

Clinical Competence in Nursing – an Essential Virtue

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Abstract

Background: Clinical competence in Nursing is an essential virtue of Nursing in order to provide safe and Quality Nursing Care. The study aimed to examine the Perceived Clinical competence of Final year B.Sc.Nursing Students

Methods: The study was descriptive in approach, performed among 110 B.Sc.Nursing students in selected colleges of Nursing at Chennai. Simple random sampling technique was used to select the study participants. The tool had demographic variables and a 3 point Likert scale to assess the perceived clinical competence. The data were analyzed using descriptive and inferential statistics. Findings revealed that most of them perceived (92.7 %) overall high competence and (7.3%) moderate competence. The findings in specific areas revealed that in Emergency, 77.3 % perceived high and 20% moderate competence. In perioperative nursing (81.8%) perceived high competence and 14.5 % moderate competence. In the areas of Administration of Injection, communication and interpersonal skills, 89.1%, 63.6 % of students perceived high competence respectively. There was no statistically significant association between perceived clinical Competence and Demographic Variables.

Conclusion: Final year nursing students had reasonably good level of perceived Clinical competence. Planned training and development programs in addition to the regular clinical experience will enhance the Clinical Competence and Confidence of Nursing students.

Key words: Administration of Injection, B.Sc.Nursing Students, Clinical competence, Communication Skills, Emergency, Perioperative Nursing.

Introduction

“If you want to be successful, don’t seek success - seek competence, empowerment; do nothing short of the best that you can do.” -Albert Einstein

Nurses are the largest health care providers, play a major role in promotion, maintenance and restoration of the health of patients. Clinical competence in Nursing is a mix of skills, knowledge, attitude, and abilities are an essential virtue of Nursing in order to provide safe and Quality Nursing Care.

In a research on Competence in nursing is a dynamic process rather than the sum of individual competencies. Further, a review of the concept of competence identified the following approaches towards the concept of competence (a) knowledge regarding tasks and skills, (b) a generic focus on problem-solving and critical thinking and (c) a

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holistic approach that brings together knowledge, skills, attitudes, and judgments¹.

Today's healthcare systems face difficulties with nursing shortages (ICN, 2017). In order to overcome the shortage of staffing manpower, novice Nurses are expected to function independently as quickly as possible. Studies have reported that new graduate nurses lack adequate levels of competence that are needed in the real world of clinical nursing practice to meet the ever-increasing demands in today's complicated healthcare environment.

In a research on self assessed clinical competence and need for further training among newly graduated Registered Nurses revealed components "professional development" and "critical thinking" were rated lowest in clinical competence and "direct clinical practice" rated highest in need for further training². Assessment of the perceived Clinical competence among Nursing students and inculcating the need to be competent is the need of the hour.

Statement of the Problem:

A Descriptive study to assess the perceived Clinical Competence among Undergraduate Nursing Students in selected Nursing Colleges, Chennai.

Objectives:

- To assess the clinical competence among undergraduate nursing students in Selected Nursing Colleges.
- To associate level of clinical competence with the selected demographic variables.

Hypothesis:

RH₁: There will be a significant association between the levels of clinical competence with the selected demographic variables.

Materials and Methods

Design and Study Setting

Cross-sectional descriptive design was used to assess the perceived clinical competence of undergraduate nursing students in selected nursing colleges Chennai. The study was conducted in 5 Nursing Colleges, Chennai.

Sampling Criteria

Final Year B.Sc.Nursing students who had undergone any additional skill development or internship programs

Sampling and Sample Size

Simple Random Sampling (Lottery method) was used. Sample size included 110, 22 students from each College.

Data collection methods and instrument

Tool consisted of two parts

Part I – Demographic Variables included Hospital exposure during the course, Part time job, Sex, Father's education, mother's education, living area, marital status.

Part II – 3 point Likert scale, to assess the perceived clinical competence of undergraduate nursing students. It had total 50 essential competency items, prepared by the investigator based on the prescribed curriculum for the baccalaureate nursing program in India, which was divided into 4 sections i.e. (i) emergency nursing skills (15 items), Perioperative nursing (16 items), Administration of injection (15 items), Communication and interpersonal skills (5 items) and an open ended Question – Any suggestions to improve the Clinical Competence. Each listed essential competencies was measured on 3 point Likert scale i.e.1- low competence, 2- moderate competence 3- high competence. Each participant

was handed over the questionnaire in classroom under the supervision of research investigator and they were asked to first fill socio demographic data, and the Likert's scale. Participants took about 25-35 min to fill the questionnaire. Data was collected during February 2021.

Total score was interpreted as follows

- High Competence - 101-150
- Moderate Competence - 51-100
- Low Competence - 1-50

1. Level of Perceived Clinical competence

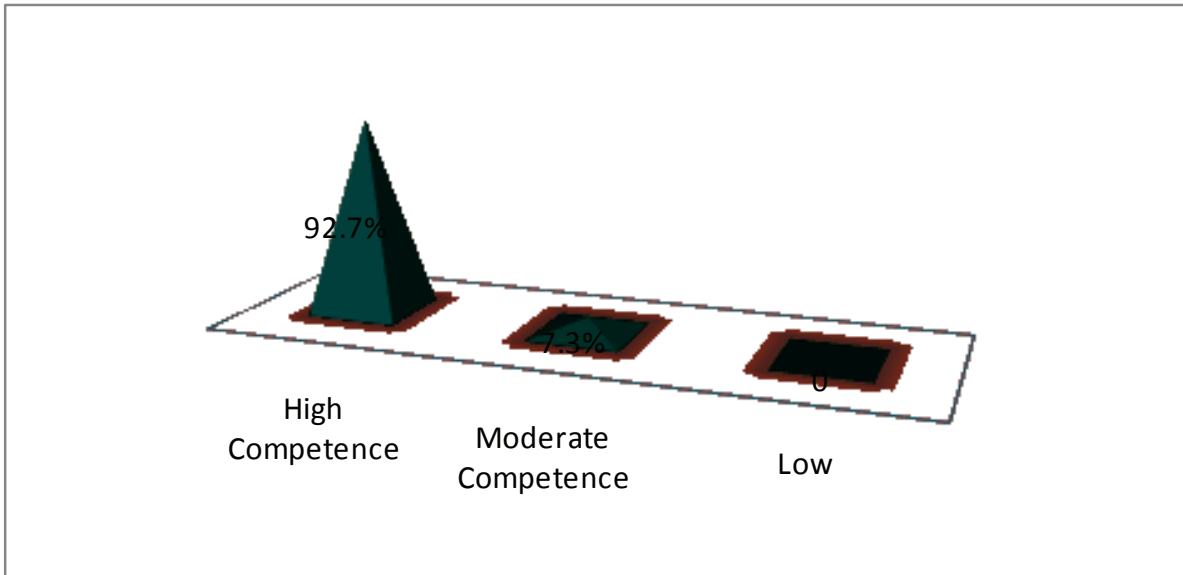


Fig -1 Frequency and Percentage distribution of overall Perceived Clinical competence among undergraduate nursing students (n=110)

Statistical analysis

Descriptive Statistics and chi-square was used to analyze the data.

Results and Discussion

Analysis of the Socio demographic variables revealed that Majority of participants were females (86.4 %) and most of them (95.5 %) were unmarried. Majority participants father's and mother's education was up to 10th standard (89.1 %). All had Clinical Exposure both in Government and Private Hospitals.

Table -1 Frequency and Percentage distribution of perceived clinical competence in specific areas among undergraduate nursing students (n=110)

S.No	Level of Clinical Competence	No	%
1	Emergency Nursing		
	High competence	85	77.3
	Moderate competence	22	20
	Low competence	3	2.7
2	Perioperative Nursing		
	High competence	90	81.8
	Moderate competence	16	14.5
	Low competence	4	3.6
3	Administering the injection		
	High competence	98	89.1
	Moderate competence	12	10.9
4	Communication and interpersonal skills		
	High competence	70	63.6
	Moderate competence	38	34.5
	Low competence	2	1.8

Over all clinical competence was high (92.7 %) (Fig 1).The findings in specific areas revealed that in Emergency, 77.3 % perceived high and 20% moderate competence. In perioperative nursing (81.8%) perceived high competence, 14.5 %moderate competence. In the areas of Administration of Injection, communication and interpersonal skills, 89.1%, 63.6 % students perceived high competence respectively. (Table 1).

In addition to the above findings it was observed that students perceived lower to moderate level of competence in areas like handing peak flow meter,

infusion pump, Gas cylinders, chest tube drainage system, costing and legal procedures in operation theatre. Students suggested few ideas to improve the clinical competence which included additional training and skill development programmes in advanced procedures, instruments identification and emergency procedures.

These findings are consistent with a descriptive study which revealed the mean competencies score for basic nursing skills was reasonably high. However, it was significantly low for the advanced nursing skills and selected basic nursing tasks such as perioperative

care, elimination-related interventions, and handling of medical equipment (recording electrocardiogram and using defibrillator)³. The reasons for perceiving moderate clinical competence in areas of the emergency department, perioperative nursing, administering the injection, communication, and

interpersonal skills could be due to less exposure to advanced nursing skills, lack of handling of medical equipment.

2. Association of Perceived clinical competence with Demographic Variables

Table- 2 Association of Perceived clinical competence among undergraduate nursing students with selected demographic variables. (n=110)

Demographic variables	Moderate		High		Chi-square value
	No	%	No	%	
Hospital exposure during the course					$\chi^2=0.079$ d.f=1 p=0.778 N.S
A. Government	0	0	0	0	
B. Private	0	0	0	0	
C. Both	8	7.3	102	92.7	
Part Time Job					$\chi^2=0.323$ d.f=2 p=0.850 N.S
A. Home Care	0	0	2	0.1	
B. Hospital	0	0	2	0.1	
C. Nil	8	7.5	98	92.5	
Sex					$\chi^2=1.362$ d.f=2 p=0.506 N.S
A. Male	0	0	13	0.1	
B. Female	8	8.4	87	91.6	
C. Transgender	0	0	0	0	
Father Education					$\chi^2=1.469$ d.f=1 p=0.226 N.S
A.10th	8	8.5	86	91.5	
B. Graduate	0	0	16	0.1	
C. Post Graduate	0	0	0	0	
Mother Education					$\chi^2=1.056$ d.f=2 p=0.590 N.S
A.10th	8	8.2	90	91.8	
B. Graduate	0	0	11	0.1	
C. Post Graduate	0	0	0	0	
Living Area					$\chi^2=4.552$ d.f=2 p=0.103 N.S
A. Rural	2	5.9	32	94.2	
B. Urban	2	3.8	51	96.2	
C. Semi Urban	4	17.4	19	82.6	
Marital Status					$\chi^2=0.411$ d.f=2 p=0.814 N.S
A. Married	0	0	4	0.1	
B. Unmarried	8	7.6	97	92.4	

Demographic variables had not shown a statistically significant association with the level of clinical competence among the undergraduate nursing students. (Table 2)

Contradictory findings were reported in a study which revealed graduating nurses with younger age and longer duration of clinical placement had higher mean competency scores in basic as well as advanced nursing skills ($P < 0.05$). Whereas, nurses studying at private nursing institutes had lower mean competency scores for advanced nursing skills ($P = 0.001$)³ and another study which revealed Social support, type of institution, year of study, attending theory classes, and clinical environment were associated with perceived clinical competence⁴.

This difference could be due to the type of institution where they had their clinical exposure and all the study participants are from similar socio demographic background.

H_1 stated that there will be a significant association between the levels of clinical competence with the selected demographic variables. Hence RH_1 is not accepted

Conclusion

Final year nursing students had a reasonably good level of perceived clinical competence. It is important to ensure that the nursing institutes have sufficient facilities and facilities for adequate clinical observation and learning experience in basic and advanced nursing skills and knowledge, which will

enhance Quality of the Nursing care provided by the Students as Future Nurses.

Source of Support : Nil

Conflicts of interest : The authors have no conflict of interest to declare.

Ethical considerations: Ethical clearance was obtained from Institutional Ethics Committee.

Informed Consent was obtained. Confidentiality was maintained throughout the study.

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