CLINICAL PREPAREDNESS AND COMPETENCY OF NURSING STUDENTS IN DELIVERY ROOM DURING THE LIMITED FACE-TO-FACE CLINICAL EXPOSURE

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Abstract

The discrepancy between nursing students' theoretical knowledge and practical skills in clinical settings has been a persistent concern. The COVID-19 pandemic's impact on nursing education has further exacerbated this issue, necessitating a reevaluation of nursing students' readiness and effectiveness. To address this, descriptive-correlational research was conducted with a purposive sampling of second-year nursing students from Misamis University. A modified questionnaire and competency checklist were utilized to evaluate students' clinical preparedness, including knowledge, communication abilities, technical skills, and teaching responsibilities. A second survey assessed respondents' clinical proficiency in the delivery room. Statistical analyses were applied to the survey results. The findings indicated that second-year nursing students exhibited a very high level of preparedness, with technical skill preparation ranking the highest. Additionally, the second set of results showed that the clinical competence of the second-year nursing students was rated as very satisfactory. Despite favorable outcomes, no significant correlation between clinical competency and clinical preparedness was identified, indicating that clinical readiness is neither a determinant of clinical competency nor a factor influencing nursing students' overall competence. The study emphasizes the necessity for a comprehensive investigation into other factors that may impact nursing students' clinical competency to ensure the delivery of high-quality healthcare services.

Keywords: *preparedness, competency, healthcare services, readiness, knowledge*

Introduction

Clinical competence is defined as the ability of a healthcare professional to perform a comprehensive assessment, implement a care plan, and assess client outcomes (Australian Health Practitioner Regulation Agency, 2019). Nursing students must acquire the skills and personal characteristics required to effectively perform their duties while integrating multiple elements such as knowledge, techniques, attitude, thinking ability, and values required in specific contexts. In addition, being well-prepared is essential to achieving objectives and preventing or minimizing undesirable effects while effectively carrying out one's duty (Asimba et al., 2008). Thus, nursing students must be theoretically prepared and competent before being assigned to hospital duty, and a well-prepared student nurse is a nurse who works effectively.

Clinical exposure is critical for practice development because it improves students' competencies and ability to learn independently, make decisions, and articulate ethical commitments. According to Awuah-Peasah, Sarf &Asamoah in 2013, nursing practice demands the synchronization of both knowledge application and clinical skills, and students must demonstrate the capacity to combine these professional needs of the trained nurse for which they are being prepared. However, the current COVID-19 outbreak has forced a transition in nursing students' education from traditional to distance learning. With the pandemic outbreak, face-to-face classes, clinical skills laboratories, and student clinical placement were discontinued or restricted globally. Providing students with real-world experiences, integrating clinical skills, and developing the necessary competencies are the most difficult curricular challenges in nursing education (United States National Council of State Boards of Nursing 2020). As a result, various instructional approaches have been considered, such as using blended learning methodologies to develop clinical skills and compensate for the limited clinical exposure (Cutcheon et al., 2015). This alternative approach, however, severely limits the student's ability to develop their skills and place them in clinical settings, which is the typical method in traditional nursing curricula.

Second-year nursing students are novices who have never had the opportunity to practice in a clinical setting; thus, they are vulnerable to the effects outside of the clinical setting. These students face three major issues: a lack of self-confidence, knowledge, and skills (Jamshidi et al., 2016). When nursing students come into practice in clinical exposure, this becomes the most difficult barrier. Fear and stress, on the other hand, can be beneficial if students perceive them as an opportunity. Clinical exposure was undeniable in the study because it provided opportunities for rich practice in each clinical context. Its role was critical because it could inspire students to improve their knowledge and skills through practice (Neal, 2016).

Nurses play a vital role in rendering health care services as they collaborate with other health professionals to deliver the highest standards of patient care. They are the backbone of any successful healthcare program, thus making their contribution to improving the health and well-being of society undeniable (Fooladi, 2015).

The Bachelor of Science in Nursing (BSN) curriculum prepares nursing students to become professionals by providing the necessary knowledge, skills, and attitude to render competent and quality nursing care to their clients (Oducado & Penuela, 2014). According to Backes et al. (2018),

the nursing education program involves the combination of teaching and learning materials and processes, teaching and clinical experiences, human resources, and instructors' attitudes and commitment to attain the learning expectations in the field and produce exceptional performances of the students. With the program being strongly associated with the quality of curriculum, faculty, and resources, the nursing students' clinical competence contributes to the provision of standard and safe nurse care (Chaatit et al., 2015; Forsberg et al., 2011).

The clinical practice environment improves students' skills and helps them develop self-confidence and practice readiness (Edwards et al., 2004). The most influential source of self-confidence is clinical skill performance. Over the semester, students' confidence in performing specific clinical skills grew. With more exposure to clinical settings, the level of confidence improved. Thus, self-confidence has been noted as vital for good clinical performance, and confident students are more likely to be more effective nurses (Porter et al., 2013).

Most students said they felt prepared for practice and that simulation experiences helped them achieve this. Expanded placements, expanded use of simulation for clinical skills practice, reduced clinical skills class numbers, and current technology were indicated as areas for improvement to help students gain confidence and prepare for practice. The students highly regarded clinical rotations as a means of boosting their perceived preparedness to practice independently after graduation. Caring for several patients entails a high level of complexity, and there is likely to be a learning curve, with confidence and competence increasing with experience (Woods et al., 2015).

According to the study of Mould et al. in 2011, students who underwent simulation-based learning show a high level of competence in the clinical setting. In addition, Edwards et al. (2004) discovered that effective instructor assistance was linked to students' readiness to practice in the clinical setting. Bromley (2014) defined competency as a multifaceted characteristic that includes knowledge, skills, attitudes, and values: the context and the students' traits as nurses were linked to their competency. Mentorship and preceptorship, teaching and learning modules, and simulation-based learning effectively boosted students' general preparedness, knowledge levels, and competency to practice in critical care (Ahmed & Mohamed, 2018; Gallagher et al., 2011; Mould et al., 2011; Smallheer et al., 2018).

Other factors that affect the students' competency are communication skills and interpersonal relationships. Yang (2018) states that communication ability and interpersonal interactions influence nursing students' clinical competence. The findings demonstrate the need to develop and implement training programs in Colleges of Nursing to promote communication skills and interpersonal interactions, which will improve nursing students' clinical competence.

Natividad et al. (2020) postulated that nursing students may experience anxiety during their first practical exposure as they question their abilities and lack confidence in adjusting to the clinical learning environment. Nursing students who were initially exposed to clinical practice had a mixed bag of positive and negative experiences. The Nursing College should emphasize thorough orientation before students are exposed to clinical practice.

In this study, the researchers considered the limited opportunities for face-to-face clinical experience during the COVID-19 pandemic in the Bachelor of Science in Nursing (BSN) Curriculum. This research evaluates second-year nursing students to determine their readiness and competency for their upcoming first clinical exposure in the delivery room.

There is a limited discussion between theory (taught in the classroom) and practice (in the clinical area); however, (Abu et al., Ph.D., Aljerjawy Mohamad, Ph.D., Salama Akram, MSc, 2018) mention that appointing a nurse practitioner in the ward would aid in bridging the gap. Furthermore, students must be active participants in their learning, and preceptors and nurse teachers are facilitators and accountable for students' learning in clinical settings (Sweet L, Broadbent J., 2017). As a result, the environment should motivate students and contribute to their sense of security, even when asking questions to achieve learning outcomes.

The pandemic's limited opportunities for face-to-face clinical experience drew the researchers' attention to the need to evaluate second-year nursing students of Misamis University in the delivery room to determine their readiness and competency for their upcoming first clinical exposure in the delivery room. Future nurses must be adequately trained to provide nursing care at such a crucial time.

Materials and Methods

Research Design

The study utilized a descriptive-correlational study. The descriptive research design describes the characteristics of the population or phenomenon studied, while the correlational design allows flexibility in investigating and describing the relationship between independent and dependent variables. The researchers considered it an appropriate research design since the present study describes the preparedness and clinical competency level of second-year nursing students during the limited face-to-face clinical duty in the delivery room.

Research Setting

The research was conducted in Ozamiz City. According to Department Order No. 42 Series of 1976 from the Department of Education and Culture, the College of Nursing is a four-year course. As of the First Semester, S.Y. 2021-2022, it has a population of 555 nursing students, of which 118 are regular second-year students.

Research Respondents

The study's respondents were forty (40) second-year nursing students officially enrolled in the College for the second semester of the school year 2021-2022 and Level II Clinical Instructors assigned in the delivery room. The respondents were selected through purposive sampling. This non-probability sampling technique chooses a sample from a population most likely to provide useful or relevant information.

Ethical Considerations

The following ethical considerations were observed during the conduct of the study: Ethical considerations such as autonomy, anonymity/confidentiality, beneficence, and non-maleficence were upheld in this study.

The consent form had two parts that ensured the autonomy of the research participants. The informed sheet contained information about the study, including the introduction, the purpose of the study, the description of the data gathering, the study duration, the procedures, potential benefits, confidentiality, and the right to refuse/withdraw. The second part, the Certificate of Consent, served as the participant's consent to participate in the study.

The researchers were assured the participants' right to privacy in the study. No personal information other than the questions in the tool will be asked or any identification to ensure anonymity. The research tool did not ask for the names of the research participants and the statistician of this study to ensure the confidentiality of the research. Furthermore, the hard copy of the raw data was placed in a sealed envelope and stored hidden that was only accessible to the researcher. The softcopy of the files was held in a separate flash drive and stored hidden by the researcher.

Research Instruments

The study used modified questionnaires as an instrument to gather all information about the respondents. The first set of questionnaires assessed the level of preparedness of the second-year nursing students in terms of knowledge, communication skills, technical skills, and teaching responsibilities. The continuum presented below was used to interpret the data.

Scale	Range	Responses	Interpretation
4	3.51-4.00	Strongly Agree	Very High
3	2.51-3.50	Agree	High
2	1.51-2.50	Disagree	Low
1	1.00-1.50	Strongly Disagree	Very Low

The second set of questionnaires was used by the clinical instructors to evaluate the clinical competency of second-year nursing students using the Delivery Room Competency Checklist of the College of Nursing. The continuum presented below was used to interpret the data.

Score	Interpretation
68-70	Excellent
64-67	Very Satisfactory
58-63	Satisfactory

55-57	Passed
54 and below	Failed

Data Gathering Procedure

Before the research instrument's actual fielding, permission was obtained from the Dean of the College of Nursing to conduct the study. Following approval of the letter of request, the researchers conducted a preliminary pilot testing on ten individuals to evaluate the validity and reliability of the study tool before conducting the main study. The researchers identified the respondents, described the study's purpose and scope, and asked whether they would participate. Those who did not want to participate were replaced by others who would undergo the same process of obtaining informed permission. The researchers distributed the questionnaires to the respondents following the minimum public health protocol during the COVID-19 pandemic and gave them sufficient time to answer the questions. The answered questionnaires were collected immediately.

Results and Discussions

The results presented in Table 1 provide an insightful overview of the level of clinical preparedness. The findings indicate that the students demonstrate a very high level of clinical preparedness. In specific areas, the students show a strong level of clinical preparedness in their technical skills, as evidenced by a mean score of 3.54 and a standard deviation of 0.38. This suggests they possess the necessary skills and competencies for their clinical responsibilities. These results indicate a very high level of clinical preparedness, positioning the respondents well for future professional performance. This aligns with previous research conducted by Panda et al. (2012), emphasizing the significance of blending theoretical and clinical learning experiences in nursing education programs to prepare students for their careers adequately. The study findings also underscore the importance of effective clinical experiences in nursing education.

Given the study's findings, which reveal a high degree of clinical preparedness across various domains, it can be inferred that second-year nursing students are effectively adhering to established nursing education programs and successfully applying their knowledge and skills in their academic pursuits. These findings support the positive outcomes associated with comprehensive nursing education and the integration of theoretical and clinical learning experiences.

Table 1. Respondents' Level of Clinical Preparedness
(n= 40)

Variables	Mean	SD	Interpretation
Knowledge	3.33	0.37	Very High Level

Communication Skills	3.38	0.39	Very High Level
Technical Skills	3.54	0.38	Very High Level
Teaching Responsibilities	3.48	0.38	Very High Level
Overall Preparedness	3.43	0.38	Very High Level

Note: Preparedness Scale: 3.25-4.0 (Very High Level); 2.50-3.24(High level); 1.75-2.249(Low level);1.0-1.74(Very Low Level)

Table 2 presents the outcomes of clinical competency assessment among second-year nursing students. The findings demonstrate a high level of clinical competency among the respondents. Most of the students, comprising 27 individuals, accounting for 67.50% of the total respondents, were classified as having a very satisfactory level of clinical competency. This indicates they possess the necessary skills and abilities to perform their clinical duties effectively. Additionally, eight students, representing 20% of the participants, were identified as having excellent clinical competency. This group demonstrates higher proficiency and excellence in their clinical practice.

Furthermore, five students, 12.50% of the respondents, exhibited satisfactory clinical competency. While lower than the very satisfactory or excellent groups, this category still indicates a satisfactory level of competence among these individuals. These results align with the research conducted by Bahreini et al. (2022), emphasizing the importance of nursing education in fostering high levels of competence among students. The study suggests that nursing schools should prioritize preparing students to assume job responsibilities and provide safe and effective care. Consequently, focusing on quality improvement and enhancing nurses' competencies becomes integral to any nursing program. The results presented in Table 2 also indicate that second-year nursing students can perform actions with desired outcomes in various real-world conditions. They demonstrate deliberate organization of their activities with flexibility and efficiency (Aasen et al., 2022).

Overall, the findings suggest that the implemented nursing program has effectively equipped second-year nursing students with the necessary clinical competencies. The outcomes reflect a favorable level of proficiency and indicate that the students were well-prepared to assume their professional roles.

Table 2. Respondents' Level of Clinical Competency
(n= 40)

Variables	Frequency	Percentage
Excellent	8	20.00
Very Satisfactory	27	67.50
Satisfactory	5	12.50
Fair	-	-
Poor	-	-

Note: Competency Scale: 68-70 (Excellent); 64-67 (Very Satisfactory), 58-63 (Satisfactory); 55-57 (Fair); 54 and below (Poor)

The results presented in Table 3 indicate no significant relationship between the level of clinical preparedness (knowledge, communication skills, technical skills, and teaching responsibilities) and the competency of second-year nursing students. These findings contradict the claims made by Irwin et al. (2018), Salisu et al. (2019), and Sheppard-Law et al. (2018). Irwin et al. (2018) argue that the main purpose of clinical preparedness is to ensure that graduates possess the necessary knowledge and skills to translate into excellent professional performance. However, the results of this study suggest that clinical preparedness, as measured by the factors mentioned, does not significantly impact the clinical competency of second-year nursing students. This indicates a divergence from Irwin et al.'s claims.

Similarly, Salisu et al. (2019) define clinical preparedness as a form of knowledge provision and training aimed at enhancing the ability of nursing students to provide excellent and competent healthcare services after graduation. The findings of this study do not align with Salisu et al.'s assertions, as no significant relationship between clinical preparedness and competency was observed. Additionally, Sheppard-Law et al. (2018) state that planned clinical experiences in nursing education aim to enable students to develop clinical skills, integrate theory with practice, apply problem-solving abilities, develop interpersonal skills, and become familiar with formal and informal norms, protocols, and expectations of the nursing profession and healthcare system. However, the results of this study contradict these claims, as they indicate no significant relationship between clinical preparedness and competency among second-year nursing students.

It is important to consider that this study's findings represent a specific context and sample, and further research may be needed to explore the relationship between clinical preparedness and competency in different settings. The absence of a significant relationship in this study suggests that other factors not accounted for in the analysis may influence the development of clinical competency among nursing students.

Overall, these conflicting results highlight the complexity of the relationship between clinical preparedness and competency in nursing education. Additional studies and comprehensive investigations were required to understand better the factors contributing to clinical competency and how clinical preparedness aligns with it. By building on existing research, a clearer picture can emerge regarding the impact of clinical preparedness on the development of competent nursing professionals.

Table 3. Significant Relationship between the Respondents' Level of Clinical Preparedness and Competency

Variables	*r* value	*p* value	Remarks
Knowledge and Competency	0.03	0.87	Not Significant
Communication Skills and Competency	0.31	0.05	Not Significant
Targeted Skills and Competency	0.03	*0.05	Significant
Teaching Responsibilities and Competency	0. 16	0.33	Not Significant

*Note: Probability Value Scale: **p<0.01* (Highly Significant)*; *p<0.05* (Significant)*; p*>0.05 (Not significant)

Conclusions and Recommendations

This study comes up with several conclusions based on the findings. The overall level of clinical preparedness of the second-year nursing students was verbally interpreted as a very high level which indicated that the respondents were adequately prepared when it comes to their theoretical knowledge, communication skills, technical skills, and teaching responsibilities. This indicated a successful dissemination of a standard nursing education among the students. The results of the overall clinical competency revealed that the majority of the second-year nursing students have a very satisfactory clinical competency which indicated that nursing students were able to perform an excellent healthcare service in the actual healthcare settings. Moreover, the

survey's findings showed that although the respondents' clinical preparedness and clinical competence scores were favorable, there was no evidence of a significant relationship between the two. This indicates that the level of clinical preparedness of a nursing student does not determine the level of their clinical competency.

The findings of this study resulted for the following recommendations for nursing students, clinical instructors, and nursing research. For nursing students, they must maintain a strong interest in learning, prioritize skill development, and stay motivated to excel in their studies, especially in new normal situations. For the clinical instructors, they must invest efforts in enhancing nursing students' competence by providing a supportive and nurturing learning environment. Future researchers may thoroughly explore the variables influencing nursing students' clinical competency to develop effective support and ensure high-quality patient care.

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