

A Study to Assess the Knowledge and Attitude Regarding Simulation Based Learning among Nursing Faculties in Selected Colleges of Nursing

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Abstract: *SBL is an unorthodox teaching strategy that promotes abilities, improves teamwork, and improves team coordination in a secure setting with no risk to the individual. This makes it possible to practice without endangering the patient, which lowers the likelihood of a medical error.1. To assess the knowledge regarding simulation - based learning among nursing faculties.2. To assess the attitude regarding simulation - based learning among nursing faculties.3. To find out the association between knowledge score with their selected socio demographic variables.4. To find out the association between attitude score with their selected socio - demographic variables. Quantitative research approach and purposive sampling technique was used for study.40 faculties were selected from Sharda university, greater Noida. Self Structured knowledge questionnaire was used to measure knowledge and Likert scale was used to measure attitude. Result: 57.5% have moderate level of knowledge and only 5% have adequate knowledge about SBL.82.5% faculties have positive attitude and 17.5% have neutral attitude regarding SBL. There was no association found between knowledge score and attitude score with their selected demographic variables. Conclusion: The present study assessed the effectiveness of structured teaching programme on knowledge regarding Simulation based learning among the nursing faculties. The result revealed that about 10% of the nursing faculties have adequate knowledge and 52.5% of nursing faculties having moderate knowledge.*

Keywords: SBL, Attitude, Knowledge

1. Introduction

One of the major problems of nursing education is the lack of coordination between theory and practice. The distance created between theory and practice complicates the learning process and the lack of understanding of nursing terms and concepts affects the professional integration of a student. This is achieved through real knowledge and understanding of health - care science, where nursing theory is harmoniously combined with practical skills.

It is a teaching method where, following a certain scenario, students experience the actual dimensions of their future professional roles, which helps them to be more quickly integrated into the workforce of the health - care sector. Today, simulation allows students to learn skills; develop clinical reasoning abilities; and to become competent in caring for patients/families in a safe environment. It creates a setting that mimics real - world tasks and situations, allowing students to test their knowledge and apply principles.

The power of simulation - based learning lies in providing learners practical insights into a subject through a realistic, immersive experience. Simulation is an active teaching learning method performed in a controlled, protected, and safe environment. Simulation based nursing education is a good approach implemented in nursing education to provide students with varied opportunities to practice their clinical skills before they are exposed to the real patient. Simulation in nursing education is used to teach learners concepts relating to the care of patients who are either sick or infirm. Through the replication of real - world nursing scenarios and experiences, learners can practice the skills necessary to

succeed in the field, without ever putting a real - life patient at risk. Simulation based education in nursing education is very helpful as it bridges the gap between theory and practical through innovative teaching learning process. The variety of simulation - based learning options can offer a way to replace traditional and often hard to find, clinical experiences.

The use of patient simulators in nursing education is a relatively new instructional methodology. The rationale for using simulation as an educational strategy includes the absence of risk to a live patient; the ability to provide standardization of cases; the promotion of critical - thinking, clinical - decision making, and psycho - motor skills; the provision of immediate feedback, and the integration of knowledge and behaviour. Learners can be exposed to critical care scenarios and have the opportunity to respond without fear of harming a live patient.

2. Literature Survey

Teaching via simulation must be done as carefully as any other new teaching method. It requires a careful, thoughtful approach to ensure success for both students and faculty. To gain the most value from simulations, it is important to create a curricular map of the concepts and high - level learning occurring in each simulation for each course. This ensures that you are not focusing on the same topics in each simulation (e. g., simulations in pediatrics, maternal health, and community health that all focus around the death of new born). Faculty are encouraged to leverage this freedom to give students experiences that they may not get in ordinary clinical settings. For example, faculty can have students play the role of the nurse (not student nurse). Students need to practice the

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role of the bedside nurse, to include making decisions, calling other healthcare providers, documenting without a co-signer, and administering medications independently. This experience offers students the opportunity to evaluate how well they can perform, while remaining within a safety net.

Problem statement

A study to assess the knowledge and attitude regarding simulation-based learning among nursing faculties in selected colleges of nursing Delhi - NCR.

Objective

- 1) To assess the knowledge regarding simulation-based learning among nursing faculties.
- 2) To assess the attitude regarding simulation-based learning among nursing faculties.
- 3) To find out the association between knowledge score with their selected socio-demographic variables.
- 4) To find out the association between attitude score with their selected socio-demographic variables

3. Materials and Methods

In the present study quantitative approach with purposive sampling technique was used to select 40 faculties. The study was conducted at, Sharda university, greater oidia. Self-structured questionnaire was used to assess knowledge and Likert scale for attitude.

Reliability of the tool was assessed by using test-retest method and it is found highly reliable.

4. Analysis and Interpretation

Section - A

Table 1: Frequency & Percentage distribution level of knowledge. N=40

| S. no | Demographic Variables | Frequency | % |
|-------|-----------------------|-----------|-----|
| 1. | Age | | |
| | 1. 24 - 34 years | 19 | 48% |
| | 2. 34 - 45 years | 18 | 45% |
| | 3. 46 years and above | 3 | 8% |
| 2. | Gender | | |
| | 1. Male | 9 | 23% |

Table 3: Descriptive statistics of Knowledge N=40

| Descriptive Statistics | Mean | Median | S. D. | Maximum | Minimum | Range | Mean % |
|------------------------|------|--------|-------|---------|---------|-------|--------|
| Knowledge Score | 7.9 | 7.5 | 2.94 | 16 | 3 | 13 | 41.58 |

Table 3: Represents those descriptive statistics of knowledge. It was found that the mean value was 7.90, median score was 7.5, maximum score was 16, minimum score was 3, range of score was 13 and mean percentage was 41.58%.

Table 4: Frequency & Percentage distribution level of Attitude. N=40

| Criteria Measure of Attitude Score | | |
|------------------------------------|------------|-----------|
| Level of Scores N= 40 | Percentage | Frequency |
| Positive Attitude (47 - 60) | 82.5% | 33 |
| Neutral Attitude (34 - 46) | 17.5% | 7 |
| Negative Attitude (20 - 33) | 0.0% | 0 |

Maximum =60 Minimum=20

| | | | |
|---|--|----|-----|
| | 2. Female | 31 | 78% |
| | 3. Transgender | 0 | 0% |
| | Area of Residence | | |
| 3 | 1. Urban | 29 | 73% |
| | 2. Rural | 11 | 28% |
| 4 | Qualification | | |
| | 1. M. sc Nursing | 31 | 78% |
| | 2. Pursuing Ph. D. | 7 | 18% |
| | 3. Post doctorate | 2 | 5% |
| 5 | Designation | | |
| | 1. Tutor/Lecturer | 10 | 25% |
| | 2. Assistant professor | 14 | 35% |
| | 3. Associate professor | 12 | 30% |
| | 4. Professor or Above | 4 | 10% |
| 6 | Previous Knowledge Regarding Simulation - Based Learning | | |
| | 1. Yes | 34 | 85% |
| | 2. No | 6 | 15% |
| 7 | Experience | | |
| | 1. 1 - 5 year | 21 | 53% |
| | 2. 6 - 10 year | 10 | 25% |
| | 3. Above 10 years | 9 | 23% |

Table1: This table depicts that most of the faculty members belongs to age group belongs to 24 to 34 years, 78% participants were female, 73% participants were belonging to urban area, 78% participants had M. Sc. nursing qualification, 35% participants were having Assistant professor designation, 85% participants had previous knowledge regarding SBL, 53% participants had 1 to 5 years of experience.

Table 2: Descriptive statistics of knowledge N=40

| Criteria Measure of Knowledge Score | | |
|-------------------------------------|------------|-----------|
| Level of Scores N= 40 | Percentage | Frequency |
| Adequate Knowledge (13 - 19) | 5.0% | 2 |
| Moderate Knowledge (7 - 12) | 57.5% | 23 |
| Poor Knowledge (0 - 6) | 37.5% | 15 |

Percentage wise distribution of level of knowledge of the faculties shows that highest percentage (57.5%) of faculties had moderate knowledge, (37.5%) had poor knowledge and only (5%) had adequate knowledge. it depicts that most of the faculties had moderate knowledge about sbl.

Table 4: depicts that Percentage wise distribution of level of attitude of the faculties shows that (82.5%) had positive attitude and (17.5%) faculties had neutral attitude and (0%) had negative attitude. this depicts that most of the faculties had positive attitude regarding sbl.

Table 5: Descriptive statistics of Attitude N=40

| Descriptive Statistics | Mean | Median | S. D. | Maximum | Minimum | Range |
|------------------------|-------|--------|-------|---------|---------|-------|
| Attitude Score | 49.98 | 51 | 4.69 | 58 | 37 | 21 |

Table 5: Represents the descriptive statistics of Attitude. It was found that the mean value was 49.98, median score was

51, maximum score was 58, minimum score was 37, range of score was 21.

Table 6: Association between Knowledge score and with their selected socio - demographic characteristics (age, gender, education and occupation) N=40

| Demographic Data | | Levels of Knowledge (N=40) | | Association With Knowledge Score | | | | |
|--|---------------------|----------------------------|--------------|----------------------------------|---------|----|-------------|-----------------|
| Variables | Opts | Above Median | Below Median | Chi Square | P Value | df | Table Value | Result |
| Age | 24 - 34 years | 11 | 8 | 1.029 | 0.598 | 2 | 5.991 | Not Significant |
| | 34 - 45 years | 8 | 10 | | | | | |
| | 46 years and above | 1 | 2 | | | | | |
| Gender | Male | 2 | 7 | 3.584 | 0.058 | 1 | 3.841 | Not Significant |
| | Female | 18 | 13 | | | | | |
| | Transgender | 0 | 0 | | | | | |
| Area of Residence | Urban | 15 | 14 | 0.125 | 0.723 | 1 | 3.841 | Not Significant |
| | Rural | 5 | 6 | | | | | |
| Qualification | B. Sc. Nursing | 0 | 0 | 2.433 | 0.296 | 2 | 5.991 | Not Significant |
| | MSc Nursing | 17 | 14 | | | | | |
| | PhD | 3 | 4 | | | | | |
| | Post Doctorate | 0 | 2 | | | | | |
| Designation | Tutor/Lecturer | 4 | 6 | 0.686 | 0.877 | 3 | 7.815 | Not Significant |
| | Assistant professor | 8 | 6 | | | | | |
| | Associate professor | 6 | 6 | | | | | |
| | Professor or above | 2 | 2 | | | | | |
| Previous Knowledge Regarding Simulation - Based Learning | Yes | 17 | 17 | 0 | 1 | 1 | 3.841 | Not Significant |
| | No | 3 | 3 | | | | | |
| Experience | 1 - 5 year | 9 | 12 | 0.94 | 0.625 | 2 | 5.991 | Not Significant |

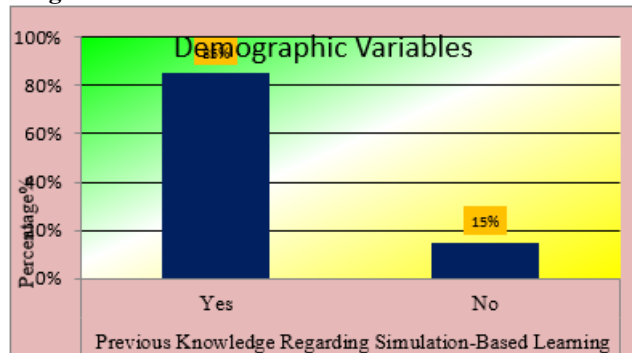
Table No.5: This table depicts that there was no significant association found between knowledge score with their selected socio - demographic variables.

Table 6: Table Showing Descriptive Stats of Demographic Variables N=40

| Demographic Data | | Levels of Attitude (N=40) | | Association With Attitude SCORE | | | | |
|---|---------------------|---------------------------|--------------|---------------------------------|---------|----|-------------|-----------------|
| Variables | opts | Above Median | Below Median | Chi Test | P Value | df | Table Value | Result |
| Age | 24 - 34 years | 9 | 10 | 0.509 | 0.775 | 2 | 5.991 | Not Significant |
| | 34 - 45 years | 8 | 10 | | | | | |
| | 46 years and above | 2 | 1 | | | | | |
| Gender | Male | 5 | 4 | 0.302 | 0.583 | 1 | 3.841 | Not Significant |
| | Female | 14 | 17 | | | | | |
| | Transgender | 0 | 0 | | | | | |
| Area of Residence | Urban | 14 | 15 | 0.025 | 0.873 | 1 | 3.841 | Not Significant |
| | Rural | 5 | 6 | | | | | |
| Qualification | B. Sc. Nursing | 0 | 0 | 4.778 | 0.092 | 2 | 5.991 | Not Significant |
| | MSc Nursing | 12 | 19 | | | | | |
| | PhD | 5 | 2 | | | | | |
| | Post Doctorate | 2 | 0 | | | | | |
| Designation | Tutor/Lecturer | 6 | 4 | 6.22 | 0.101 | 3 | 7.815 | Not Significant |
| | Assistant professor | 3 | 11 | | | | | |
| | Associate professor | 8 | 4 | | | | | |
| Previous Knowledge Regarding Simulation - Based Learning | Professor or above | 2 | 2 | | | | | |
| Previous Knowledge Regarding Simulation - Based Learning Experience | Yes | 16 | 18 | 0.018 | 0.894 | 1 | 3.841 | Not Significant |
| | No | 3 | 3 | | | | | |
| Experience | 1 - 5 year | 8 | 13 | 1.606 | 0.448 | 2 | 5.991 | Not Significant |

Table no - 6: This table depicts that there was no significant association found between Attitude score with their selected socio - demographic variables.

Diagrammatic Presentation of Data



5. Discussion

The study findings showed Percentage wise distribution of level of knowledge of the faculties that 57.5% of faculties had moderate knowledge, 37.5% had poor knowledge and only 5% had adequate knowledge. it depicts that most of the faculties had moderate knowledge about sbl.

The level of attitude of the faculties shows that 82.5% had positive attitude and 17.5% faculties had neutral attitude and 0% had negative attitude. this depicts that most of the faculties had positive attitude regarding sbl.

6. Conclusion

Based on findings of the study, it was concluded that more than half of the faculty members had moderate knowledge and most of the faculty members has positive attitude.

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