

ORIGINAL ARTICLE

The Perceptions of Nursing Students on Learning Practical Skills During Undergraduate Study

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ABSTRACT

Introduction: Practical skills training is a crucial component of nursing education, linking theoretical knowledge with real-world clinical applications. With an emphasis on readiness, competency, and the efficacy of educational programmes, this study explores nursing students' opinions on acquiring practical skills during their undergraduate studies. **Methods:** Twelve final-year nursing students at the Kulliyyah of Nursing, IIUM, participated in semi-structured interviews as part of a qualitative study using a purposive sampling method. Key themes and sub-themes were identified through thematic analysis. **Findings:** The four themes that emerged were practical skills, preparedness, self-assessed competence, and educational programme. Students emphasised the value of practical experience, theoretical integration, and feedback in learning new skills. Recommendations include increasing simulation opportunities and improving the curriculum structure. **Conclusion:** A strong nursing education programme that prioritizes hands-on training, self-assessment, and feedback systems is essential for preparing students for clinical practice. *Malaysian Journal of Medicine and Health Sciences* (2026) 22(3): 1-10.doi:10.47836/mjmhs.v22i3.1579

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INTRODUCTION

To adequately prepare students for their future careers as healthcare professionals, the acquisition of practical skills is essential in nursing education. Nursing students engage in various learning experiences throughout their undergraduate studies, including clinical placements, community service, laboratory simulations, and lectures (1). These structured experiences aim to facilitate the learning and application of practical skills in safe, supervised environments. Despite the importance of practical skills in nursing education, mastering these skills poses significant challenges and warrants increased attention from researchers and educators (4). The complex process of acquiring practical skills is often influenced by the students' preferences, challenges, and perceptions. However, less is known about these beliefs in general, particularly regarding their impact on students' motivation, engagement, and the quality of their educational experience (2). To enhance the nursing curriculum and better prepare students for

clinical practice, these gaps must be addressed.

Learning practical skills is a joint responsibility of clinical settings and academic institutions (3). An evaluation of current methods and curricula in undergraduate programmes is necessary to ensure that nursing students possess the skills required in healthcare services. By investigating students' experiences, educators can identify curriculum gaps and develop plans to align educational programmes with students' needs and expectations. This will ultimately enhance students' preparedness for real-world clinical settings (4). Few studies have examined nursing students' perceptions in specific situations, such as their readiness, competency, and the integration of theory and practice, despite prior research addressing many facets of nursing education (1,3). This study aims to bridge this gap by examining the perspectives of final-year nursing students on acquiring practical skills during their undergraduate studies. The results will provide essential insights into the efficacy of the current nursing curriculum and guide methods for its improvement by focusing on their experiences, preferences, and motivations. The ultimate goal of this research is to help develop competent and self-assured healthcare professionals who can deliver safe and effective care to patients.

MATERIALS AND METHODS

Research Design

A qualitative approach is adopted in this study, and semi-structured, one-to-one interviews were used to investigate nursing students' perceptions of their practical skill learning in detail. The qualitative method starts to shed light on this complex and subjective experience in a way that reflects the participants' perspective. Through an intensive narrative account such as this, the understanding and interpretation of the learning journey of students at the Kulliyyah of Nursing, International Islamic University Malaysia (IIUM), in the acquisition of practical nursing skills can be examined.

The semi-structured interviews were employed as a more flexible yet directed method for gathering data. This approach enables the interviewer to explore emerging issues in depth while ensuring consistency across interviews. It promotes learners' free expression of thoughts, leading to in-depth, lengthy descriptions of their learning experiences, problems, and identified shortcomings in the acquisition of practical skills. The level of detail achieved using this approach is essential for recognising patterns, interpreting findings, and drawing grounded conclusions about students' learning during clinical and simulation practice.

Study Setting

The study was implemented at the Kulliyyah of Nursing, International Islamic University Malaysia (IIUM), Kuantan Campus. As a leading institution in nursing education, the Kulliyyah offers a comprehensive curriculum that combines theoretical and laboratory training programs, exposing students to diverse learning experiences and providing ample opportunities to hone their clinical skills. Nursing students undergo their clinical rotations in various units, including the emergency department, operating theatre, ICU, labour room, and medical, surgical, and orthopaedic wards. Undergraduate students are all assigned 52-week clinical placements to expose them to a range of clinical presentations and to enhance their clinical capability by facilitating the application of theory to practice.

Sampling method

The purposive sampling method was used to select participants who had rich, applicable, and diverse experiences related to the development of practical nursing skills. The study participants were all undergraduate nursing students from the Kulliyyah of Nursing, International Islamic University Malaysia (IIUM), who had completed several clinical attachments and gained diverse and broad experience in real clinical settings.

The study population consisted of male and female students to ensure diversity and representativeness in the sample, given the vast array of opinions. Purposive

sampling was chosen to deliberately select participants who met specific inclusion criteria aligned with the research objectives, particularly those with substantial exposure to various clinical environments, such as the emergency department, operating theatre, intensive care unit, and general medical and surgical wards.

Twelve students were participating in one-to-one, qualitative, semi-structured interviews. It was considered that the sample size achieved was adequate to enable an in-depth exploration of the research area, and it reached saturation, whereby no new emerging themes were identified from further interviews. This methodology facilitates the research objective of exploring the nuanced and context-bound experiences of nursing students regarding the learning of practical skills.

Data collection procedure

Participants were interviewed about their experiences with practical skill development, focusing on clinical competencies, challenges faced, strategies used, and recommendations for future improvement. A semi-structured interview guide, adapted from previously published studies, ensured consistency across sessions while allowing flexibility to delve deeper into emerging topics.

All interviews took place in a quiet, private, and comfortable setting within the Kulliyyah of Nursing, which was designed to foster open and honest communication. Each session lasted approximately 15 to 20 minutes. The interviewer assumed a facilitative role, creating a supportive and respectful atmosphere that encouraged participants to share their insights freely. While the interview guide provided a framework for discussion, the conversational nature of the interviews permitted a natural flow and exploration of unexpected yet relevant themes. Rapport was established through active listening, empathy, and non-verbal cues, helping participants feel at ease without compromising the integrity of their voices.

With informed consent, interviews were audio-recorded to ensure the accuracy of data collection. All recordings were transcribed verbatim, and participants' identities were anonymised using pseudonyms. Any identifying information was removed during transcription, and all audio files were securely deleted after transcription to safeguard participant confidentiality.

The data were then inductively coded and analysed using thematic analysis, allowing patterns and themes to emerge directly from the data. Methodological triangulation was employed by comparing data obtained through interviews with reflective field notes and memos taken during the interview process. This approach enhanced the credibility and trustworthiness of the findings by ensuring consistency across multiple data sources.

Data Analysis

The transcribed interview text underwent a systematic and rigorous data analysis process to identify and interpret meaningful information. The analysis followed the thematic analysis approach, an appropriate method for recognising, analysing, and reporting patterns (themes) within qualitative data.

First, each of the interview transcripts was read several times to become familiar with the content. First-cycle coding identified key phrases, common patterns, and significant statements, and descriptive codes were allocated. These initial codes represented the essential aspects of the data concerning the research purpose. In the following step, the codes were combined and categorised into broader categories, which were subsequently summarised into themes at a higher level of abstraction, constituting overarching patterns and central categories reported in the narratives of the informants.

Throughout the analysis process, a reflexive stance was adopted, with a deliberate attempt to bring awareness to and reflect upon potential prejudices, assumptions, and preconceptions that may have shaped data interpretation. Reflexive journaling and memoing were employed to document the decision-making steps and promote analytical transparency.

To enhance credibility, member checking was also considered. A subsample of participants was asked to provide feedback on preliminary themes to validate the interpretations. Furthermore, peer debriefing among members of the research team served to verify that the themes directly emerged from the data and were not influenced by individual biases.

The flexible yet rigorous structure of thematic analysis was an appropriate approach to investigate the complexities of nursing students' enriched and multifaceted experiences in developing practical competencies. This process enabled the researchers to build rich and nuanced understandings that resonate with the standpoints of individuals and everyday experiences within the sample.

Ethical approval

The IIUM Research Ethics Committee approved this study (IREC 2024-125), as did the Kulliyyah of Nursing Postgraduate and Research Committee (KNPGRC). Written and verbal descriptions of the purpose, objectives, and procedures of the study were provided to participants. All participants gave informed consent for participation and were made aware that participation was voluntary. Confidentiality and anonymity were assured, and the names of the study participants were kept strictly confidential. They were also informed that they could withdraw from the study at any time without penalty. This ethical stance upheld participants'

autonomy and confirmed the goal of ensuring the highest standards of ethical research.

FINDINGS

Demographic characteristics

The study recruited final-year nursing students from the Kulliyyah of Nursing at the International Islamic University Malaysia, based on predetermined inclusion and exclusion criteria. A total of twelve participants were selected using a purposive sampling method to ensure a diverse representation of students with varied backgrounds and experiences in practical skill acquisition.

Data saturation served as the guiding principle in determining the final sample size. Saturation was considered achieved when no new themes, insights, or relevant information emerged from the interviews, and the data began to show repetition and redundancy across participants. After the twelfth interview, it was observed that the participants consistently echoed previously identified patterns, and no additional substantive categories were identified, indicating that thematic saturation had been reached. This approach ensured that the study captured a comprehensive and rich understanding of the students' perspectives on practical skill development.

Table 1 provides specifics on the sociodemographic profiles of the participants. The participants' ages ranged from twenty-three to twenty-four, with nine female students and three male students participating (Table 1). Identified themes

Table 1: Sociodemographic background of the participants

Pseudonym	Age	Years of Study	Gender
Participant 1	24	4	Female
Participant 2	24	4	Male
Participant 3	23	4	Female
Participant 4	24	4	Female
Participant 5	23	4	Female
Participant 6	23	4	Female
Participant 7	23	4	Female
Participant 8	23	4	Male
Participant 9	23	4	Female
Participant 10	23	4	Female
Participant 11	24	4	Female
Participant 12	23	4	Male

The data analysis revealed four major themes: 1) Practical skills, 2) Preparedness, 3) Self-assessed competence, and 4) Educational program. Eight sub-themes were identified within these main themes (Table 2).

Table II: Identified themes

Main theme	Sub-themes	Categories
Practical skills	Definition and scope	Hands on abilities, application of theory to real-life practice, technical skills, patient care, medical equipment, soft skills, problem-solving, communication, time management
Preparedness	Self-assessment reflection/evaluation and	Hands-on training, confidence, knowledge, abilities, practice, feedback, preparation for clinical placement
	Basis for preparedness	Curriculum, training programs, clinical skill centre, hands-on practice, feedback from instructors, self-assessment, learning objectives.
Self-assessed competence	Evaluation criteria of competence	Proficiency levels
		Performing procedures without mistakes
		Comparison with peers
		Passion-driven competence
	Method of gaining competence	Skill refinement
		Interest and focus
		Confidence levels
		Reading checklists
	Skill mastery significance	Watching videos
		Face-to-face learning
		Patient safety, effective care, confidence, competence, patient outcomes, error minimization, continuous learning.
Educational programme	Program evaluation	Progressive skills enhancement, balance of theoretical and practical training, effective training sessions, comprehensive curriculum, hands-on practice, structured program
	Meeting needs	Theory-practice integration Practice opportunities Preparation for clinical placement, improvement over time, practical skill development

Theme 1: Practical Skills

All students view "practical skills" as essential hands-on abilities that are directly applicable in clinical settings. These skills include patient care procedures, such as wound care and medication administration; vital tasks like taking vital signs and conducting patient assessments; and important soft skills, including communication and problem-solving.

Subtheme: Definitions and scope.

Students emphasized the importance of translating theory into practice. They gave several examples to picture how they perceived practical skills in their own way:

"First of all, when you said about practical skill the first that comes into my mind is practical skill is a skill that was taught by lecturers during CSC session which will later be used during clinical posting." (P2)

"I think it is about going to hospital or clinic to practice nursing theory and practice the clinical in the clinical area itself with guide from the clinical instructor and also staff nurse at the ward. It is more about the practical and how we hands-on any procedure. So, when we learn, it is more about remembering but when practical, it is about we do it itself. So, we experience first-hand." (P9)

The students viewed practical skills as a core component of nursing. While theoretical knowledge forms the foundation, practical skills training allows students to translate that knowledge into real situations during their practice sessions in the Clinical Skills Centre (CSC) and, ultimately, in real-world situations during clinical placements. Practical skills include everything from basic patient care to complex medical procedures. Students consistently highlighted the value of these skills in ensuring patient safety and delivering high-quality care.

Theme 2: Preparedness

Preparedness varied among students but was influenced by rigorous training and access to simulation environments. Self-assessment and reflection were critical in identifying strengths and areas for improvement.

Subtheme: Self-evaluation of preparedness.

Students' self-evaluation of their preparedness for clinical practice varies; however, many feel confident due to rigorous training, hands-on practice, and instructor feedback. While most feel ready, particularly in areas where they have had ample practice, some acknowledge variability in their confidence across different skills and disciplines. For example, they stated:

"I will do self-assessment, reflect my knowledge and skill for example NG tube feeding or insertion to identify the areas where I feel confidence and areas that I need further practice or review. And then I will practice the skill at the CSC before going to the ward and ask feedback from the CI and also my friends" (P1)

"Firstly, I do the self-assessment of myself. I reflect on my confidence level and proficiency in the very practical nursing skill. I also identify the area that I maybe feel strong and area that when I need the improvement. Also, I will review my theoretical knowledge first and the concept and also the procedure that relevant to the specific wards that I will be placed in." (P8)

"I will assess my knowledge, my abilities and also my confidence in a variety of areas and departments, including patient care, the prescription of medication, the record keeping and also the communication with the patient" (P12)

From the responds, this shows that students did not solely rely on classroom learning to assess their preparedness for clinical placement. Instead, the students employed a holistic approach to assess their preparedness based on a combination of hands-on practice and a strong foundation in theoretical knowledge. The students systematically self-evaluate their preparedness by assessing their knowledge and skills. By critically examining their strength and weakness, the highlighted the importance of self-assessment and ongoing reflection to identify areas of confidence and those needing improvement. This self-evaluation process is critical for developing self-awareness and ensuring a continuous personal and professional growth, preparing them to confidently navigate the complexities of patient care.

Subtheme: Basis for preparedness

The students attribute their preparedness to a combination of thorough training, hands-on practice, and supportive feedback. They also emphasize the importance of both theoretical knowledge and practical application, with simulations and consistent practice being crucial. Feedback from instructors and a comprehensive curriculum are also fundamental to their readiness for clinical placements.

"I think the first one would be knowledge. Because without knowledge, even though you have the skills to do the procedure, you still need the knowledge." (P4)

"I think the basis for this preparedness are based on my knowledge, readiness to do the procedures in the wards, confidence and experience to do the procedures." (P6)

"The basis for my preparedness is firstly I will gain the knowledge first by reading the slide from my lecturer previously and also for the practical skill I will read all the checklist first before I go into the clinical placement ward after that I will go to the csc to practice this first before I go into the clinical placement ward." (P8)

The students attributed their feelings of preparedness for clinical placements to the practical skills training they received during their studies. Students themselves stressed the importance of integrating theoretical knowledge with hands-on practice. This integration is seen as the foundation of their confidence and readiness to perform in clinical settings. This integration ensures that students not only understand the theoretical concepts taught in classrooms but also have the practical skills to apply this knowledge in real-life patient care scenarios, fostering a sense of preparedness and competence when they enter clinical rotations.

Theme 3: Self-Assessed Competence

Competence was gauged through self-reflection, adherence to procedural guidelines, and instructor feedback. Students valued opportunities for hands-on practice to build confidence and technical proficiency.

Subtheme: Evaluation criteria of competence

Students use a variety of methods to self-assess their competence in practical skills, emphasizing confidence, hands-on practice, and feedback from instructors and peers. They follow checklists and guidelines, reflect on past experiences, and seek continuous improvement. Many also highlight the importance of honest self-assessment and actively volunteering for procedures to gauge their proficiency.

"I will make sure to always keep updated with the checklist of the procedure so that I adhere and follow the right guideline then will gain feedback from my ci and friends to incorporate their feedback into my self-assessment and highlight where should I make improvement" (P1)

"I would describe myself as competent in practical skills when I can do a procedure without mistakes based on the checklist procedure that I had learned in theory and practical classes, right techniques and achieve the intended purpose for the procedures." (P6)

Students evaluate their competence in practical skills through a combination of self-reflection, following checklists, and obtaining feedback from instructors and peers. They highlight the importance of honest self-assessment and active participation in procedures

to improve their skills and confidence. Ultimately, a systematic approach that integrates hands-on practice, reflective learning, and constructive feedback proves essential for their development.

Subtheme: Method of gaining competence

Nursing students gain competence through a mix of training, hands-on experience, and continuous learning. They value clinical rotations, practicing at clinical skill centres (CSC) and guidance from experienced nurses. Self-directed learning, workshops, and educational resources like checklists and videos are essential. Regular practice, reflecting on feedback, and real-world application are key strategies for skill development.

"How I think I gain this competence by reading the checklist and watch videos that already prepared by my lecturers. And then, learn face-to-face from the staff nurse or clinical instructors. Lastly, I will try to practice it and do it in front of the staff nurse." (P3)

"I always practice at the clinical skill centre, CSC, at KON. So that my skill won't be rusty. And also practicing the procedure that I rarely found in the ward. I would involve myself in that kind of procedure so that I have the skills to do it when I work later on." (P4)

"I would say due to countless practices and I'm reading more about certain procedures. Because, you know, nurses and practical skills cannot be separated. So, I would say hands-on... Hands-on on a real patient, it's very important to compete in procedures or skills that we want to enhance." (P7)

"I think I gained this competence mainly from regular practice. So, I regularly go to clinical center at Kulliyyah Nursing to practice the procedure and revise the procedure itself. Other than that, I also seek guidance from my clinical instructor and also, staff nurse that are available at the wards" (P9)

Nursing students develop competence through a combination of theoretical learning, which incorporates checklists, videos, and workshops, and practical experience gained from clinical rotations, CSC practice, and direct patient care, supplemented by mentorship from staff nurses and clinical instructors. Regular practice, self-directed learning, and the proactive pursuit of feedback are essential for enhancing skills and fostering confidence.

Subtheme: Skill mastery significance

All students unanimously emphasized the critical importance of mastering practical skills in nursing. Mastery impacts patient care and safety, ensuring effective, high-quality care and minimizing risks of malpractice and errors. It involves technical proficiency, understanding the rationale behind procedures, and knowing how to apply skills in diverse clinical

scenarios. Skills mastery requires courage, experience, confidence, and continuous learning. Knowledge serves as the foundation for practical skills, guiding actions and enhancing competence in real-life settings.

"I think mastering practical skill is very crucial for nurses as it will directly impact for the patient care and safety. It involves not only acquiring the technical proficiency to perform the task effectively but also to understand the rationale behind each skill and knowing when and how to apply it appropriately in diverse clinical scenarios." (P1)

"In my opinion, I think mastering practical skills is important since it can avoid from malpractice or negligence or harm the patients so we can save patient life and also we can increase the quality of care of the patients" (P3)

"For me, it is very crucial since mastering practical skills prevent us to do harm to the patients and to ourselves as nurses. This is because a mishap in delivering interventions to the patient can cause harm to them. For example, overdose of drugs can cause harm to the patients, and they have the right to sue us." (P6)

"Mastering practical skills are in the same is essential for providing safe and effective and also a high-quality patient care firstly mastering practical skills ensure that nursing students can perform tasks such as medication administration wound care and also patient assessment safely and also to minimize the risk of errors such as medication error and adverse events that could harm the patient" (P12)

Nursing students totally agree that mastering practical skills is essential for delivering high-quality patient care and ensuring patient safety. These skills directly impact patient well-being and reduce the likelihood of errors and malpractice. Achieving proficiency in practical skills requires not only technical expertise but also a solid understanding of underlying procedures and the ability to apply these skills in various clinical situations. This mastery ultimately contributes to safe and effective patient care.

Theme 4: Educational Program

The curriculum was praised for its integration of theoretical and practical training but highlighted areas for improvement, including increased simulation-based learning and technological tools.

Subtheme: Program evaluation

The students emphasized the importance of well-structured curricula that integrate theoretical knowledge with hands-on experience. Suggestions for improvement included enhancing instructor qualifications, increasing hands-on learning opportunities, and incorporating more technology into learning environments. These insights

highlight the role of educational programs in preparing nursing students for clinical practice effectively.

"I think educational program is important since students need to learn the correct ways and how to do certain practical skills before they went to clinical skills before they went to clinical postings so when they learn first at least they can get a brief idea on how to perform it" (P3)

"For me, it is important because we need to be exposed to situations or what we should do when we go for clinical posting later. Besides, it can also prepare the students in mastering required skills that needs to be used later in clinical setting, whether they are still a student" (P6)

From this study, the students view the university's educational program on practical skills positively, appreciating the well-structured curriculum that integrates theoretical knowledge with hands-on experience, which they found crucial for bridging the gap between classroom learning and real-world clinical practice. They appreciated the current educational programs but suggested enhancements such as improving instructor qualifications, increasing hands-on learning opportunities, and incorporating more technology. For instance, the students recommended more supervised practice sessions in the Clinical Skills Centre (CSC) and highlighted the value of quality clinical placements and the use of advanced technologies. The students also noted that practical skills training enhanced their preparedness and ability to perform in clinical settings.

Subtheme: Meeting needs

The students provided feedback on how the educational programs at university met their needs before clinical placements. They emphasized that these programs improved their skills and prepared them effectively from their early years to their final year of study. The programs were noted for providing essential knowledge and practical skills that enhanced their readiness for clinical settings.

"I think it has met my needs because it improved my skill compared from when I was year one to year four." (P1)

"Yes because at least I know how and why and when I need to do practice and also what practices I perform. This educational program me actually very important and make myself prepare before clinical postings and I have the ideas of what the skills that I need to perform" (P3)

This study found that nursing students' satisfaction with their education is a crucial aspect that impacts their learning outcomes and overall experience. The students perceived the educational programme as beneficial in providing them with the necessary practical skills and

knowledge base to prepare them for clinical placements.

DISCUSSION

The purpose of the present study was to explore the perceptions of final-year nursing students regarding their learning of procedural skills during their education. The transition from academic learning to practical skills remains an essential aspect of nursing education. Understanding how students experience and comprehend this shift can provide insights into the efficacy of new educational methodologies. By examining the students' perceptions, this study aims to identify potential enhancements to the curriculum and support structures in nursing programmes that could improve the development of practical competencies.

Perceptions of Practical Skills Training

The results of this study showed that students have a high regard for practice skills training. They claimed that hands-on experience is essential for their education and growth. This was reflecting the importance the educational programme placed on practising skills as a key component in their preparedness for clinical placement. By doing this, students said they could apply theory to practice in a real-world situation, which increased their confidence and competence within the clinical environment. The importance of hands-on practice, especially for nursing students, has also been emphasised by recent studies. The acquisition of hands-on clinical experience may impact their ability to provide quality patient care upon graduation (5). By practicing iteratively in an immersive environment, students develop the techniques, hone their critical thinking, and instill the muscle memory needed to perform these tasks efficiently under pressure (6). Furthermore, previous research highlighted the importance of practical skills in nursing education, bridging the gap between theory and practice. The findings of the phenomenological study emphasised that there should be constant evaluation of clinical practice within nursing curricula to ensure that students graduate with the skills needed to succeed in practice (7).

Preparedness for Clinical Placements

One participant factor that enhanced feelings of being well-prepared for the clinical placement sites was the program's emphasis on practice experience. By having both practice and theory they felt that it revolutionised their ability to approach the different clinical cases. Not only to aid their academic success, but to benefit their professional growth as future nurses. Students appreciated the opportunity to practice in a controlled environment, before confronting the complexities of caring for real patients.

Moreover, this study showed that students do not perceive attending the classroom as sufficient evidence of being prepared for their first clinical placement.

Accordingly, the students used a more continental view to assess their preparedness as a product of experiential practice and a robust theoretical framework (4). The students can self-assess their readiness by objectively evaluating their knowledge and skills through a systematic approach. By highlighting their strengths and weaknesses, they emphasized the importance of self-appraisal and constant retrospection to identify areas of confidence and areas that need improvement. According to Kerr et al., the self-reflective factor is an influential factor in the development of clinical readiness in nursing students, offering a multidimensional solution for enhancing the capabilities of nursing students (8). Self-reflection enables students to evaluate their strengths and weaknesses, drawing attention to features of their clinical performance (9). This not only ensures an increase in the confidence quotient but also provides a tailor-made learning experience tailored to a person's needs.

To take responsibility for a part of the student learning process, self-assessment plays a crucial role, urging students to higher standards of clinical competencies. In terms of the clinical placement experience itself, students felt similarly prepared, which they also directly attributed to the development of practical skills throughout their studies. Students themselves have been the ones to highlight the need to combine theory and practice. Recent findings support this view, showing that bridging theory and practice enhances students' learning experiences by enabling them to connect theoretical knowledge with practical application and develop a holistic understanding of clinical phenomena (10). In previous research, the components used to evaluate the perceived readiness of senior nursing students toward the transition process to the clinical setting included clinical competency, evidence-based practice, framework-oriented performance, and patient-centered care (11). This means that such an integration is crucial for students to gain the confidence to begin participating in clinical practice. Altogether a different animal, and the real-world applications add depth to theoretical content, force critical thinking skills, and increase students' overall learning, which ultimately results in better patient care.

For self-rated competence for students, one of the subthemes is assessment needs or competence, in which the students base their self-evaluation heavily on their ability to perform clinical procedures accurately and according to predetermined guidelines. And this checklist or guideline dependence is not only an indication of their skills, but also of their commitment to patient safety and quality of care. Hands-on practice and successful skill demonstration during assessments were recognized by students as vital indicators of their competence (12). Among the main assessment criteria for competency was the ability to perform activities independently, that is, without staff nurses or clinical

faculty members supervising practical training. The results follow the findings of previous research (13). Therefore, at the stage where students correctly perform procedures and tasks without needing constant guidance and supervision, they are ready to professionalize in the field of nursing.

Additionally, students reported that they acquire practical skills through a combination of theory and practical experience. They construct basic information through training, checklists, videos, and workshops, where helpful information is reinforced within numerous clinical skills centres (CSCs). Repetitive practice is the key to mastering skills, students said. One example of such competence-enhancing techniques can be found in a study that demonstrated how nursing students had positive experiences using video to improve both their clinical skills and confidence (14). At the centre of a survey of nursing students' experiences with using video to enhance their clinical skills and confidence are a number of key findings. Shared perceptions from students in the study revealed advantages that included the opportunity to revise their performance via video recording, which allowed them to view techniques, determine strengths and weaknesses, and support learning about clinical capabilities.

Moreover, based on this study's results regarding the significance of skill mastery among nursing students, the subjects of the study expressed that the mastery of skills is not limited to performance but rather the understanding of the rationale for each skill, when and how to do it in various clinical scenarios as well as having the confidence to perform needed but may be unpleasant procedures and (15). They view this mastery as protection against malpractice and negligence, arguing that "getting things right" is a fundamental responsibility to patients who depend on nursing professionals to safeguard their health. The study by Donoghue et al. supports these findings [16], where mastery in resuscitation skills is necessary to ensure high-quality care in critical scenarios [14]. Skill mastery indicates that learners have achieved the level of performance required of them, demonstrating that they've truly understood what they've learned and how to apply it. Two principles used in the resuscitation education literature that can facilitate better educational outcomes are deliberate practice and mastery learning (14).

Educational Program's Benefits

The substantive professional learning program embedded in the educational program was also highly regarded from the students' perspective, as they perceived that the knowledge and skills gained through this were advantageous in preparing them for their future professions. In addition to theoretical instructions, practical skills training was also believed to be a balanced approach that accommodates diverse learning styles. These results are consistent with those of a study

on undergraduate Nursing students' satisfaction with the clinical learning environment in Iraq-Kurdistan, which found a positive impact of the nursing educational program in meeting the needs of its students for practical clinical placements (17). That means the program has a clear pathway with a personalized instructional approach. The aspects, such as task orientation and personalization, were rated as satisfactory by the students. The accessibility of clinical instructors was mentioned as a positive factor contributing to student satisfaction, which reflects the value the program places on staff development at the clinical site in a supportive role (17).

Students found that the program structure contributed to the gradual development of their competencies and served as a bridge from classroom-based learning to practice in the clinical setting. This thorough training was also identified as an essential factor in developing them to become competent and confident professional nurses. Consistent with previous findings, it is necessary for educational institutions to regularly evaluate and improve the quality of learning environments, teaching effectiveness, and support during clinical placements to ensure that nursing students have optimal and satisfying educational experiences (18).

LIMITATIONS

This study has several limitations. First, the findings are based on self-reported data, which individual expectations, recall accuracy, and subjective interpretations may influence. Although the study employed purposive sampling to capture diversity in clinical experiences, gender, and academic performance, the participant group remained relatively homogeneous in terms of institutional and geographical context, as all twelve participants were final-year students from the same university. As such, the results may not be fully generalisable to nursing students from other academic settings or regions.

Future research involving a larger and more demographically diverse sample across multiple institutions would provide more robust and transferable findings. Additionally, conducting comparative studies across various types of nursing programmes may further validate and expand upon the insights gained from this study.

RECOMMENDATIONS

Based on the findings, it is recommended to strengthen practical training by increasing clinical simulations and workshops, particularly in the early years of the curriculum. Clinical instructors in specialised areas should be equipped with the necessary skills to ensure quality supervision. Integrating technology, such as video tutorials, can support self-directed learning

and reinforce skills. Institutions should also promote reflective practice through regular self-assessment and feedback sessions. Future research should involve larger and more diverse samples across multiple institutions to enhance generalisability. Continuous curriculum review is essential to align nursing education with evolving clinical demands and best practices.

CONCLUSION

The study underscores the need for a continuation of ensuring that nursing education is providing students with hands on experience in delivering care. It reinforces that educational strategies must positively impact students' confidence and competence such that these strategies equip them for complex patient care situations that they face. A positive learning environment, with appropriate supervision, constructive feedback, and ample practice opportunities, is critical. Assessment and reflection about performance should be periodically incorporated into the training process so that students feel confident in their preparation for clinical practice. Institutions should have more frequent training in practical, and a variety of clinical simulations and workshops. Healthcare personnel (HCP) play a leading role in providing essential health services and their qualifications, as well as quality in providing the practical training and supervision needed in various comprehensive health services, are vital, especially in specialized areas. Similarly, adding technology such as videos helps supplement traditional training in an effective manner to encourage self-practice for students.

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