

ORIGINAL ARTICLE

Educational Experiences and Career Aspirations of Final-Year Nursing Students at International Islamic University Malaysia

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ABSTRACT

Recognizing the career aspirations of nursing students is essential for designing educational programs that develop skilled healthcare practitioners. Personal choices in career fields, development opportunities, and education all influence these aspirations. This study explores final-year nursing students' educational experiences and career aspirations at the International Islamic University Malaysia (IIUM). A qualitative descriptive approach was employed to conduct personal interviews with purposefully selected participants from the Kulliyah of Nursing. The findings reveal that while students are keen to specialise in paediatrics and critical care, they encounter challenges such as academic pressure and a lack of clinical practice hours. Mentorship and clinical placements play a vital role in shaping their professional aspirations. Participants stressed the necessity for enhanced clinical practice and academic support to better equip them for their future roles. These findings underscore the importance of aligning nursing education with students' career goals and addressing their challenges to improve their readiness for specialised healthcare positions. This study enhances the literature on nursing education by emphasising the importance of robust mentorship programmes that support students in their academic and professional growth. By focusing on these elements, nursing curricula can be refined to facilitate specialisation, thereby advancing the field of



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nursing education.

INTRODUCTION

Career goals play a crucial role in shaping nursing students' educational journeys and future career choices. Nursing is a dynamic and rapidly evolving profession that offers numerous opportunities for advancement and specialisation. Thus, nursing students need well-rounded educational preparation. Historically, how well a nursing school or department trains its students has been linked with subsequent clinical and professional success (Aller, 2020; Qonitatin et al., 2023; Younas et al., 2019). To ensure that students are well-prepared to take up roles in the future, it is important to understand their education history and aspirations for a career.

Increasing literature identifies the need to examine career choice and development determinants among nursing students (Matarese et al., 2019; Tosunöz et al., 2019). In this sense, by investigating these factors, educators can provide a learning environment which can support learners from their growth, and specialisation until their careers (Fontanilla et al., 2023; Sari, 2020). However, the study of Vujicic et al. (2023) provides strong support for the intrinsic motivators that influence people to participate in nursing, including professional fulfilment and responsibility as well as interpersonal relationships. Yet, this investigation only partially compromised nursing students' foundational training and professional desires.

The nursing sector in Malaysia has evolved over the past decade, placing a greater emphasis on specialised knowledge and skills. The International Islamic University Malaysia (IIUM) nursing programme uniquely integrates Islamic values with contemporary healthcare practices, offering students an exceptional learning experience. This is important to ensure that the local curriculum better reflects the local skill needs and also international

requirements while understanding these experiences and their impact on career aspirations.

The determinants impacting students' career choices were grouped into three main domains: clinical environment, education and individual. It can promote particular specialities over others in a nursing curriculum. This study provides an understanding of the motivating and demotivating factors that influence students' future career choices and how to motivate/remind them towards less-preferred nursing specialities (Anyango et al., 2024).

Kulliyah of Nursing at IIUM encompasses a comprehensive four-year course which is supplemented by significant clinical placements in relevant institutions like Hospital Tengku Ampuan Afzan and Hospital Sultan Ahmad Shah. The university focuses that it gives on the importance of Islamic values, and ethical conduct, and these placements create a different learning opportunity for students' eyes regarding their career goals as compared to any other University.

Although the literature on the career aspirations and motivations of nursing students is growing, few studies examine the perceptions of final-year nursing students regarding their course experiences concerning their future careers and specialisation options. Focusing solely on final-year students is important, as this stage represents a critical transition from being a student to becoming a practitioner. Students are ideally positioned at this point, well past the majority of academic and clinical training yet still planning for their future careers, to take stock of how their education has prepared them for any desired career paths. Furthermore, final-year students are in the process of making career-related decisions such as specialization and future employment opportunities and therefore represent an important group for understanding nursing career aspirations

(Anyango et al., 2024).

There is a notable scarcity of literature specifically addressing final-year nursing students, who are in a transitional phase between education and practice. As these students approach the end of their clinical rotations, they often reflect on where they envision starting their careers. However, not much is known about their opinions on how their educational experiences have influenced these decisions, especially in the context of Malaysian Islamic higher education.

Because there exists a lack of empirical research to investigate this area, therefore this study was designed to answer this phenomenon by exploring final-year nursing students' experiences and expectations towards the profession at the International Islamic University Malaysia (IIUM). This understanding will assist the study in developing targeted interventions to enhance nursing education and support students in their career paths.

These factors will establish the theoretical framework for understanding how different perceptions of educational preparation influence students' expectations for their professional careers. This knowledge will inform appropriate curriculum development and career counselling initiatives, ensuring that future nurses are well-equipped to thrive in an evolving and dynamic healthcare landscape.

MATERIALS AND METHODS

Research Design

A qualitative research design was utilized to gather in-depth insights into the experiences and aspirations of the students. This approach is appropriate for comprehending the nuances of individual perceptions and behaviours (Tang et al., 2020). Qualitative research provides rich, detailed data that quantitative methods might not be able to capture by allowing

for a thorough exploration of participants' thoughts, feelings, and experiences (Cadena, 2019).

Setting and Samples

Stratified random sampling was employed to choose final-year nursing students from the Kulliyyah of Nursing at IIUM Kuantan. The eligibility criteria included final-year nursing students with at least one year of clinical practice experience. The study took place in formal classrooms and practical experience areas at the IIUM Kuantan Campus. This setting was advantageous for obtaining an overall understanding of the student's educational background. Several factors support the choice of IIUM as the study location. First, IIUM is a prominent institution with a diverse student population, offering a comprehensive nursing curriculum that integrates both theoretical and practical components. This environment is ideal for exploring the educational experiences and career aspirations of nursing students. Furthermore, IIUM emphasises Islamic values in its educational framework, adding a unique cultural and ethical dimension to the students' learning experiences. This focus on values-based education, coupled with the university's strong emphasis on clinical training, provides an enriching context for investigating students' readiness for professional practice. Additionally, the Kulliyyah of Nursing at IIUM is well-regarded for its clinical placements, offering students hands-on experience in various healthcare settings. These placements are crucial for shaping students' career goals, making IIUM's environment particularly relevant for a study exploring the link between educational experiences, clinical exposure, and career aspirations. Finally, the university's commitment to producing competent healthcare professionals aligns with the objectives of this research, further validating the selection of IIUM as the setting for this study.

In qualitative research, there is no predetermined sample size, and it should

depend on the required information or research objectives (Polit & Beck, 2019). Previous qualitative studies have used a sample size of 16 participants (Monique & Kaiser, 2022). However, for this study, the sample was limited to 10 participants, and data saturation was reached during the 8th interview. Details such as the date and time of the last interview and the participant identification number 9 indicated that data saturation had been achieved. The interviews were concluded when no additional information could be identified, and no more codes could be generated for this study. This occurred after a total of nine interviews, and the data became saturated.

Data Collection

The study was conducted in the year 2024, with a duration of four months, from February to June. Data were collected through face-to-face semi-structured interviews. The interviews were conducted in English and Malay, depending on the participants' preference. Each interview lasted between 30 and 60 minutes. The interview guide consisted of open-ended questions that allowed participants to freely express their thoughts and experiences. The questions focused on educational experiences, clinical placements, career aspirations, and factors influencing career choices. The interviews were transcribed verbatim and analysed using thematic analysis to identify key themes. This method involves coding the data, identifying recurring patterns, and synthesizing the findings to provide a comprehensive understanding of the students' experiences and aspirations.

Data analysis

The data processing process began by transcribing the interviews conducted in the participants' language using Microsoft Word. The transcripts were reviewed multiple times to familiarize the researcher with the participants' accounts and establish an initial understanding of their narratives. Before coding, a comprehensive analysis of the transcripts was conducted using the thematic

analysis method to determine overarching themes.

Braun and Clarke (2006) propose a six-step framework for thematic analysis, which includes becoming familiar with the data, generating initial codes, identifying themes, reviewing themes, defining and naming the themes, and finally, writing the report (Naeem et al., 2023). The first step involved examining the structure of the narratives to understand their chronological flow. The second step focused on the content of the narratives to uncover the meaning. The researcher then proceeded with coding, independently coding at least two transcripts to generate initial codes. The data were then categorized by identifying more general categories or themes from these initial codes. In the final step of the analysis, the objective was to identify recurring patterns in the participants' decision-making processes. To ensure the development of emerging themes, the authors engaged in a recursive dialogue, reaching a consensus on the themes while preserving the participants' voices. Any discrepancies were resolved by reviewing the typed interview notes and tapes or consulting the field notes. Although some quotes may have been translated from Malay into English for documentation purposes, the meaning closely resembled the source language to accurately reflect the participants' accounts.

Trustworthiness/rigor:

Dependability and confirmability in this study were ensured by maintaining an audit trail, as recommended by Braun and Clarke, 2006 (Naeem et al., 2023). The audit trail recorded and monitored the actions and choices made throughout the process of gathering, analyzing, interpreting, and formulating conclusions from the data. Detailed documentation was kept in a research journal, documenting observations on the research procedure, interactions with participants, and the researcher's thoughts, emotions, and analyses.

Consistent with the criteria outlined by Braun

and Clarke, 2006 and Naeem et al (2023), it was important to prioritize transparency in interpreting the data. The analysis of the results was based on a thorough examination of the data, including interview transcripts, audio recordings, reflective journals, and field notes. Additionally, regular consultations with three experts in qualitative research and a thorough examination of relevant literature guided the analytical process.

The importance of transparency in narrative research, states that describing how interpretations were obtained allows readers to evaluate the study's thoroughness (Campbell et al., 2019). Therefore, the interpretations provided in this context are based on a comprehensive analysis of the data and scholarly discussions, confirming the researcher's commitment to ensuring the accuracy and reliability of the results.

Although member-checking is commonly used to enhance the credibility of qualitative research, its use in this study was reevaluated due to the extensive audit trail and strong engagement with the data. Conversely, the study highlights the importance of providing detailed and comprehensive descriptions, as well as purposefully selecting samples, to improve the applicability of the findings to different situations (Hiebl, 2021).

Ethical Considerations

Before the commencement of the study, ethical approval was obtained from the appropriate authority, specifically the IIUM Ethical Committee, under reference number IREC 2024-KON/CCN1. Participation in the study was entirely voluntary, and informed consent was obtained from all participants before their involvement. To protect participants' identities, pseudonyms were assigned during the transcription and analysis phases of the study, ensuring that no identifiable information was linked to the data. Additionally, any identifying details in the interviews, such as specific references to individuals or locations, were removed to maintain confidentiality. The

anonymity and confidentiality of the data were diligently maintained throughout the research process, and all data were stored securely in password-protected files accessible only to the research team.

RESULTS

A total of 9 final-year nursing students aged between 23 and 24 participated in this study, of which 7 were female and 2 were male. The findings are presented under four major themes: learning experience, clinical placement, career aspiration, and factors influencing career choices.

Theme 1: Learning Experience

Participants reported that their learning experience had been profoundly affected by the transition to online learning due to the COVID-19 pandemic. This shift made it challenging for students to remain motivated and engaged, especially in the absence of hands-on activities. One participant shared, "When the classroom changed to online, it was a difficult transition. It was much harder to stay motivated and engaged since we couldn't do hands-on activities." (Participant 1).

The study was conducted in 2024, after the COVID-19 pandemic. However, the participants faced challenges during their second and third years. Despite these difficulties, students noted that the support and mentorship they received from faculty members significantly contributed to their growth. One participant highlighted the value of their mentor, stating, "My mentor was very encouraging. Her support helped me overcome many obstacles and inspired me to pursue a career in paediatric nursing." (Participant 2).

Theme 2: Clinical Placement

Clinical placements were regarded as vital for developing practical skills and boosting confidence in real-life healthcare settings. Participants shared experiences from various

placements, which influenced their career perspectives. For instance, one student said, "Working in the ICU was an enlightening experience. It was very busy, but I learned a lot about patient care and teamwork." (Participant 3, 8). Another participant noted how their time in the oncology ward reignited their passion for working with cancer patients, stating, "The experience on the oncology ward reignited my passion for working with cancer patients." (Participant 4).

Theme 3: Career Aspiration

Several students expressed a desire to pursue specialities in areas such as paediatrics, critical care, and emergency. As the participants advanced through their education, their career aspirations became more defined. Initially, many students expressed broad interests, but clinical placements helped narrow their focus. For example, one participant shared, "At first, I was confused about my career choice, but after my rotations, I knew I wanted to specialise in Emergency Nursing." (Participant 5).

Theme 4: Factors Influencing Career Choices

The participants identified personal interest, family influence, and role modelling as key factors shaping their career decisions. They expressed gratitude for their family's support, saying, "My family always gave me the confidence to pursue nursing as my career, and without them, it would not have been possible." (Participant 6, 7). Furthermore, mentorship played a critical role in helping students gain confidence and pursue their aspirations. One participant remarked, "Having a mentor who believes in you can make all the difference in the world. You feel confident to pursue your dreams." (Participant 9).

In summary, the interviews conducted with nine nursing students revealed significant insights into the multifaceted experiences that shape their educational journeys and career aspirations. The transition to online learning during the COVID-19 pandemic presented considerable challenges, particularly in

maintaining engagement and motivation without hands-on practice. However, mentorship from professors and clinical instructors emerged as a crucial element of support, facilitating both professional development and resilience.

Consistently, clinical placements were identified as pivotal in enhancing practical skills and building professional confidence. These experiences not only equip students with essential knowledge and skills but also play a decisive role in shaping their career interests and specialization choices. Participants' career aspirations evolved, influenced by their clinical rotations and the guidance they received, leading many to focus on specific nursing specialities such as paediatrics, emergency nursing, and critical care.

Furthermore, the study highlighted the profound impact of personal motivations, familial support, and mentorship on the participants' career choices. The combination of these factors emphasizes the importance of a supportive and nurturing environment in the development of a strong professional identity and the pursuit of career goals in nursing. Overall, the findings suggest that targeted support through mentorship, diverse clinical experiences, and a conducive learning environment are essential for cultivating the next generation of nurses who are both confident and committed to their chosen specialities. Future research could further explore how these factors interact throughout a nursing student's education and their long-term impact on professional development.

DISCUSSION

Learning Experience

Relevant ideas were found from the study results which are appropriate to clarify the experiences and professional growth of nursing students. They found these concepts throughout the presentation and have expanded upon them. The sudden transition

to online learning because of the COVID-19 pandemic presented significant challenges. This sudden change disrupted the in-person clinical opportunities for students in the spring of 2020 due to global health challenges (Head et al., 2022; Pologruto et al., 2021). According to the studies (Kalanlar, 2022; Kang, 2021), students could not experience continuous engagement and implement theoretical knowledge due to a lack of practical training opportunities. In addition, students struggle to maintain motivation and interest when there are no experiential opportunities (Kinsey, 2020). The discussion section explains the reasons behind these findings, as well as more information related to the interruption of actual patient care. The findings of this study provide critical evidence to help inform nursing education policy and curriculum development in response to the challenges posed by COVID-19. Online learning did not allow for critical in-person clinical experiences essential to the nursing education process whereby real practice occurs and practical experience is gained. Such a disruption called into question the need for a more adaptive and resilient educational system. According to Kalanlar (2022) and Kang (2021), completeness of clinical competence development can not only be from online learning. Nursing education policy must better plan for the mixed-mode model of education that integrates theory with simulations in virtual space so that the translation into clinical practice can continue when physical clinical placements are scarce. According to Pologruto et al. (2021) stimulated understanding of the virtual simulation programmes retains significant competence when in-person clinical training is not feasible. Additionally, the difficulties caused by the pandemic highlighted the need for mentorship in nursing higher education. Supported by Heffernan (2020), and Dahlberg & Byars-Winston (2019) that addressed the importance of rethinking mentorship as a means of making connections between theory and application, to help students manage academic or professional life when challenges appear.

Policies should promote that established mentorship programmes are integrated into the nursing curriculum to support nursing students with experience during their clinical placements. These programmes will ideally improve the performance, satisfaction and career understanding of the students (Enyan et al., 2021).

Clinical Placement

Clinical placements in the education and training of competent healthcare professionals are an essential component (Aryuwat et al., 2024). As recently documented by Younas and Maddigan (2019), this anticipation is reinforced by the needs of students who greatly value the developed practice skills, as well as fortified confidence in applying these skills in actual healthcare settings. Students will be able to advance their technical skills and be able to provide care to patients, give medications and perform medical procedures under the auspices of experts. It enables them to be flexible in the changing environment of health care (Rojo et al., 2020). Clinical placements are not just a means to gain skills, they also foster critical thinking, problem-solving and choices that require ethical decision-making (Aryuwat et al., 2024). This approach is based on exposing students to real-world problems that need solutions. Clinical practice is a formative process, and the guidance and advice of experienced healthcare providers are crucial to guiding students through complex clinical situations while developing their professional identities. In addition, clinical placements are integral to the socialisation of practice-oriented skills of collaboration and communication (Cant et al., 2021) during interdisciplinary episodes in healthcare. Contact with different populations develops more empathy, resilience and patient-centredness. These experiences influence graduates' job choices because participants receive first-hand experience in different specialities, impacting students' future career directions (Bobbo & Lázzaro, 2018). To sum it up, clinical placements are the bridge from

theory to practice and enable students to gain the essential skills and practical experiences that prepare them for their future practice as healthcare professionals.

Career Aspiration

Career ambitions are deeply rooted in clinical experiences. Many students said that their ambitions were clarified and refined as they took courses, gained experience, and received more direct advice. This result is consistent with previous studies (Abbas et al., 2019; Boston-Fleischhauer, 2019), which have shown a strong connection between clinical placements and specialization choices. The complex landscape of modern healthcare has led students to select specific fields. Clinical experiences, personal motives, family support and mentorship work together to be essential in career decision-making for students. This study builds upon existing literature (Bugaj et al., 2016; Kelly et al., 2017; Khan & Parveen, 2020) that outlines the important role of a supportive environment, including peers and institutional support services, in facilitating access to academic success and the development of skills needed for professional success. To summarize, students' career trajectories are shaped at the intersection of practical experience, individual characteristics, and a supportive environment.

While tackling some very pertinent issues, this study affirms the importance of resilience and adaptability in nursing education. The findings concur with Ching & Cheung (2021) in that resilience, is key to overcoming obstacles such as those presented during the pandemic. Resilience training should be included in existing nursing curricula as part of their stress, coping and crisis leadership preparation to enhance student preparedness for healthcare challenges such as global health crises.

This study, which supports Kelly et al. Eenhoorn, Faber and Roodbol (2017); and Khan & Parveen (2020) have highlighted the role of self-motivation which is very crucial in

this regard and suggest that nursing should provide supportive environments to develop individuals both personally and professionally. Support structures from family and peers strengthen resiliency and success for students. Thus, educational institutions should offer services such as academic advising, counselling, and career services to help students cope with individual and academic challenges (Bugaj et al., 2016). These systems are important to help students connect their experiences in school with their future childhood goals.

Factors Influencing Careers

As nursing students endure a challenging academic and clinical course of study, crucial to their success is support from others. Support from family is indispensable; it can provide financial support, emotional comfort and physical assistance. Families play a critical role in bolstering the resilience of students by acknowledging their commitments and investing in the faith that they will perform (Kelly et al., 2017; Khan & Parveen, 2020).

Guidance, knowledge and networking support from more experienced nursing professionals. Having a mentor leads to the development of critical thinking skills among students and also facilitates their navigating through clinical challenges, thereby hastening their professional growth (Barker & Kelley, 2020; Nowell, 2018). Peer encouragement motivates creating a community space of collaboration and togetherness which enhances the role of a supportive learning environment (Jafarian-Amiri et al., 2020). These systems are supplemented by educational institutions providing counselling, academic advising services and student organizations (Bugaj et al., 2016). They provide the student's well-being and academic planning as well as work-life balance.

This study demonstrated the multiple levels of family support, mentorship, peer relationships and institutional resources

interact to contribute towards nursing student success. Together, this holistic framework fosters a space to grow personally and professionally in an intellectually vibrant environment; we produce educated but also humane healthcare providers.

Implications for practice and future research

The results of this study highlight the etch on clinical placement opportunities have on nursing students' practice pathways. Nursing educators and clinical preceptors should strive to optimize the benefits of placements by facilitating varied rotations, developing effective mentorship programs, creating supportive learning environments and including holistic career counselling alongside clinical experience. Targeted approaches such as these can facilitate students to widen their scope of discovery into other specialities, benefit from invaluable mentorship led by experienced nurses over decades, and develop competencies around collaboration, and the various aspects of career planning and decision-making.

The findings further have policy and practice implications for nursing education concerning future curriculum development practices as a solution to COVID-19 pandemic challenges. Nursing education may need to increase their preparedness for future emergencies by adapting blended learning approaches and providing organized mentorship programs together with options that offer flexibility in clinical placements as well as resilience elements. Not only will these changes foster student engagement and skill attainment, but they will also make certain that nursing graduates have the knowledge and stamina to survive progressive movements in our volatile climate. According to Abbas et al. According to Kane and Boston-Fleischhauer (2019), these changes will develop a nursing workforce that is more competent, agile, and specialized to be prepared for the evolving healthcare demands of today.

Future longitudinal studies should also examine the enduring impacts of school experiences on career paths. Although nursing students within a particular educational system may differ, comparing student outcomes between schools in differing countries may provide valuable information about trends or best practices on an international level. In-depth qualitative investigations that explore the complex pathways between economic conditions and career choice, together with studies that examine the intersection of student-level variables including technology with aspirations and professional development can inform new teaching and learning designs. Answering such research questions allows the nursing field to better understand students' lived experiences to create more effective support systems for training future healthcare providers.

Limitations

Limitations of this qualitative study First, the use of stratified random sampling in this study may restrict the generalization of results to a wider population of nursing students. Participants were primarily selected for their specific conditions, limiting the findings to a generalization of that cohort only. Secondly, the low number of participants in this study could limit the reach and depth of data gathered. The qualitative approach enables deep exploration into the experiences of participants; however, the small number of participants may not provide adequate perspectives and experiences by members representing that group. Third, while the qualitative nature of this study renders the rich data collection process possible, it may also expose researcher bias. Findings may also be biased due to subjective conclusions drawn by the researcher based on the interpretations and analysis of the data. This speaks to the need for continued reflexivity, and triangulation of diverse data. Lastly, the specific focus on nursing students from IIUM only could also restrict the generalisation of findings to other institutions as well as cultural contexts. Nursing

students in IIUM are stated to be different from others, due to the nature of IIUM with its religious engagement and specific unique programs offered. The limitations of this study could be addressed in future research in terms of the sample size and diversity, multiple data collection methods and methodological rigour that would improve generalizability.

CONCLUSION

This research investigated final-year nursing students' educational experiences and career ambitions at the International Islamic University Malaysia (IIUM). The study aimed to enhance nursing education by examining the determinants of profession selection and assessing the perceived sufficiency of educational preparation. The results indicated that while students are motivated to pursue specialisation, they face obstacles such as academic pressure and limited clinical practice opportunities. These findings underscore the need for nursing programmes to modify and enhance their curricula to better align with the evolving requirements of students and the healthcare sector. Future initiatives may include establishing structured mentorship programmes, increasing clinical placement opportunities, and incorporating resilience training into the curriculum to prepare students for the complexities of contemporary healthcare effectively. Additionally, continuous monitoring and feedback systems must be implemented to consistently assess these interventions' effectiveness. By focusing on these areas, nursing education can better align with professional expectations, thereby cultivating a more proficient and versatile nursing workforce capable of addressing the challenges of the healthcare environment.

CONFLICT INTEREST

The authors have not declared any conflict of interest.

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