ORIGINAL ARTICLE e-ISSN: 2349-0659 p-ISSN; 2350-0964

# Readiness for Practice among Pregraduate Nursing Students in South India: A Cross-sectional Survey

Dinesh Kumar Suganandam*, Vinitha Ravindran, Vathsala Sadan, Ida Sweetlin Priyadarsini

## Abstract

**Background**: Often the transition from student nurse to a graduate nurse causes stress and fatigue among novice nurses. This study intended to identify the readiness for practice among pregraduate nurses. **Methods**: A cross-sectional online survey conducted among 195 pregraduate nursing students. Participants filled Modified Casey-Fink Readiness for practice tool. A total of 192 students responded to the survey. Student *t*-test and ANOVA were used to identify the difference in practice based on demographic variables. **Results**: Overall mean score of readiness for practice among pregraduate nurses was found to be 58.5 ± 5.58. There was significant difference in readiness for practice in terms of their religion and program of study. **Conclusion**: To facilitate the smooth transition from student to professional, a planned preparatory program may be useful at the course completion.

**Keywords:** Nursing students, Pregraduate nurses, Readiness for practice, Transition

*Asian Pac. J. Health Sci*., (2022); DOI: 10.21276/apjhs.2022.9.4S1.05

## Introduction

Over the last two decades, there has been an enormous increase in the number of nursing institutes/schools in different parts of India. The increase in quantity did not go in par with the quality of nursing education provided due to lack implementation of expected statutory guidelines in terms of clinical requirements and curriculum implementation. Further, the training falls short of enabling students to meet the current health demands of the country at large.

Although this is a general scenario in the country, some institutions have been stringent in following the guidelines and have stood firm on providing quality nursing education to empower nursing students to meet patient care needs comprehensively. With the increase in number of log book requirements which are expected to be completed in each year of nursing, even the nurse educators in institutions with good clinical and teaching facilities strain to balance their clinical teaching between completing the logbook requirements for all students effectively as well as enabling students to learn to provide comprehensive patient care which facilitates nursing students to take up professional roles in clinical settings.

On the other hand, nursing students are focused on completing their clinical requirements and may be achieving their clinical objectives in silos, out of comprehensive patient care context. Therefore, there is a feeling of inadequacy and incompetence when they need to take up professional nurse roles. The stress in transitioning then becomes multifold for students at the end of their studentship period. The hands-on skill in most of the institutes was less and also the norms for attaching with the hospital is irregular. Although the quantity is more, the quality is still questionable.[1] The way the nurses are educated today does not match the complexities of health-care realities. Academia and clinical services should work together to improve the educational preparation for better nurses.[2]

National Council of State Boards of Nursing has designed a transition to practice model which will enable the freshmen nurses to have a smooth transition to workforce.[3] The transition from nursing student to nursing staff is quite stressful. Novice nurses experience severe stress and anxiety during the first 6 months of period. The stress was focused toward four important things as identified by Charnley, namely, the reality of practice, learning the system, developing the clinical judgments, and professional relationships.[4]

A study based in Ireland conducted by O'Shea and Kelly also mentioned that the stress of the novice nurses is primarily due to the multidimensional roles and responsibilities including clinical, managerial, and organizational skills. Exposed to a situation which is challenging to manage is also a major stressful factor.[5] Smith and Crawford identify that the new graduate nurses undergo much stress during their initial period of work life which leads to adverse medical errors and dropouts.[6] They felt and they have less confidence in taking care of patients due to lack of knowledge in pharmacology, anatomy, physiology, leadership, and clinical judgments. They felt quite stressful and perceived a lack of support from mentors.[7]

Azimian *et al*. discuss that inadequate preparedness and readiness are a major contributing factor for nurses coping during transition.[8] The lack of practice readiness is highly attributed to the real gap of theory and practice and the complex nature of current working environment.[9]

Readiness refers to quality or state of being ready as mentioned in the Merriam Webster Dictionary. An Australian study

College of Nursing, Christian Medical College, Vellore, Tamil Nadu, India.

**Corresponding Author:** Mr. Dinesh Kumar Suganandam, College of Nursing, Christian Medical College, Vellore, Tamil Nadu, India. E-mail: dinesh.kumars@cmcvellore.ac.in

**How to cite this article:** Suganandam DK, Ravindran V, Sadan V, Priyadarsini IS. Readiness for Practice among Pregraduate Nursing Students in South India: A Cross-sectional Survey. Asian Pac. J. Health Sci., 2022;9(4S1):29-36.

**Source of support:** Nil

**Conflicts of interest:** None.

**Received:** 03/05/2022 **Revised:** 17/06/2022 **Accepted:** 04/07/2022

conducted by Heslop *et al*., to identify the undergraduate students' preparedness for the graduate role. It was noted that 47% of the students felt that they are inadequately prepared. Caring for six to eight patients and patients with complex diseases are the highly unprepared situations for them.[10] Most of the students felt uncomfortable in doing invasive procedures and expressed less confidence in professional identity and taking care of more assignments.[11] In contrast, a study conducted by Woods *et al*. from Australia reported that 88.8% of students approved that they felt ready to take up the role of registered nurse role after completion of their clinical posting.[12]

Another study by Wray revealed that the senior BSN students felt low level of confidence in communicating with physician and also in knowing what to do for a dying patient. They were also uncomfortable in writing reflective logs or journals. As mentioned in the previous studies, they also felt increasingly stressed as the number of patient assignment increases.[13] Interestingly, similar finding was noted in Brown's study also.[14] In addition to the above-mentioned factors, another important area that was expressed by the students is that the simulation did not help them to prepare for their clinical environment. This infers that though there are lot of arguments on simulation learning for students' clinical practice, it is the hands-on skill on actual patients which help them to be confident in clinical setting.

Wright in her study identified that the graduate nursing students perceived high level of preparedness for practice compared to the perception of nursing faculty and nurse leaders in clinical area.[15] The domains included were clinical knowledge, technical skills, critical thinking, communication, professionalism, and management of responsibilities. This may be the fact that the students consider themselves to be overconfident which is not true in reality.

Candela and Bowles identified that 51% of graduate nurses were not prepared for medication administration and 77% were ill prepared in assessing and managing electronic patient information. They also felt that their educational preparation helped them more to clear NCLEX rather than an efficient practical nurse.[16] In a study conducted by Mozingo *et al*. on perceived competency level among BSN final year nurses, 75% of the students agreed that they were lacking technical skills. However, they were agreeing for other items such as identifying their professional goals, educational preparation for safe practitioners, and knowing how to find answers to questions about nursing care.[17]

Although there were many studies undertaken in other countries regarding readiness for practice, it's quite minimal in India. By keeping the above points in mind, the researcher felt that there is a need to explore the readiness for practice among pregraduate nurses to identify the lacunae and prepare a bridging program to enable smooth transition of nursing student to nursing staff.

### Statement of the Problem

A descriptive study was to identify the readiness for practice among pregraduate nurses in South India.

### Objectives

The objectives of this study were as follows:

1. To identify the readiness for practice among pregraduate nursing students
2. To find the differences in readiness for practice based on their demographic variable.

## Methodology

### Design and Setting

A cross-sectional survey design was used to identify the readiness for practice among pregraduate students studying in a reputed Nursing college attached to a Quaternary Medical College and Hospital. The survey was carried out once in the month of June/July 2020.

### Participants and Recruitment

All final year students from baccalaureate and diplomate program were eligible to participate in the study. Students who were in the delayed batch were excluded from the study. A cover letter consist of information sheet with study procedures and informed consent was sent along with the survey. Students were requested to fill the consent form if they were interested in taking part in the study. A total of 192 subjects responded to the survey out of 195 surveys sent.

### Survey

An online survey comprising Casey-Fink Readiness for Practice tool was sent using Microsoft forms. Casey-Fink readiness for practice survey is a standardized tool developed by Casey *et al*.[18] Permission was obtained from the authors to use the tool and change the demographic section and few items according to Indian context.

The Casey-Fink Readiness for Practice Survey consists of three sections.

1. The first section asked for demographic data and information related to student's practical experiences. This section was replaced by the demographic profile created by the investigator. Permission for the change is obtained
2. The second section focused on the student's comfort with skill performance – both clinical and relational
    - First, using a list of 18 skills and procedures, students were asked to identify the top three skills, they were uncomfortable performing independently. Students had the option of adding items not listed
    - Second, students were asked about their level of confidence in managing multiple patient assignments
    - Third, students were presented with a list of 20 items asking for a self-report about comfort/confidence in key practice skills using a Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree). There were four items with negative words, for which reverse scoring was done. The tool had three domains: Professional Identity (seven items), Ethical Practice (nine items), and Systems of Care (four items).

The overall readiness for practice score was calculated by adding the scores of individual items. The minimum score was 20 and the maximum score was 80. The readiness for practice scores was not categorized. Higher mean score denoted better readiness among pregraduate nurses.

The third section which consisted of two open-ended questions was not used for the current survey.

### Data Collection

Data were collected using Microsoft Forms offered by the institution and data security was ensured. Weekly reminders were sent during the data collection period. Survey completion was done at the mid of July 2020.

### Data Analysis

Descriptive statistics (frequency, percentage, and Mean, SD) were used to describe the demographic variable and the readiness for practice. Inferential statistics (Student *t*-test/ANOVA) was used to identify the difference in readiness for practice among pregraduate nurses based on their demographic variables. The significance level $\alpha$ was set at 0.05. All analyses were performed using SPSS Version 22 (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.).

### Ethical Consideration

Approval was obtained from the Institutions' Research Committee and College authorities to conduct online survey among final year baccalaureate and diplomate program nursing students. Participants' anonymity was always maintained. No incentives were offered to participants. Students were assured that this survey is not a part of curricular evaluation but an independent research project. Voluntary participation is encouraged by accepting the consent form.

## Results

### Subject Characteristics

Out of 195 surveys sent, 192 students responded to the survey and all the data were complete without any missing representing the response rate of 98%.

Table 1 infers that the majority of the subjects (95.3%) were female and belong to Christian faith (90.1%). Half of the subjects (56.2%) were from urban background, and most of them (85.9%) had English as their medium of instruction in school at the entry level to nursing. More than half (60.4%) of the students had scored <80% of theory marks in their higher secondary examination. Fifty-nine percentage and 66.7% of subjects were in the range of 80–100% marks in the final year internal theory examinations and internal practical examinations in nursing, respectively.

**Table 1:** Distribution of demographic variables, *n*=192

| *Variable* | *Frequency* | *Percentage* |
|---|---|---|
| Gender | | |
| Female | 183 | 95.3 |
| Male | 9 | 4.7 |
| Religion | | |
| Christian | 173 | 90.1 |
| Hindu | 19 | 9.9 |
| Locality | | |
| Rural | 84 | 43.8 |
| Urban | 108 | 56.2 |
| Medium | | |
| English | 165 | 85.9 |
| Others | 27 | 14.1 |
| Theory percentage in HSE | | |
| 80–100 | 79 | 39.6 |
| <80 | 116 | 60.4 |
| Final year theory marks (Nursing)- internal | | |
| 80–100 | 113 | 58.9 |
| <80 | 79 | 49.1 |
| Final year practical marks (Nursing)- internal | | |
| 80–100 | 128 | 66.7 |
| <80 | 64 | 33.3 |

### Perceived Difficult Clinical Competencies

Figure 1 depicts that most of the subjects (48.4%) felt that central line dressing was the difficult procedure to perform, followed by responding to emergency code (33.9%) and chest tube care (32.8%). None of them had difficulty in medication administration and pulse oximetry checking.

### Confidence Level in Caring for Patients

Figure 2 reveals that while caring for two patients, 31.8% of subjects felt highly confident, whereas 5.7% of subjects were not at all confident if they care for four patients. It is clearly evident in the graph that the confidence level was declining if the number of patients were to be cared increased.

Figure 3 infers that the mean confidence level declined from 3.9 ± 0.88, while caring for two patients to 2.9 ± 0.94, while caring for four patients (Max score – 5).

### Readiness for Practice

Figure 4 depicts that mean score of readiness for practice among pregraduate nurses was found to be 58.5 ± 5.58 (Max score – 80) which indicates that the pregraduate nurses are fairly prepared to practice.

### Professional Identity

Table 2 reveals that 79.7% strongly agreed/agreed that they were feeling confident in communicating with physicians. Provision of feedback by tutor regarding readiness to assume RN role was strongly accepted/accepted by 71.9%, while 83.9% of subjects approved/strongly approved of their confidence in problem solving abilities. Seventy-eight percentage of subjects strongly agreed/agreed that they had adequate opportunities to practice skills and procedures more than once. Most of the subjects (93.2%) agreed/strongly agreed that simulations have helped them to be prepared for clinical practice. Ninety-two percentage of subjects strongly agreed/agreed that they were satisfied with nursing as a career choice and 85.9% strongly agreed/agreed to take up the professional nursing role. Higher level of agreement (3.23 ± 0.65) was seen in the acceptance of their satisfaction with choosing nursing as a career, followed by taking up the professional nursing role (3.09 ± 0.67) and simulations helping them to feel prepared for clinical practice (3.08 ± 0.46) (Max score – 4).

### Ethical Practice

Majority of the subjects (88.6%) strongly agreed/agreed to feeling confident in communicating with patients from diverse background. Eighty-eight percentage of subjects strongly agreed/agreed to comfortable delegation of tasks to the nursing assistant. More than half (70.9%) of the subjects strongly agreed/agreed that they felt overwhelmed by ethical issues in patient care responsibilities. Huge proportion (93.2%) of the subjects strongly agreed/agreed to the usage of current evidence in patient care

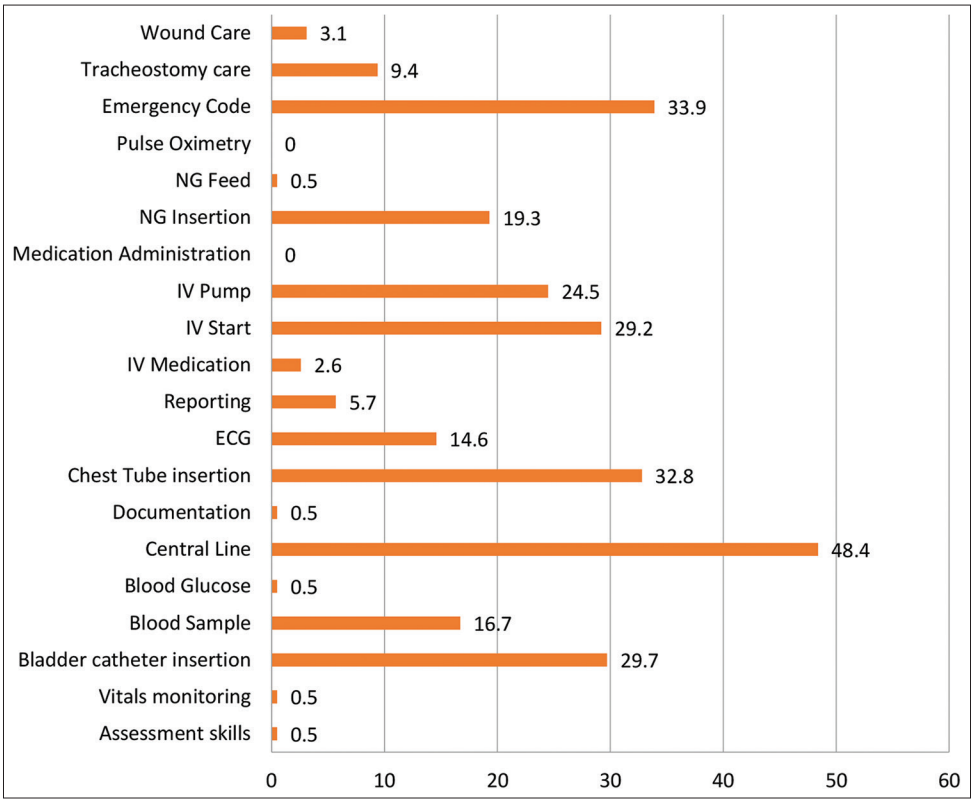


**Figure 1:** List of clinical competencies difficult to perform as expressed by subjects

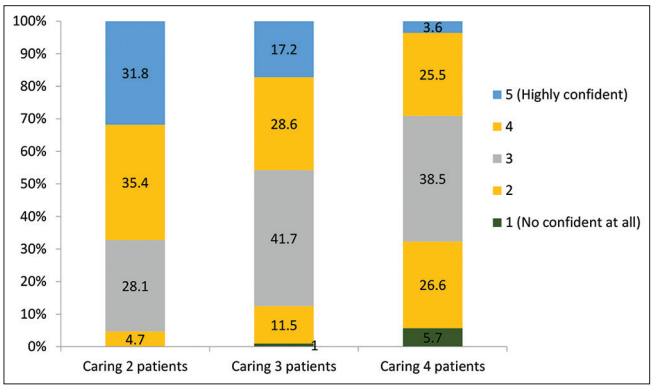


**Figure 2:** Confidence level of subjects on caring for patients

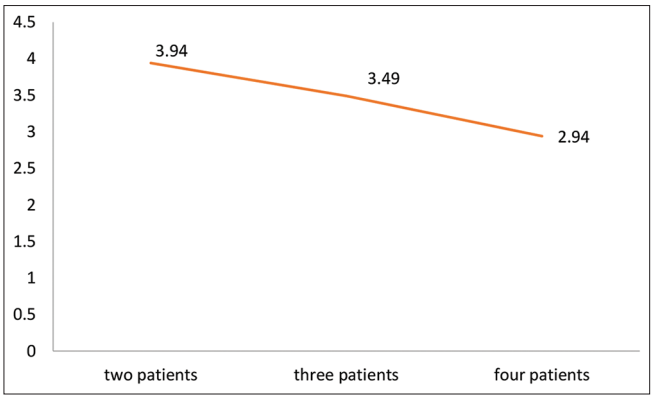


**Figure 3:** Mean confidence level of subjects on caring for patients

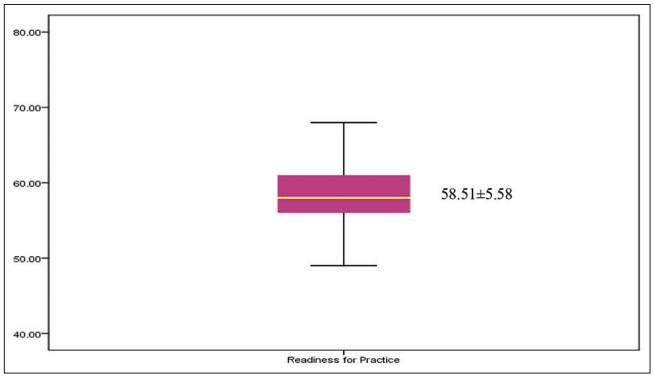


**Figure 4:** Mean score of readiness for practice

and 83.2% strongly agreed/agreed on finding comfortable in communicating and coordinating care with interdisciplinary team members. Eighty one Percentage of subjects agreed upon writing reflective journals/logs provided insights into their own clinical decision-making skills. More than half of the subjects (66.1%) strongly accepted/accepted that they felt comfortable knowing what to do for a dying patient. Greater number of subjects (83.4%) strongly agreed/agreed on being comfortable in taking action to solve problems, similarly 91.7% strongly agreed/agreed that they felt confident in identifying actual or potential safety risks to my patients. Higher level of agreement (3.06 ± 0.55) was seen in being comfortable in communicating with patients from diverse populations, while the lower level (2.72 ± 0.63) was noted in feeling comfortable in knowing what to do for a dying patient.

**Table 2:** Distribution of item wise agreement on readiness for practice, *n*=192

| *Items* | *Strongly disagree and disagree* | | *Strongly agree and agree* | | *Mean* | *SD* |
|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | | |
| Professional Identity | | | | | | |
| I feel confident communicating with physicians | 39 | 20.3 | 153 | 79.7 | 2.89 | 0.62 |
| My tutor provided feedback about my readiness to assume an RN role | 54 | 28.1 | 138 | 71.9 | 2.69 | 0.62 |
| I am confident in my ability to problem solve | 31 | 16.1 | 161 | 83.9 | 2.95 | 0.56 |
| I have had opportunities to practice skills and procedures more than once | 43 | 22.4 | 149 | 77.6 | 2.89 | 0.65 |
| Simulations have helped me feel prepared for clinical practice | 13 | 6.8 | 179 | 93.2 | 3.08 | 0.46 |
| I am satisfied with choosing nursing as a career | 16 | 8.4 | 176 | 91.6 | 3.23 | 0.65 |
| I feel ready for the professional nursing role | 27 | 14.1 | 165 | 85.9 | 3.09 | 0.67 |
| Ethical Practice | | | | | | |
| I am comfortable communicating with patients from diverse populations | 22 | 11.4 | 170 | 88.6 | 3.06 | 0.55 |
| I am comfortable delegating tasks to the nursing assistant | 24 | 12.5 | 168 | 87.5 | 2.96 | 0.46 |
| I feel overwhelmed by ethical issues in my patient care responsibilities | 56 | 29.1 | 136 | 70.9 | 2.75 | 0.56 |
| I use current evidence to make clinical decisions | 13 | 6.8 | 179 | 93.2 | 3.02 | 0.42 |
| I am comfortable communicating and coordinating care with interdisciplinary team members | 22 | 11.5 | 170 | 88.5 | 3.03 | 0.51 |
| Writing reflective journals/logs provided insights into my own clinical decision-making skills | 37 | 19.2 | 155 | 80.8 | 2.88 | 0.63 |
| I feel comfortable knowing what to do for a dying patient | 65 | 33.9 | 127 | 66.1 | 2.72 | 0.63 |
| I am comfortable taking action to solve problems | 32 | 16.6 | 160 | 83.4 | 2.94 | 0.54 |
| I feel confident identifying actual or potential safety risks to my patients | 16 | 8.3 | 176 | 91.7 | 3.03 | 0.47 |
| Systems of Care | | | | | | |
| I have difficulty documenting care in the patient record | 162 | 84.3 | 30 | 15.7 | 1.96 | 0.65 |
| I have difficulty prioritizing patient care needs | 156 | 81.3 | 36 | 18.7 | 2.11 | 0.57 |
| I have difficulty recognizing a significant change in my patient's condition | 132 | 68.7 | 60 | 31.3 | 2.25 | 0.61 |
| I am comfortable asking for help | 12 | 6.3 | 180 | 93.7 | 3.06 | 0.51 |

### Systems of Care

Difficulties pertaining to documentation of patient care and prioritizing patient care needs were strongly disagreed/disagreed by 84.3% and 81.3%, respectively. Sixty-nine percentage of subjects strongly disagreed/disagreed to the difficulties in recognizing significant changes in patient condition. Majority of the subjects (93.7%) strongly agreed/agreed to seek help from other comfortably. Higher level of agreement (3.06 ± 0.51) was seen in being comfortable to ask for help, whereas lower level of agreement (1.96 ± 0.65) was noted for difficulty in documenting the patient care record.

### Differences in Readiness for Practice Based on Demographic Variable

Table 3 reveals that there is a statistically significant difference in readiness for practice based on religion ($P = 0.008$), and the course, they undergo ($P = 0.03$). The readiness for practice among subjects with Christian faith is found to be 58.12 ± 5.47, whereas subjects with Hindu faith had 62.00 ± 5.47. This could be attributed to the uneven distribution of subjects as only 10% of subjects were Hindus. Based on the course they undergo, GNM subjects were found to have higher readiness (59.35 ± 4.61) compared to B.Sc (57.68 ± 6.31). This could be a notable finding because even with the lesser duration of course (3 years), GNM subjects revealed higher level of readiness compared to B.Sc with four year duration of course.

**Table 3:** Difference in readiness for practice based on the demographic variable, *n*=192

| *Variable* | *Percentage* | *Mean±SD* | *Statistical Value* | *P-value* |
|---|---|---|---|---|
| Gender | | | | |
| Female | 95.3 | 58.32±5.47 | 1.683 | 0.129 |
| Male | 4.7 | 62.22±6.83 | | |
| Religion | | | | |
| Christian | 90.1 | 58.12±5.47 | 2.925 | 0.008* |
| Hindu | 9.9 | 62.00±5.47 | | |
| Locality | | | | |
| Rural | 43.8 | 58.27±4.68 | 0.535 | 0.593 |
| Urban | 56.2 | 58.69±6.21 | | |
| Medium | | | | |
| English | 85.9 | 58.41±5.73 | 0.656 | 0.516 |
| Others | 14.1 | 59.07±4.64 | | |
| Program of Study | | | | |
| B.Sc | 39.6 | 57.68±6.31 | 2.105 | 0.03* |
| GNM | 60.4 | 59.35±4.61 | | |
| Theory percentage in HS | | | | |
| 80–100 | 58.9 | 57.82±5.81 | 1.880 | 0.172 |
| <80 | 49.1 | 58.95±5.41 | | |
| Final year theory marks (Nursing) - internal | | | | |
| 80–100 | 66.7 | 58.66±5.17 | 0.206 | 0.651 |
| <80 | 33.3 | 58.29±6.15 | | |
| Final year practical marks (Nursing)- internal | | | | |
| 80–100 | | 58.49±5.41 | 0.004 | 0.949 |
| <80 | | 58.54±5.96 | | |

*$P<0.05$

## Discussion

The present study revealed that majority of the subjects (95.3%) were female. It is a well-known fact that the intake of male candidates in nursing is limited in all the colleges. Most of the subjects (90.1%) belongs to Christian faith. Half of the subjects (56.2%) were from urban background. The present study infers that 59% and 66.7% of subjects were in the range of 80–100% marks in final year internal theory examinations and internal practical examinations in nursing, respectively.

While enquired about three difficult procedures to perform in the student period, most of the subjects (48.4%) felt that central line dressing was the difficult procedure to perform, followed

by responding to emergency code (33.9%) and chest tube care (32.8%). Opposingly in another studies, NG Tube care (52%) (Wray, 2017) and venipuncture (50%) (Woods *et al*., 2015) were found to be most difficult procedure by the pregraduate nursing students. Central line dressing is performed quite rare by nurses in regular clinical setup as it is highly common in critical care units. Hence, the students do not get more opportunities to perform this procedure often. It could be the reason for their difficulty in central line dressing. In line with that, another Indian study by Sharma *et al*. also reveals that only 15.6% of the students were performing central venous catheter care independently.[19] Since the available data are from abroad, where the clinical practice on patient is quite less and majority are performed by simulation in a controlled environment, it is not comparable. Contrarily, the current setting allows constant direct clinical exposure and supervised independent practice on patients which allows students to gain confidence.

It is surprising to note that NG tube care was found to be the most difficulty procedure in a study by Wray,[13] whereas in the present study, it was only 19%. Because the students in the current setting are constantly exposed to taking care of patients with NG tube since their 1st year, the difficulty level was low. By the end of 2nd year, they are fully confident in handling NG feeds, insertion and care. Similarly, venipuncture was found to be difficult by 29.2% in the current study, whereas it was 50% in a study done by Woods *et al*.[12] Even in an Indian study carried out by Sharma *et al*.,[19] it was found that 76.3% of students were able to perform venipuncture independently. This could be due to the frequent performance of this procedure during their final year. As the program of their study had incorporated internship in their final year, it enables them to practice with little independence.

Supportive to the current finding, Brown found that 54% and 35% of subjects perceived difficulty to perform chest tube care and responding to emergency code respectively.[14] Same finding is resonated in a study by Wray, where responding to CODE (32%) and chest tube care (28%) were expressed as second and third most uncomfortable procedure.[13] Responding to emergency code is a challenging experience for any nurses. Although these procedures are mandated in their clinical requirement, it is not expected all the time to be performed by the students as compared to other routine care. Usually in times of CODE, staff members take the active lead as they are directly responsible for the care. In the same way, chest tube care involves greater risk of pneumothorax and other complications, it is not a routine procedure for students. Indian Study by Sharma *et al*. also reveals that only 13.9% and 6.3% of subjects were independently practicing chest tube care and basic life support.[19]

It is a noteworthy finding that all the procedures which were highlighted by the students as difficult are performed rarely by them or in other terms only to complete the log requirement. However, the routinely performed procedures such as vitals monitoring (0.5%), assessment skills (0.5%), and glucose monitoring (0.5%) were found to be least difficult by them. Hence, it can be inferred that the frequency of the performance of procedure and not the complexity of the procedure determines the difficulty level.

The present study also highlights that 31.8% of subjects felt highly confident while caring for 2 patients, whereas 5.7% of subjects were not at all confident if they care for four patients. The mean confidence level was high (3.9 ± 0.88) while caring for two patients and it is clearly evident that the mean confidence level declined (2.9 ± 0.94) while caring for four patients (Max score-5). In agreement with this, it was found that the mean confidence level was 4.92 ± 0.27, while caring for two patients and significantly reduced to 3.50 ± 0.65, while caring for four patients.[14] Similar finding is also noted in a study, where the mean score in confidence while caring for two patients is 4.24 ± 0.78 and significantly reduced to 2.48 ± 1.12 if they care for four patients.[13] Hence, it can be globally inferred that the nursing students' confidence level declines as the number of patients to care increases. In the student period, the usual assignment ranges from 2 to 4 patients, and most of the time, they are not fully responsible for the patient care. It will significantly influence the confidence level in the initial days of professional nursing role.

In the domain of professional identity, higher level of agreement (3.23 ± 0.65) was seen in the acceptance of their satisfaction with choosing nursing as a career, followed by taking up the professional nursing role (3.09 ± 0.67) and simulations helping them to feel prepared for clinical practice (3.08 ± 0.46) (Max score – 4). It is a positive sign to note that they are highly satisfied with their profession and ready to take up professional role. Augmenting the current finding, it was revealed by Wray that the mean score was found to be 3.68 ± 0.48 for acceptance of choosing nursing career and 3.08 ± 0.57 for simulations helping to prepare.[13] The above-mentioned findings were supported by other studies as well.[12,14] Contrarily, in another study, little lower agreement (2.88 ± 0.68) was noted in taking up the professional nursing role.[13] This could be attributed to the minimal clinical exposure during the student period and hence exhibited in the confidence level of taking up the professional role. In Indian context, nursing students are given ample opportunity to perform clinical procedures on real patients unlike other foreign countries. Adequate exposure equips them to be free from fear and promotes positive opinion about the profession.

It was a noteworthy finding that lower level of agreement (2.69 ± 0.62) was seen in tutor provision of feedback about readiness to assume an RN role in the current study. However, this finding is not syncing with many studies which are done apart from India.[12-14] Hence, it infers that the concept of feedback to the nursing students is lacking in Indian context which is quite well established in other countries. Tutors are highly focused, driven by procedures and the onus on procedural completion falls on them. They do give feedback on procedures and care logs but not in terms of their ability to take up professional roles. Probably, the clinical evaluation form in the final year should incorporate aspects on their readiness as well as emphasis should be on provision of feedback for their readiness. Constant feedback about the performance of students will enable improvement and confidence among students.

It was also interesting to note that the nursing students are not very confident in communicating with physicians (2.89 ± 0.62). The current finding was also resonated in other studies, where the mean agreement levels were found to be 2.96 ± 0.74,[12] 2.72 ± 0.79,[14] and 2.52 ± 0.87.[13] Similar pattern of agreement was noted in communicating and coordinating care with interdisciplinary team members. It is understood that the budding nurses will have apprehension in communicating with the physician globally. Senior nurses' communication with physicians, team-based approach in patient care, and working culture significantly influence students' ability to communicate with physicians.[20]

Among the ethical practice domain, higher level of agreement (3.06 ± 0.55) was seen in being comfortable in communicating with patients from diverse populations. Contrarily, little higher level of agreement was seen in few studies, where the mean agreement

levels were 3.46 ± 0.52,[12] 3.46 ± 0.51,[14] and 3.28 ± 0.46.[13] It is engrossing to note that though globally nursing students are having difficulty in communicating with physicians, Indian nursing students are having little difficulty in communicating with patients too. As the current setting caters to patients with different cultural and linguistic background, it could be the reason for their difficulty in communication. English may be a common language in abroad settings, whereas, in India, there are multiple languages which act as a major constraint for students to communicate.

Universally, nursing students are not very comfortable in knowing what to do for a dying patient. The present study highlights that lower level of agreement (2.72 ± 0.63) was noted in feeling comfortable in knowing what to do for a dying patient. This finding is line with other studies, where the mean agreement level were found to be 2.94 ± 0.74,[12] 2.81 ± 0.80,[14] and 2.74 ± 0.77.[13] It is evident that the end-of-life care issues are quite sensitive and needs maturity and experience to handle it. Hence, students were not comfortable in knowing further.

In the Systems of Care domain, higher level of agreement (3.06 ± 0.51) was seen in being comfortable to ask for help. Conversely, in other studies, the level of agreement were little high comparatively.[12-14] As observed in the previous findings that Indian nursing students were not comfortable in communicating with physicians, they are not very comfortable in asking for help too. This could be due to the gaps in communication, working culture, and fear of shame. This may improve as they take up the professional role which involves collaboration and coordination of patient care with other team members.

Lower level of agreement (1.96 ± 0.65) was noted for difficulty in documenting the patient care record. Similar findings were noted in other studies, where the mean agreement levels were 1.71 ± 0.59[12] and 1.62 ± 0.75.[14] This item is negatively stated, and scores are reversed. Hence, it can be inferred that globally nursing students are not having any difficulty in documenting patient care record. It is a noteworthy finding that they get adequate practice in documentation and lot of attention was given to it during their course of study. During the student period, there are numerous care plans and care studies which prepare them to document the patient care effectively. Although there were difficulties noted in communicating with physicians and with other team members, they were quite comfortable in documentation. It infers that there is a remarkable emphasis on documenting the patient care.

The overall mean score of readiness for practice in the present study was found to be 58.51 ± 5.58 (Max Score – 80). Interestingly comparable findings were observed in few studies, where the readiness for practice scores was found to be 57.96 ± 0.52,[13] 57.54 ± 0.64.[14] Therefore, it is evident that the readiness for practice among pregraduate nurses in Indian context is quite in par with the findings from other countries as well. It will be a boosting finding, where the general perception is opposing to the current finding that our nursing students are not well prepared to take up the graduate role. Although the readiness score was less compared to the overall score, it is almost equivalent to the other counterparts globally with the available literature findings. It is still average level of readiness for practice which shows the surrounding uncertainty for nursing students in taking up the professional role. It is a gratifying finding to note that majority of the nursing students (91.7% and 85.9%) are satisfied with choosing nursing as a career and ready to take up the professional role, respectively. However, there are uncertainties in few aspects which need to be addressed.

### Limitation

This study was carried out in a single setting which might limit the generalizability. Nevertheless, it can give a basic idea as there is a uniform standard of nursing across the country. Second, there was a chance of providing socially acceptable responses by the subjects or halo effect due to the electronic survey. However, the responses were normally distributed which ensures that various opinions are included. Third, the survey had limited clinical competencies for perceived difficulties which could have restricted the subjects to express the actual ones in their clinical context. Finally, there were dearth of literature in the studied concept in Indian context, the comparable findings were from other countries.

## Conclusion

This study highlighted that the central line dressing was the difficult procedure to perform, followed by responding to emergency code and chest tube care. Therefore, frequent skill practices should be performed on the above-mentioned procedures. Mock drill needs to be carried out to address the difficulties in emergency code response. It was also observed that the mean confidence level declines when the number of assignments increase. Since it is a global matter of concern and the initial phase of career, it is not an alarming one. Although their confidence level goes down, it is advisable to continue the current pattern which will help them to cope once they take up the professional role. This study throws light that the readiness for practice score among pregraduate nurses in Indian context is equivalent to that of foreign standards. Nevertheless, there is a scope of improvement as the overall readiness score is still on the average line. To facilitate the smooth transition from student to professional and also to address few concerns, preparatory program at the end of the course is highly appreciable. This program can be designed to focus on demonstrating few important clinical procedures as well addressing ethical issues and concerns. Structured way of preceptorship program and pre-clinical exposure before professional role can effectively enhance the readiness for practice. Nurse educators should periodically provide feedback for the final year students about their readiness for practice which will assist them to identify the areas of improvement.

## Conflicts of Interest

None.

## Copyright and Permission Statement

We confirm that the materials included in this chapter do not violate copyright laws. Where relevant, appropriate permissions have been obtained from the original copyright holder(s). All original sources have been appropriately acknowledged and/or referenced.

## Author Contributions

Dinesh Kumar Suganandam contributed to the conception, design of the study, data collection, analysis, interpretation, and drafting of manuscript. Vinitha Ravindran, Vathsala Sadan, Ida Sweetlin Priyadarsini contributed to the conception and design of the study, critically revised the manuscript and final approval.

## References


1. Tiwari RR, Sharma K, Zodpey SP. Situational analysis of nursing education and work force in India. Nurs Outlook 2013;61:129-36.
2. Mannino JE, Cotter E. Educating nursing students for practice in the 21st century. Int Arch Nurs Health Care 2016;2:26.
3. Spector N. A transition to practice regulatory model: Changing the nursing paradigm. Deans Notes 2009;31:1-3.
4. Charnley E. Occupational stress in the newly qualified staff nurse. Nurs Stand 1999;13:33-6.
5. O'Shea M, Kelly B. The lived experiences of newly qualified nurses on clinical placement during the first six months following registration in the Republic of Ireland. J Clin Nurs 2007;16:1534-42.
6. Smith J, Crawford L. Medication errors and difficulty in first patient assignments of newly licensed nurses. JONAS Healthc Law Ethics Regul 2003;5:65-7.
7. Morrell N, Ridgway V. Are we preparing student nurses for final practice placement? Br J Nurs 2014;23:518-23.
8. Azimian J, Negarandeh R, Fakhr-Movahedi A. Factors affecting nurses' coping with transition: An exploratory qualitative study. Glob J Health Sci 2014;6:88.
9. Romyn DM, Linton N, Giblin C, Hendrickson B, Limacher LH, Murray C, *et al*. Successful transition of the new graduate nurse. Int J Nurs Educ Scholarsh 2009;6:34.
10. Heslop L, McIntyre M, Ives G. Undergraduate student nurses' expectations and their self-reported preparedness for the graduate year role. J Adv Nurs 2001;36:626-34.
11. Usher K, Mills J, West C, Park T, Woods C. Preregistration student nurses' self-reported preparedness for practice before and after the introduction of a capstone subject. J Clin Nurs 2015;24:3245-54.
12. Woods C, West C, Mills J, Park T, Southern J, Usher K. Undergraduate student nurses' self-reported preparedness for practice. Collegian 2015;22:359-68.
13. Wray MA. Senior BSN Students' Confidence, Comfort, and Perception of Readiness for Practice; 2017. Available from: https://digitalcommons.gardner-webb.edu/undergrad-honors/11 [Last accessed on 2021 Nov 12].
14. Brown HD. Examination of Baccalaureate Nursing Students' Readiness for Practice. Pueblo: Colorado State University-Pueblo; 2016. Available from: https://www.semanticscholar.org/paper/Examination-of-baccalaureate-nursing-students%27-for-Brown/749d71c657e1a137cf49792b6962ef6a395ce035 [Last accessed on 2021 Nov 12].
15. Wright AP. Preparedness to Practice as Perceived by the Graduate Nurse, Nursing Faculty and Hospital Leadership. Denton, TX, USA: Texas Woman's University; 2014. Available from: https://www.proquest.com/openview/9d90f32b55d7d8e9f6eca2515aae64a6/1?cbl=18750&parentSessionId=RpBTrcz%2B72kWZ13XPFgto97CWiOnrJHOH3XI68k1v8w%3D&pq-origsite=gscholar&accountid=37964 [Last accessed on 2021 Nov 14].
16. Candela L, Bowles C. Recent RN graduate perceptions of educational preparation. Nurs Educ Perspect 2008;29:266-71.
17. Mozingo J, Thomas S, Brooks E. Factors associated with perceived competency levels of graduating seniors in a baccalaureate nursing program. J Nurs Educ 1995;34:115-22.
18. Casey K, Fink R, Jaynes C, Campbell L, Cook P, Wilson V. Readiness for practice: The senior practicum experience. J Nurs Educ 2011;50:646-52.
19. Sharma SK, Arora D, Belsiyal X. Self-reported clinical practice readiness of nurses graduating from India: A cross-sectional survey in Uttarakhand. J Educ Health Promot 2020;9:125.
20. Schmalenberg C, Kramer M. Nurse-physician relationships in hospitals: 20 000 nurses tell their story. Crit Care Nurse 2009;29:74-83.