implementation of open distance learning; hardware and software infrastructure affected e-learning based education [17]. However, 14% of students reported no challenges with an open distance learning environment.

Furthermore, 60% of participants in this study indicated the learning environment to be conducive to open distance learning, compared to 40% of participants who reported no conducive learning environment. Moreover, 77% of students were satisfied to study nursing through open distance learning, while 23% of them showed dissatisfaction about learning the program through open distance learning.

Additionally, 57% of students in this study reported having support from employer when pursuing their studies through open distance learning, while 43% did not find support from their employer. Similarly, Tuner (2024) suggested that the conflict between the work schedule and the study schedule makes it difficult to attend classes or complete assignments [20].

This study revealed that 71% of students reported unreliable internet connections during open distance learning. Similarly, Nuuyoma, Lauliso and Chihururu (2022) suggested that poor and lack of access to the internet hampers learning as students find it difficult to attend live sessions as well as the ability to download learning materials [7]. Also, internet connections are generally slow with the use of mobile phones [7]. Once more, lack of robust internet coverage has been found to be a major overarching issue that affected communication, students' engagement, and preparedness for e-learning [5]. However, 29% of students in this study reported that the internet connection was reliable during open distance learning. These findings provide insight into the role played by the internet in open distance learning.

Association of African Union encourages institutions to be highly proactive in terms of teaching and learning tools, platforms and ICT program in place before implementation of online learning [19]. In this study, the issue of institutional organization for the BNS program at NUL has shown adjacent variations where 49% agreed that the institution was organized in offering the program while 51% disagreed about the organization of the program. Therefore, the findings of this studyproves that ODL for nursing program at NUL was not well organized.

Several studies have shown personal factors to have a significant impact on the quality of open distance learning [20]. Similarly, about 71% of nursing students in this study reported that personal issues affected them during their studies. A lesser percentage (29%) did not agree about personal issues that affected study during open distance learning.

The support from employers indicated by 57% of students in this study made it possible for them to manage their time efficiently. Like Trynia suggested, implementing effective time management strategies includes prioritizing tasks [21], setting study schedule can help students manage time more effectively.

Limitations of the Study

The study findings cannot be generalized to the entire

ODL programmes in the country.

Implications of the Study

The study highlights that the BNS program at the NUL needs better organization ODL. This shows that educational institutions should ensure adequate planning and logistical assistance while shifting to ODL formats in order to improve program performance. Institutions should have built-in support services for students who struggle with technology. Improving internet infrastructure and guaranteeing dependable connectivity are critical for equal access to education, particularly in rural areas.

## 5. Conclusion

This study provided information about challenges faced by nursing students that were associated with open distance learning at NUL, which involved, poor interaction, an unreliable internet connection, a lack of built-in support for technology, inadequate organization for open distance learning program, and personal issues that affected the open distance learning. However, some students were satisfied with studying nursing through open distance learning.

The researchers investigated insight into equitable and sustainable open distance learning; how best open distance learning can be improved for the next generation. Based on the results of this study, the researchers recommend that the institution offer technical support and step-by-step training for students and facilitators on how to navigate through e-learning platforms. Students can be provided with training and support to develop technical skills to overcome issues of technology. Creating a personal schedule and maintaining an achievable balance between studies and other commitments can help overcome personal issues that may affect open distance learning. Moreover, maintaining open communication channels with facilitators can help with stress management during adaptation to open distance learning.

Strengthening internet coverage so that it is reliable, secure, and efficient for students to access online platforms without interruptions can help overcome connectivity problems. Planning prior to open distance learning should be done to avoid distractions during learning. Furthermore, developing an applicable environment for open distance learning can help to efficiently implement ODL.

#### **Abbreviations**

ANA American Nurses Association BNS Bachelor of Nursing Science

CV Curriculum Vitae
DL Distance Learning
E-learning Electronic Learning
IRB Institutional Review Board

ICT Information Communication and Technology

IT Information Technology

NUL National University of Lesotho
ODL Open Distance Learning

SN Student Nurse

SPSS Statistical Package of Social Sciences

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#### **Author Contributions**

**Thapelo John Letsae:** Conceptualization, Data curation, Formal Analysis, Investigation, Methodology, Project administration, Resources, Writing – original draft

**Bokang Amelia Mahlelehlele:** Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

**Lineo Maja:** Validation, Visualization, Writing – review & editing

**Letuka James Phiri:** Validation, Visualization, Writing – review & editing

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# **Data Availability Statement**

The data is available from the corresponding author upon reasonable request.

## **Conflicts of Interest**

The authors declare no conflicts of interest.

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# **Biography**



Bokang Amelia Mahlelehlele is a lecturer in the department of nursing, faculty of health sciences at the National University of Lesotho. She is teaching nursing care of adults with medical conditions (with its practical module), children with medical conditions (with its practical module) and

pathophysiology. She is a PhD candidate at the University of South Africa.

#### **Research Field**

**Bokang Amelia Mahlelehlele:** Communicable and non-communicable diseases, nursing education and innovation, postgraduate supervision, adult health.

**Letuka James Phiri:** Pandemics and outbreaks communicable and non-communicable diseases, primary healthcare, Community Health Models, Rehabilitation & Chronic Diseases, Innovations in Nursing Education and Practice.