



JOURNAL of MALAYSIAN NURSES ASSOCIATION

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FROM THE EDITORIAL DESK

Welcome to the 2023 Issue of JMNA!

Malaysian Nurses Association has the honour of establishing a platform for nurses in Malaysia to publish their research articles in their Journal of Malaysian Nurses Association (JOMNA) since 2005. This started in view to expand and promote academic exchange with nursing professionals.

As chief editor of JOMNA, I welcome the submission of manuscripts of relevance to nursing related research. You are encouraged to submit original articles addressing research into the practice, theory, or philosophy of nursing. All articles submitted will be reviewed prior to publication.

This issue includes four quantitative and three qualitative research. Research that investigated on nursing care included in this issue. That is assessing nurse's knowledge, attitudes and practice for pressure injury prevention. A study on relationship between quality of work-life, burnout and professional commitment among nurses. Another on Covid 19 that indwell on resilience through faith that explored the interplay of religiosity and stress levels among Muslim undergraduate student amidst the Covid 19 pandemic. In addition a study among student was done about nursing students experiences with the integration of flexible learning in the Clinical Skills Centre. An observational qualitative study was carried out on clinical handover practice in the Emergency and Trauma Department.. The result of these studies may benefit similar research in the future and may have health policy implications.

Nonetheless, conducting research represents a path forward to enriching the lives of our patients and ourselves as well. Please be a lifelong learner and a researcher. I hope you find our articles enlightening and beneficial.

Lastly, I thank all submitting authors, who have toiled in the production of their work and have chosen JOMNA as the journal they would like to publish in.

L. YOHGASUNDARY LETCHUMANAN

NURSING STUDENTS' EXPERIENCES WITH THE INTEGRATION OF FLEXIBLE LEARNING IN THE CLINICAL SKILLS CENTRE

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ABSTRACT

Background: In nursing education, flexible learning is highly regarded since it offers students a variety of readily accessible, customized learning opportunities. By successfully developing clinical competency outside of the conventional paradigm, this model guarantees that nursing students will have the abilities necessary to adapt to the constantly changing healthcare environment.

Purpose: This study aimed to explore the nursing students' experiences related to the implementation of flexible learning methods to learn clinical skills.

Methodology: This research employed a descriptive qualitative research design and involved the participation of 11 undergraduate nursing students from the Kuliyyah of Nursing at the International Islamic University Malaysia, located in Kuantan, Pahang. The study sample was using purposive sampling methods. Data collection occurred through one-on-one interviews between 12th April 2023 and 19th April 2023.

Results: Through a thematic analysis of participants' responses, this study unveiled four themes associated with various forms of flexible learning within clinical skills practice. These include Self-Directed Learning, Benefits, Barriers, and Challenges.

Conclusion: The research recommends educators to use technology sensibly, particularly in creating instructional videos, to enhance student learning. The study identifies educators' proficiency with video technology as a barrier in nursing education, emphasizing the need for annual training. Flexible learning, including video-based instruction, offers advantages in skill acquisition, although students express concerns about feedback and prefer hands-on sessions. Balancing online and physical sessions is essential to nursing education, prioritizing students' well-being and capacity to learn.

Keywords: flexible learning, clinical skills practice, nursing students, experiences, nursing education

INTRODUCTION

The COVID-19 epidemic has been a driving force behind changes in the landscape of nursing education. The conventional model of in-person, skills laboratory-based clinical skills training has encountered numerous challenges, making the integration of flexible learning methodologies imperative. This paper explores nursing students' experience with the implementation of flexible learning in the context of nursing students' clinical skills training in the skills laboratory, with a focus on the benefits, challenges, and potential strategies for successful adoption.

Beyond geographic limitations, flexible learning gives nursing students the chance to access clinical skills training resources whenever it's convenient for them. Students can review and practice skills whenever and wherever they desire thanks to virtual platforms and online modules, which provide a 24/7 learning experience (Reyes et al., 2020). Students can customize their learning experience to fit their unique requirements and interests, which is one of the main benefits of flexible learning. According to Nural et al. (2020), students who engage in self-directed learning are able to concentrate on areas that require more practice and advance at their own speed. This method makes use of a variety of resources, such as interactive online discussions, multimedia materials, and virtual simulations, to enhance the learning process and accommodate diverse learning preferences and styles (Kumar et al., 2021). Moreover, the autonomy offered by flexible learning encourages students to think critically and independently, an essential skill for effective clinical practice (Jowsey et al., 2020).

However, the implementation of flexible learning is not without its challenges. Some students may lack the technical skills required to navigate online platforms and engage with digital learning materials. Educators must ensure that students receive adequate training and support in using these technologies (Pimmer et al., 2020). While virtual simulations provide valuable practice, they cannot entirely replace hands-on experience. Skills laboratory-based training remains essential, and students must have access to the necessary physical resources and equipment. Nursing educators need to adapt to the new teaching methodologies, including the creation of online content and providing guidance in digital environments (Langegård, et al., 2021). Additionally, flexible learning can lead to feelings of isolation among students, as they may miss the social interaction and peer support that traditional in-person training offers (Jowsey et al., 2020).

In conclusion, flexible learning is a progressive step in preparing nursing students for the needs of modern healthcare. This is especially true when it comes to clinical skills training in the skills laboratory. Even while it has many advantages, like improved customisation and accessibility, there are several issues that need to be resolved. Over the past few decades, flexible learning has been widely used in theoretical classrooms; however, research on its efficacy in clinical skills practice among nursing students is still lacking. By examining

nursing students' experiences using flexible learning in the context of clinical skills practice, this article aims to close the gap. We hope to make a contribution by investigating the viewpoints, difficulties, and benefits that students see in this changing educational environment.

METHODOLOGY

This study employed a descriptive qualitative research design and focused on undergraduate nursing students enrolled in the Kulliyyah of Nursing at the International Islamic University Malaysia (IIUM) in Kuantan, Pahang. Inclusion criteria comprised students who were actively pursuing their undergraduate nursing studies, spanning two, three, or four years, and who had experienced flexible learning in clinical skills during the semester. Students meeting these criteria were invited to take part in the study. Data collection commenced after obtaining necessary approvals from the Kulliyyah of Nursing, the Postgraduate and Research Committee (KNPGRC), and the IIUM Research Committee (IREC). Data collection methods included face-to-face sessions held in a private location and online sessions conducted via Google Meet. To compile a list of potential participants, the researcher contacted administrative staff to acquire the names, matriculation numbers, email addresses, and phone numbers of eligible students. A week prior to the interviews, selected participants were provided with information about the interview's agenda and a set of guided topics. Before the actual interviews, the researcher explained the study's particulars to the participants. The importance of confidentiality was emphasized, and consent for audio recording was obtained. The interviews, which aimed to gather comprehensive information, spanned a duration of approximately 25 to 45 minutes per participant. A set of developed topic guides consisting of 16 questions. During these interview sessions, audio records were used, with the permission of the participants, to ensure that no information from the discussions was missed. A thematic analysis approach was utilized to analyse the data.

RESULTS

A total of 11 undergraduate nursing students participated in this study. They were in the 2nd, 3rd, and 4th year of their studies and had experienced flexible learning in clinical skills. From interviews, 21 codes were extracted. Subsequently, these codes were classified into two main domains: types of flexible learning activities and nursing students' experiences with flexible learning activities in clinical skills. There was one main theme for types of flexible learning activities and three themes for nursing students' experiences with flexible learning activities in clinical skills. The types of themes included self-directed learning and experience themes encompassed benefits, barriers, and challenges.

Theme 1: Self-Directed Learning

The majority of participants in this study indicated that they had employed self-directed learning methods, primarily through the utilization of pre-recorded videos. Faculty members typically recorded the clinical procedures, making these videos accessible to students through the university's e-learning platform. For instance, one participant noted, *"Most of the lecturers share the link to the procedure videos, which have been uploaded to the LMS system."* Additionally, many participants took the initiative to create their own recorded videos during

the demonstration sessions, with the lecturer's permission. They felt that the pre-recorded videos lacked comprehensive explanations. As one participant explained, *"I recorded the demonstration session, even though the lecturer had provided a pre-recorded video, because I found the explanation to be insufficient and the video too concise."*

In addition to these university-provided resources, some participants sought further understanding by referring to procedure videos available on YouTube. These external resources served as supplementary references, aiding students in comprehending the rationale behind each step of the clinical procedures. A participant elaborated, *"Despite the availability of pre-recorded videos by our lecturers, certain aspects of the procedures still posed challenges. In such cases, we turned to YouTube videos from other university sources to gain a clearer understanding."*

Theme 2: Benefits

The participants in this study expounded upon the various benefits associated with flexible learning, particularly in the context of utilizing videos for clinical skills practice. One of the participants emphasized the advantage of video-based learning in terms of continuous revision, stating, *"I like watching videos since they are a great reference when I need to rehearse a process and help to refresh my memory."* Furthermore, most participants underscored the convenience of flexible learning, highlighting the ability to access and learn procedures at any time and from any location. One participant articulated this convenience, noting, *"For learning procedures, we are not restricted to a certain place, like the Clinical Skills Centre (CSC), and we are free to modify our schedules accordingly."*

Furthermore, participants recognized the significance of pre-recorded videos in preparing for clinical skills evaluations. They regarded these videos as essential tools for revision before assessments, simulations, and Objective Structured Clinical Examinations (OSCEs). As one participant conveyed, *"I consider these videos crucial, as they enable me to review the procedures comprehensively before assessments, simulations, and OSCE exams."* Additionally, the participants acknowledged the role of flexible learning in preparing them for clinical attachments, with an emphasis on enhancing patient safety by reducing the likelihood of errors. They noted how this approach ensured that students were well-prepared for procedures such as subcutaneous Actrapid injections, minimizing the risk of administering the wrong medication or route. One participant explained, *"This approach helps us minimize errors, even in minor procedures like subcutaneous Actrapid injections. It ensures that we administer the correct dosage and route, reducing the risk of errors."*

Participants also credited flexible learning with boosting their confidence when performing procedures in real healthcare settings. They highlighted that consistent practice using checklists and videos alleviated nervousness, particularly when administering medications to real patients. As one participant affirmed, *"It enables us to practice procedures regularly, following checklists and videos, which diminishes nervousness when carrying out procedures in hospital settings, such as administering medication to actual patients."* Furthermore, participants stressed that flexible learning enhanced their familiarity with procedures by

providing a clear understanding. This approach went beyond theoretical knowledge, allowing them to visualize real clinical settings and better comprehend the practical aspects of healthcare delivery.

Theme 4: Barriers

The findings from the interviews revealed two primary categories of barriers, encompassing both extrinsic and intrinsic impediments to flexible learning. Among the extrinsic barriers, poor Internet connectivity emerged as a prevalent hindrance, with participants highlighting its detrimental impact on online learning. As one participant described, *"A common external obstacle encountered in online learning is the issue of poor Internet connectivity, often leading to video buffering problems."* Furthermore, participants shed light on the limitations associated with direct feedback and engagement, particularly during online learning sessions. They shared concerns about the challenges of seeking clarification from lecturers, emphasizing that queries arising from video-based learning sessions often went unanswered for extended periods. One participant noted, *"One limitation pertains to the inability to seek immediate guidance from the lecturer during online learning. When we encountered difficulties while watching videos in the early morning or late at night, obtaining prompt clarification was hampered by the need to reach out to the lecturer via WhatsApp."*

Intrinsic barriers also surfaced, with some participants acknowledging their struggles related to self-motivation. They admitted to a lack of enthusiasm for watching videos provided by their lecturers, citing the allure of engaging with other forms of entertainment, such as YouTube, TikTok, and various social media platforms. One participant candidly stated, *"Intrinsic challenges included a lack of self-motivation to watch the provided videos. The presence of alternative and more captivating distractions, like YouTube, TikTok, and social media, often led to a disinterest in the learning process."*

Theme 5: Challenges

The theme of challenges yielded two distinct sub-themes concerning technology and equipment. Participants overwhelmingly expressed dissatisfaction with the provided videos, citing shortcomings in the creators' proficiency and video production skills, which resulted in issues such as improper camera angles and low-quality audio. One participant pointed out, *"The videos often failed to capture the procedure steps clearly, with inadequately positioned cameras."* Another participant noted, *"It appeared that the lecturer may have been new to video creation, resulting in poor video quality and faint audio."* Furthermore, participants highlighted the difficulties they faced in concentrating on lengthy, unedited videos that lacked the necessary editing to emphasize key procedural elements. As one participant elaborated, *"The videos, often spanning 10 to 8 minutes without editing, made it challenging for us to maintain our focus."*

In addition to these technological challenges, a significant number of participants also reported discrepancies between the steps demonstrated in the videos and what had been

taught during practical sessions. This discordance created confusion and hindered their understanding of the procedures. One participant recounted, *"During hands-on sessions at the Clinical Skills Centre (CSC), lecturers frequently assumed that everyone had watched the videos, which resulted in a cursory demonstration of the procedures."* Furthermore, participants discussed equipment-related challenges, primarily pertaining to the limited availability of essential resources. Many participants shared their experiences of having to share equipment with fellow students due to shortages. They recounted instances where they were unable to access the same equipment when needed, attributing this difficulty to the high demand for limited resources. As one participant noted, *"I often had to share equipment with others because it was in short supply, and many students had already borrowed the available equipment and taken it back to the dormitory."* Moreover, participants expressed concerns about the insufficient supply of equipment at the CSC, making it challenging for them to borrow items for practice outside the facility. One participant expressed, *"While equipment was available at the CSC, its limited quantity posed challenges for students who needed to borrow equipment for practice."*

Another equipment-related issue highlighted by most participants was the malfunctioning of equipment, which further exacerbated the challenge of resource availability. The impaired functionality of instruments, coupled with the high demand for equipment, limited participants' ability to effectively utilize the resources provided. As one participant pointed out, *"Malfunctioning equipment and instruments, coupled with the rapid turnover of users, often prevented us from using the available equipment effectively."*

DISCUSSION

In the realm of nursing education, the judicious utilization of technology, particularly in the creation of learning materials such as instructional videos, has been recognized as pivotal for enhancing student learning (Corbally, 2005). Nevertheless, it is worth noting that some educators face challenges in harnessing video technologies effectively, which, as discussed by the author, can act as a barrier to nursing students' education. To address this, it is recommended that nursing educators receive annual training on video production. This is congruent with the current study's findings, which emphasize the significance of providing coaching in video creation courses for educators to bolster students' engagement in mastering clinical skills.

Beyond traditional sources like the Clinical Skills Centre (CSC) and the hospital wards, the incorporation of video-based learning materials offers students an alternative, accessible means of acquiring clinical skills. This not only streamlines the learning process but also augments students' performance by enabling them to learn and practice clinical skills at their own convenience, irrespective of location or time constraints. Consequently, the need for students to physically attend the CSC for skill acquisition diminishes. However, it does pose a challenge for educators who must ensure the continuity of education. This transformative shift to flexible learning activities empowers nursing students to have greater control over the pace of their studies, a crucial consideration given the multitude of procedures they are required to master. These findings resonate with several recent studies, which identify

flexible learning as an avenue for self-directed learning (Yoshioka-Maeda et al., 2019; Foronda et al., 2018; Barisone et al., 2019; Bdair, 2021).

Despite the benefits of flexible learning, most participants in this study expressed concerns regarding the limited direct feedback and engagement inherent in this approach. In response, it is essential for educators to incorporate procedural steps and explanations into their videos to compensate for the absence of real-time critique. This aligns with the study's findings, where participants underscored the necessity of feedback to enhance their proficiency in clinical procedures (Egilsdottir et al., 2022). Previous research has also underscored the critical role of supportive instructions in the development of clinical skills (Coyne et al., 2018). Furthermore, educators can conduct question-and-answer sessions with students before their clinical attachments at hospitals, thereby reinforcing their understanding of the procedures taught.

While hands-on, in-person sessions remain the preference for most students when learning clinical skills, there is a recognized value in recorded videos as supplementary references. The majority of students favor pre-recorded videos created by their lecturers, citing the advantage of these videos in providing a comprehensive, uninterrupted overview of the procedural steps. Importantly, students emphasized the need to prioritize their well-being in educational sessions, especially in terms of their ability to grasp the information and master the clinical procedures. This emphasis on student well-being aligns with previous research that highlights the importance of nurturing a supportive learning environment that caters to students' capacity to comprehend and apply the knowledge at hand (Kasinathan, 2023).

In conclusion, the effective use of video-based learning materials can significantly benefit nursing education. While flexible learning offers a wealth of advantages, addressing feedback and engagement limitations is vital. A balanced approach that combines the benefits of in-person sessions with video resources is key to providing nursing students with a well-rounded education that empowers them to excel in their clinical practice.

IMPLICATION TO NURSING

The implementation of flexible learning in nursing education holds profound implications for the nursing profession. It empowers nursing students with a versatile approach to acquiring clinical skills and knowledge, thereby fostering adaptability and self-directed learning. This, in turn, equips future nurses with the ability to continually update their skills in a rapidly evolving healthcare landscape. Moreover, flexible learning promotes accessibility, enabling individuals from diverse backgrounds and geographical locations to pursue a nursing education. It accommodates those with various commitments, including work and family responsibilities, making nursing education more inclusive. Nursing, as a profession, stands to benefit from a more diverse and well-prepared workforce. As nurses graduate with the ability to leverage technology and self-guided learning, they become better equipped to provide high-quality patient care and adapt to new healthcare practices and technologies. In essence, the implications of flexible learning in nursing education extend to the enhancement of

patient safety, healthcare efficiency, and the resilience of the nursing workforce in the face of future challenges.

CONCLUSION

In conclusion, the study explored the implementation of flexible learning in nursing education, delving into its profound impact on nursing students and the nursing profession as a whole. This innovative approach offers students the flexibility to learn clinical skills through a variety of methods, from pre-recorded videos to guided learning sessions. Our qualitative findings shed light on the benefits, barriers, and challenges associated with this approach, highlighting the need for training and enhanced support for both educators and students. Flexible learning, with its potential to enhance accessibility, accommodate various schedules, and promote self-directed learning, paves the way for a more inclusive nursing education. It equips future nurses with adaptability and prepares them for the evolving healthcare landscape. The implications of flexible learning for nursing are substantial. It contributes to a diverse and well-prepared nursing workforce, capable of providing high-quality care and adapting to healthcare innovations. This, in turn, enhances patient safety and healthcare efficiency. As it embrace these transformative changes in nursing education, the profession stands stronger and more resilient in the face of future challenges.

FUNDING

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ETHICAL CONSIDERATION

The author(s) ensures anonymity and explicit consent was obtained from all participants throughout this study. This study received ethical approval from university's research bodies, Kuliyyah of Nursing Post-Graduate and Research Committee (KNPGRC) and IIUM Research Committee (IREC) [grant numbers IREC 2023-KON/NURF40].

CONFLICT OF INTEREST

The author(s) declare no conflict of interest.

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