Frontiers of Nursing • 11(1) • 2024
DOI: 10.2478/FON-2024-0011

sciendo

Frontiers of **Nursing**

Clinical competency: perceptions of nursing interns and clinical mentors

Original article

Jackline Prathibha, Radhika R. Pai*, Linu Sara George

Fundamentals of Nursing, Manipal College of Nursing, Manipal Academy of Higher Education, Manipal, Karnataka 576104, India

Received: 12 April 2023; Accepted: 4 September 2023; Published: 20 March 2024

Abstract: **Objective:** To assess the clinical competency of nursing interns and the perception of clinical nurse mentors toward student nurses' clinical competency.

Methods: A study was carried out among 104 nursing interns and 26 clinical nurse mentors using the purposive sampling technique. A self-reported perception scale was used to collect the data.

Results: In general, most nursing interns perceived themselves as clinically competent during the internship. The clinical nurse mentors too reported that the current internship is helping the nursing interns in becoming competent.

Conclusions: Frequent clinical evaluation, buddy system, provision of stipends, good leadership, and coordination between the academic institute and hospital are reported as the critical motivating factors for improving the clinical competency of student interns.

Keywords: *clinical competency • clinical nurse mentors • competence • internship • nursing interns • perception*

1. Introduction

Competence is an important aspect of nursing care that has a major impact on the quality of nursing services given.[1] Owing to the ongoing shortage of nurses and increasing patient acuity, there is a requirement for novice nurses to speedily master critical-thinking and psychomotor skills.[2] When it comes to hiring nurses, one of the most common concerns healthcare administrators have is whether entry-level nurses are competent and ready to work in clinical settings. According to the World Health Organization (WHO), there is a global shortfall of over 4.3 million midwives and nurses.[3] India is short of 1.94 million nurses.[4] The previous study reports that newly hired nurses lack the clinical competency to operate in a clinical context, but they are also perceived by their clinical nurse mentors as nursing interns lacking in competency in clinical skills. In a survey conducted among 57,000 nurse supervisors, only 25% of supervisors were fully satisfied with the performance of novice nurses. The healthcare system wants newly hired nurses to develop quickly from a novice to a competent level, where they can work autonomously, due to the rising demand for excellent nursing care and nurse retention.[5] Thus, student nurses need to be assessed for their ability to perform the required skills before they start working in the healthcare setting.[6]

How to cite this article: Prathibha J, Pai RR, George LS. Clinical competency: perceptions of nursing interns and clinical mentors. *Front Nurs*. 2024;1:105–110.

**Corresponding author.*
E-mail: radhika.r@manipal.edu (R. -R. Pai).

Entry-level nurses will have restrictions to use technical skills and also may lack the skills to provide comprehensive patient care. They may also be stressed out as a result of reality shock caused by the gap between theory and practice. The demands placed by the physician and nursing superiors are high on newly joined nurses, and this causes emotional stress and strain affecting their physical well-being. If they are unsatisfied with their employment, burnout and excessive stress levels can result in them considering quitting their jobs. As a result, all the money spent on nursing training will be of naught.[7] A study conducted among graduate nurses, who were about to complete their graduation, reveals that the existing evidence indicates a gap between theory and practice in achieving higher levels of clinical competency.[8]

During the process of transition, the unpreparedness of newly joined nurses for their professional role can be a broad consequence for the healthcare system and other nurses, which can lead to reduced-quality patient care.[9] Authors in this study felt the need to understand the perception of clinical competency among nursing interns as well as consider the observations of clinical nurse mentors regarding the clinical competency of their respective nursing interns.

2. Methods

The study was conducted among nursing interns and clinical nurse mentors. The study aimed to assess the clinical competency of nursing interns and the perception of clinical nurse mentors toward student nurses' clinical competency. A cross-sectional survey design was used for the study. A quantitative approach by using a cross-sectional survey design was used to collect the data from both nursing interns and clinical nurse mentors. Using an open-ended questionnaire, the data were collected from the clinical nurse mentors to assess the perception of nursing interns' competency. The data were summarized descriptively.

2.1. Participants and setting

The students who are in their final year of BSc and Diploma Nursing course, doing their 6 months of internship under registered nurses, and performing a variety of clinical and health-related duties in hospitals and other healthcare facilities were considered. Students and clinical nurse mentors were selected from a nursing academic institution located in the southern part of India. This academic institution provides education in Diploma Nursing, Baccalaureate in Nursing, Post Basic Nursing, Master in Nursing, and the Nurse practitioner course.

Students who are in their internship clinical posting during their course of nursing and the mentors who are involved with the intern students' supervision are included in the study. All the nursing interns who were available during the data-collection period and who fulfilled the inclusion criteria were included in the study.

A purposive sampling method was used to select a total of 104 nursing interns, who work under registered nurses and performed a variety of clinical and health-related duties in the hospital, and 26 internship clinical nurse mentors of nursing institutions, who are involved in the supervision of nursing interns. All nursing interns and clinical nurse mentors available between January 2021, and April 2021, are included in the study.

2.2. Data collection instrument

Data collection tools were prepared separately for both nursing interns and clinical nurse mentors.

Items included in the sociodemographic *pro forma* of nursing interns were age, gender, educational qualification, and area of internship. Subsequently, the structured clinical competency tool constructed by the researcher, which consisted of 26 items, was used in the study. It was used to measure the self-reported clinical competency among nursing interns. The areas such as basic nursing care, interpersonal relationship (IPR), drug administration, and patient safety, professional competency/accountability, and ethical components were included in the tool. For each item, participants were asked to rate their response as either competent or incompetent, which was scored as 1 and 0, respectively. A total score of 21 (>80%) and above is considered competent and a score of 20 (<80%) and below is considered incompetent.

The demographic *pro forma* of the clinical nurse mentor consisted of 4 items such as age, gender, department, and years of internship supervision experience. The perception of clinical nurse mentors of the clinical competency of student nurses was assessed using an open-ended questionnaire. The questions in the tool were like: How clinically competent do you think your intern student nurses are? What are the clinical competencies you are expecting from the intern student nurses? What areas do you think most of the interns are competent in? What areas do you think most of the interns are incompetent in? What can be done to improve the clinical competency of the students?

Before data collection, a validation report from the experts for the survey instrument was collected, and the Cumulative Validity Index (CVI) was found to be 0.96. After administering the tool to 20 nursing interns, a reliability of 0.9 was established for the self-rated clinical competency tool using Cronbach's alpha.

2.3. Data collection method

After obtaining informed consent, 104 participants were recruited for the study. The self-reported structured clinical competency tool was administered along with the demographic *pro forma*.

Open-ended questions on the perception of clinical nurse mentors toward student nurses' clinical competency were administered to 26 clinical nurse mentors of nursing interns using Google forms.

2.4. Data analysis

The Statistical Package for Social Sciences (SPSS Version 16.0, IBM Corporation, Armonk, New York, United States) was used for data storage, tabulation, and the generation of descriptive statistics. Participants' demographic data and the self-reported clinical competency among nursing interns were presented as frequency and percentage. Data from the clinical nurse mentors were collected through Google forms using an open-ended questionnaire and were analyzed as per their opinions.

2.5. Ethical considerations

Consent and permission were obtained from the institutional ethical committee (IEC Number: 40/2019) and also from the head of the nursing institution. The CTRI registration was done—REF/2019/02/017875.

3. Results

The number of nursing interns approached was 104; all of them filled the tool with a response rate of 100%.

3.1. Sociodemographic characteristics of the nursing interns

Out of the 104 participants, 94 (90.4%) were females and 10 (9.6%) were males. Approximately 97% were under 22 years of age. Among the 104 nursing interns, 78 (75%) were graduates and 26 (25%) were diploma holders. All the participants (104, 100%) had exposure to different areas of nursing like Medical-Surgical, Pediatrics, Psychiatric, Obstetrics, and Community Health (Table 1).

3.2. Self-reported clinical competency assessment of nursing interns

This tool included 5 major aspects of nursing practice, which included nursing assessment, IPR, nursing intervention, professional competency, and ethical consideration (Table 2).

Basic nursing care included components such as identifying the patients, independent assessment of the patient, patient care as per the protocol, following infection control, and biomedical waste management. In total, 96.6% of the nursing interns expressed competency in basic nursing care. The IPR had various aspects like showing respect to the patient, communication, sensitivity to the patient and family, maintaining good IPR with coworkers, and providing collaborative care to the patient assessed. In total, 89.2% of students expressed to have developed competency in the IPR aspect. Drug administration and patient safety included independent administration of medication, application of knowledge of pharmacology, handling hospital equipment as per the guidelines, and practicing safe measures. In total, 89.6% expressed having developed competency in drug administration and patient safety. Professional competency comprising understanding the hospital protocol, safe handling of medical records, demonstrating involvement in nursing education, coordinating with other healthcare teams, maintaining confidentiality, reporting errors, and performing timely documentation was assessed. In total, 86.2% of nursing interns expressed having developed professional competency and accountability to practice in nursing care. Ethical

Characteristics	Frequency	Percentage (%)
Gender		
Male	10	9.6
Female	94	90.4
Age (years)		
20–22	97	93.3
23–26	7	6.7
Educational status		
Diploma	26	25.0
Graduates	78	75.0

Table 1. Sociodemographic characteristics of the nursing interns (N = 104).

Areas	Incompetent	Competent
Basic nursing care	7.7	96.6
IPR	39.6	89.2
Drug administration and patient safety	7.5	89.6
Professional competency/accountability	24.9	86.2
Ethical components	12.2	88.3

Note: IPR: interpersonal relationship.

Table 2. Self-reported competency assessment of nurses interns (N = 104).

1. Do you think the present internship is helping the student to become competent in their professional practice?
Faculty members expressed that the present internship is helping the student to become competent as they are getting enough time to learn through one-to-one teaching. The internship also allowed them to practice their skills in critical care units and other clinical areas and independently take care of all kinds of patients under minimum clinical supervision. However, students were required to take the initiative to learn by having effective communication with the staff nurses in the ward, which would help them to become competent in professional practice. The faculty suggested that having students completely posted in the hospital would help make them more accountable and learn better in professional practice.
2. What are the clinical competencies you are expecting from the intern student nurses?
Clinical nurse mentors considered that students should also be able to effectively communicate with the patient, family, and healthcare personnel and thereby maintain good IPR. Interns should be able to handle the patient independently and provide comprehensive care to the clients by applying evidence-based practice. Students should be able to provide individualized care for the patients, which includes assessment and identification of the patient's needs and providing need-based and holistic care. Efficient documentation, waste management, patient safety, infection control, and medication aspects have been reported as essential for providing comprehensive care and being competent enough to practice effectively as an independent nurse at the bedside after the 4-year bachelor's program. Thus, clinical nurse mentors felt that internships do play a major role in the students' further professional growth.
3. What areas do you think most of the interns are competent in?
Most of the nursing interns are competent in monitoring vital signs and providing nursing care, communication, IPR, patient safety, infection control, medication administration, and waste management. But few of the clinical nurse mentors felt that interns need repeating the hands-on experience. To develop competency in the clinical area, they should even learn to take individual responsibility. Very few students are found to be competent in providing comprehensive care for patients. Students should show the right attitude toward providing care for patients. It should not be done by force or compulsion.
4. What areas do you think most of the interns are incompetent in?
Some areas were found to be lacking like fluid calculation and ABG analysis, documentation and critical care, in-depth need assessment, and advanced nursing procedures, which includes assessment of toxic signs, drug reactions, and side effects. Most of the students do not show much interest in communication with patients and health professionals, assertiveness, and application of knowledge to practice.
5. What can be done to improve the clinical competency of intern students?
Clinical nurse mentors expressed that student placement may be determined based on the interests of individual students and that if they are carefully overseen by ward nurses, their performance will improve. The key to practice is motivating pupils to participate actively in ward routines and teaching them about the importance of fluid calculation and ABG analysis. Evaluating nursing interns' performance in the clinical area along with the in-charge nurses was expressed as an effective measure of standard competency. Patient assignment to nursing interns is to be done as a buddy system in both general and critical areas. Along with being a part of the ward routine, students are supposed to be equally responsible for handing it over. It would be better if nursing interns are paid for their clinical duty; then, it would be good motivation in holding them accountable in clinical practice. Coordination between nursing institutes, clinical nurse mentors, hospitals, and students will benefit in improving students' learning and competency development. Participation in in-service education and other leadership activities are equally important factors in improving medical and nursing knowledge. Case discussion could also provide the continuous learning and confidence to perform patient assessments and help identify the need and progress, which will allow them to actively contribute during physician rounds.

Note: IPR: interpersonal relationship.

Table 3. Perception regarding nursing interns' clinical competency by the clinical nurse mentors ($N = 26$).

components included professional conduct, assertiveness, following ethical principles in practice, and providing evidence-based care. Totally, 88.3% of student nurses expressed competency in following the ethical aspects of care.

3.3. Sociodemographic characteristics of the clinical nurse mentors

In total, 26 internship clinical nurse mentors consented to their participation; among them 23 (88.5%) were females and 3 (11.5%) were males.

3.4. Nursing interns' competency as expressed by the clinical nurse mentors

These data were collected through Google forms using an open-ended questionnaire. A total of 5 open-ended questions areas concerning the present internship, expected competency of students, clinical performance, measures to improve clinical competency, and areas of competency and incompetency were addressed as per the observations of clinical nurse mentors (Table 3).

4. Discussion

In the present study, clinical nurse mentors expressed their views that the intern students needed to take the initiative to learn by having effective communication with the staff nurses in the ward, which would help them becoming competent in professional practice. In addition, the key to practice is motivating students to participate actively in ward routines and learning. Teaching them about the importance of fluid calculation and Arterial Blood Gas (ABG) analysis is helpful. Evaluation of students' performance, alongside the charge nurses, is expressed as an effective measure of standard competency.

Characterizing experiencing engagement, creating a mutual relationship, and professional development emerged as sub-themes in a qualitative study conducted among 18 on nursing students' experiences

of learning at a clinical education ward after their clinical practice at a university hospital in Sweden. In addition, caring for patients with an extensive need for nursing care helped the students to become patient-centered and overcome the threshold, experience engagement, and authenticity in learning the profession.[10]

However, some of the studies showed the opposite trend. A cross-sectional study that was conducted in two nursing schools in Ethiopia resulted in half of the study interns perceiving themselves as incompetent.[8]

In the present study, clinical nurse mentors felt that interns are incompetent in areas like fluid calculation and ABG analysis, documentation and critical care, in-depth need assessment, and advanced nursing procedures—which include assessment of toxic signs, drug reactions, and side effects. A qualitative exploratory descriptive study developed having 105 participants in Portugal reported errors in the execution of care; errors shown by the students included medication errors; errors in transversal competencies; errors in identifying needs; errors in care assessment; and errors in care planning.[11]

5. Conclusions

The undergraduate nursing students' experiences with clinical supervision were explored to obtain information from the student's viewpoints. The findings indicated that nursing interns at the institution perceived to have competency in clinical practice in the areas like nursing assessment, IPR, intervention, professional competency, and ethical considerations. It was found that most of the students reported having gained adequate competency in practice, indicating that the internship helped them to practice nursing with confidence and efficiency. Considering the opinion of the clinical nurse mentors, student teaching in areas like fluid calculations, ABG documentation, and critical care aspects can be incorporated and emphasized more before they could come for practice. Active collaboration with institutions, clinical nurse mentors, and staff nurses is an essential key component in providing the best learning opportunities for the internship. The findings of this study may help create an inclusive culture of teaching, continuous assessment, and environments that support diversity and inclusive excellence in nursing education. Further studies can be done to assess the intern nurses' clinical competencies in the clinical area, and competencies can be compared to the score obtained in their internship.

Active collaboration with institutions, supervisors, and staff nurses is an essential key component in providing the best learning opportunities for the internship. The areas in clinical practice that require focus can be addressed during the early training period of the student nurses. Perceptions of the students have given a way to understand the outcomes of clinical exposure during the internship. Perception of clinical nurse mentors elicited expectations regarding the clinical learning plan and the outcome of clinical postings for nursing interns.

Limitations

The purposive sampling technique was one possible flaw in the current study. Second, because the data came from a single university, the conclusions are not generalizable. Also, the study relied on students' self-reported data, which might have resulted in bias as a result of the respondent's interpretation of the questions or desire to express their feelings, thus increasing the prevalence of the problem.

Ethical approval

Consent and permission were obtained from the Institutional ethical committee (IEC Number: 40/2019) and also from the head of the nursing institution (CTRI registration No. REF/2019/02/017875).

Conflicts of interest

All contributing authors declare no conflicts of interest.

References

1. WHITE PAPER Expectations for Practice Experiences in the RN to Baccalaureate Curriculum Background. https://www.aacnnursing.org/Portals/42/News/White-Papers/RN-BSN-Expectations-White-Paper.pdf. Accessed December 19, 2022.
2. Bifftu BB, Dachew BA, Tadesse Tiruneh B, Mekonnen Kelkay M, Bayu NH. Perceived clinical competence among undergraduate nursing students in the University of Gondar and Bahir Dar University, Northwest Ethiopia: a cross-sectional institution based study. *Adv Nurs*. 2016;2016:1–7.
3. Ebadi A, Tabanejad Z, Pazokian M, Yasser S. Designing and psychometric evaluation of the competency inventory for postgraduate students of intensive care nursing. *Nurs Midwifery Stud*. 2016;5:8.

4. Faraji A, Karimi M, Azizi SM, Janatolmakan M, Khatony A. Occupational stress and its related demographic factors among Iranian CCU nurses: a cross-sectional study. *BMC Res Notes*. 2019;12:1–5.
5. IndiaSpend. India Short Of Nearly Two Million Nurses—Everylifecounts.NDTV.com. Everylifecounts.NDTV.com. 2019. https://everylifecounts.ndtv.com/india-short-nearly-two-million-nurses-13129. Accessed December 19, 2022.
6. Liou SR, Cheng CY. Developing and validating the Clinical Competence Questionnaire: a self-assessment instrument for upcoming baccalaureate nursing graduates. *J Nurs Educ Pract*. 2014;4:56–66.
7. Manninen K, Scheja M, Welin Henriksson E, Silén C. Self-centeredness or patient-centeredness–final year nursing students' experiences of learning at a clinical education ward. *J Nurs Educ Pract*. 2013;3:187–198.
8. Hezaveh MS, Rafii F, Seyedfatemi N. Novice nurses' experiences of unpreparedness at the beginning of the work. *Global J Health Sci*. 2014;6: 215–222.
9. Rajeswari H, Sreelekha B. Novice nurses experience of clinical stress in a tertiary care teaching Hospital. *J Nurs Health Sci*. 2017;6:54–60.
10. Santos AP, Tavares MF, Duarte AC, Sousa FA. Supervisors' perceptions on errors of nursing students in clinical clerkship: a qualitative research. *Rev Bras Enferm*. 2021;74:e20200675.
11. Safadi R, Jaradeh M, Bandak A, Froelicher E. Competence assessment of nursing graduates of Jordanian universities. *Nurs Health Sci*. 2010;12:147–154.
12. Theisen JL, Sandau KE. Competency of new graduate nurses: a review of their weaknesses and strategies for success. *J Contin Educ Nurs*. 2013;44:406–414.
13. World Health Organization. The World Health Report 2006: Working Together for Health. Zeneva, Switzerland; 2006.