



Self-assessed competence among final year undergraduate nursing students in a teaching hospital

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Abstract

Competence is required degree of knowledge, skill and attitude for standard nursing care. Self-assessment of competence helps nurses to enhance their practice by identifying their areas of strength and potential growth professionally. The aim of this study is to assess the self-competence among final year undergraduate nursing students. The descriptive cross-sectional study design was used. The total of 84 nursing students were included. The Nurse Competency Scale (NCS) with 73 items for self-assessment was used. The result of the study shows that majority of students (73.8%) self-assessed them as having very good level of competence. Majority of them responded as very good level of competence in all domains. The overall score of competence was very good that is 81.59 ± 8.81 .

Keywords: Nurse competency scale, nursing students, self-assessed competency.

1. Introduction

Competence, an important attribute to provide quality, safe care within professional standards and is defined as adequate and to the required degree of integrated knowledge, skills, attitudes and values in the specific context of situations in nursing practice. (International council of Nursing 1997). It is more important for nursing professionals as nursing is directly related to human health ^[1].

Assessing a nurse's self-recognition of their competence is important ^[2]. Previous studies conducted in Thailand (N=3, 349), found that students self-rated their competence on maintaining professional standards, working with diverse communities, collaborating with other health workers, however, low score was obtained on coping with new emerging disease ^[3]. Similarly, study conducted in Czech Republic (N=274) found that students showed higher competence on managing situation and work role ^[1].

Furthermore, study in Norway (N=99) identified negative correlation between students' clinical competence and need for further training ^[4]. In a study conducted in Nepal (N=122) students expressed that teaching helped them develop their competence and confidence ^[5].

Self-assessment of competence helps nurses maintain and enhance their practice by identifying their areas of strength and potential growth which thereby encourages nurses to take an active part in the learning process in the professional carrier ^[6]. Furthermore, identification of student's competence level of final year students facilitates to plan the

teaching/learning strategies in the curriculum as well. The study aims to assess the self-competence level of nursing students.

2. Materials and methods

2.1 Study design: A descriptive cross-sectional study design was used to conduct the study.

2.2 Study site: The study was carried out in School of Nursing and Midwifery (SoNM), Patan Academy of Health Sciences (PAHS).

2.3 Study duration: The duration of study was 2024-08-01 to 2024-12-01 and data collection was done for three months from the time of ethical approval.

2.4 Sampling technique: The total enumerative sampling technique was used to collect data.

2.5 Sample size

The sample was all the final year undergraduate nursing students of B.Sc. Nursing (Bachelor of Science in Nursing) fourth year i.e. 40, BNS (Bachelor in Nursing Science) third year i.e. 40 and BMS (Bachelor in Midwifery Science) third year i.e. 12. Thus, the total sample size was 92. However, after field editing the total of 84 students were included in final study.

2.6 Study variables

- **Dependent variable:** Self-assessed competence among nursing students.
- **Independent variable:** Age

2.7 Inclusion criteria: Those students who are willing to participate in the study.

2.8 Exclusion criteria: Those who are not present during data collection period.

2.9 Procedure detail

Data collection was by applying all the ethical procedures. The participants who meet the inclusion criteria was explained about the objectives of the study then written informed consent was taken by the researchers. Data was collected by using structured self-administered questionnaire in English. The completion of questionnaire took about 30 minute and filled questionnaire was collected immediately by researchers on same day then the field editing was done as soon as the students submitted it.

2.10 Data collection instrument

The Nurse Competency Scale (NCS) is a generic self-assessment tool designed to assess the competence of nurses from different areas of practice and cultures and is widely used to evaluate the competence of graduating nursing students. The NCS is a 73-item scale distributed into seven categories: helping role (7 items), teaching-coaching (16 items), diagnostic functions (7 items), managing situations (8 items), therapeutic interventions (10 items), ensuring quality (6 items) and work role (19 items). Each item is rated by using a visual analog score (VAS) (0-100), with the

ends labelled 0 for very low level and 100 for very high level of competence.

The level is further categorized as very good (VAS > 75-100), good (VAS > 50-75), quiet good (>25-50) and low (VAS ≤25) [6].

2.11 Ethical consideration

The study was conducted after obtaining permission from the Research Committee of SoNM and ethical approval from IRC-PAHS. Informed written consent was obtained from each participant before data collection.

2.12 Data processing and analysis

Editing, coding and classified manually and analyzed using SPSS software version 16.

Descriptive statistics: Frequency, mean, percentage, and standard deviation was used.

3. Results and Discussion

The result of present study shows that all of the nursing students were of age group above 20 years.

Table 1: Overall Level of competence, N=84

Level of Competence	Frequency	Percentage
Good (> 50-75)	22	26.2
Very good (> 75-100)	62	73.8

The Table 1 shows the overall level of competence of nursing students, it shows that majority of students (73.8%) self-assessed them as having very good level of competence and about one fourth of them (26.2%) shows good level of competence.

Table 2: Level of competence in each category, N=84

Category	Very Good (> 75-100)		Good (> 50-75)		Quite good (>25-50)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Helping role	55	65.5	28	33.3	1	1.2
Teaching role	65	77.4	18	21.4	1	1.2
Diagnostic function	63	75	21	25	-	-
Managing situation	61	72.6	23	27.4	-	-
Therapeutic intervention	64	76.2	20	23.8	-	-
Ensuring quality	57	67.9	26	31	1	1.2
Work role	68	81	16	19	-	-

The Table 2 shows the level of competence in each category. Majority of the responded as very good level of competence in all domains. The very good level of competence was seen in helping role (65.5%), teaching role (77.4%), diagnostic function (75%), managing situation

(72.6%), therapeutic intervention (76.2%), ensuring quality (67.9%) and work role (81%). Also, very few shows quite good level of competence in helping role, teaching role and ensuring quality.

Table 3: Overall score of each competency category, N=84

Categories of competency	Mean Score ±SD
Helping role	78.45± 11.68
Teaching -coaching	82.46±10.39
Diagnostic functions	81.72±9.77
Managing situations	81.95±9.77
Therapeutic interventions	80.59±9.72
Ensuring quality	80.24±11.05
Work role	82.79±8.86
Overall score	81.59±8.81

The Table 3 shows that mean score of each level of competence of nursing students. The students show the highest mean score in work role category of competence and lowest in helping role. The overall score of competence was very good that is 81.59 ± 8.81 .

4. Discussion

The current study shows that 73.8% have very good level of competence and majority shows high competence in work role (81%). Also, students show high mean score in work role category.

The study done in Chez Republic among 274 nursing students 80.3% have good or very good level of competence also high level of competence was in managing situation and work role category i.e. 67.8 and 67.2 respectively [1].

The study done in Italy among 431 nurses shows that competence score was in good category ranging from VAS 72.6 to 77.9. Also, the highest average score (VAS= 77.9) was found in the dimension managing situations, while the lowest average value (VAS= 72.9) was measured in the dimensions ensuring quality and helping role [7].

Another study done in Sweden among 543 nursing students from 10 different universities using nurse professional competence scale shows highest mean score in the area of value-based nursing care i.e. 90.6 [8]. likewise, another study done in Saudi Arabia among 317 senior nursing students as done to assess self-reported professional competence. The result shows that overall competence means score was 78.4. The highest mean scores were "Value-Based Nursing Care" (Mean = 80.23) while the lowest mean scores were given to "development, leadership and organization of nursing care" (Mean = 75.80) [9].

Another study done in Nepal about readiness for self-directed learning among 107 bachelor level of student shows that 69.2% had high level of readiness for learning [10].

The possible studies done in the area of assessing nurse competence suggested that self-competence tool is important enquiry for quality assessment, quality outcome to patient and care as well as enhance nursing education.

5. Conclusions

The study concluded that majority of undergraduate nursing students feel very good competence. Also, the students have high competence in work role category

Conflict of Interest

Not available

Financial Support

Not available

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