



Knowledge and Attitude of Nursing Students Regarding Simulation-Based Teaching Learning

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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. To assess the knowledge on simulation-based teaching-learning among nursing students of selected nursing institutions of Pune City ;2.To ascertain the nursing students attitude toward on simulation-based teaching learning among nursing students of selected nursing institutions of Pune City 3. To ascertain the relationship between the attitude of nursing students and selected demographic factors. To choose 89 samples, a cross-sectional descriptive study methodology with purposive sampling was adopted. We employed a semi-structured questionnaire. The study finding suggests that a majority of individuals (80%) had Excellent Knowledge, 10% had Good Knowledge, 45% had Average Knowledge, and 35% had Poor Knowledge. Based on scores, the level of knowledge was categorised into four groups: Poor knowledge (0-8), Average knowledge (9-15), Good knowledge (16-22), and Excellent knowledge (23-30) whereas the result regarding attitude of nursing students regarding simulation based teaching and learning depicts that majority of subjects—50%—strongly supported the simulation-based approach to teaching and learning. 23 percent of the participants agreed with the statement. 15% of respondents disagreed. Moreover, 52% of participants found it neutral. On simulation-based teaching and learning, 7% of subjects disagreed, and 5% of subjects disagreed entirely. The majority of participants firmly believe that collecting cord blood is vital.

Key words: Knowledge, Attitude, Simulation, Teaching, Learning

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INTRODUCTION

A kind of teaching or training known as simulation-based education aims to "replace or magnify real experience with guided encounters [1]."

It is method in which by putting students in situations where they must actively solve problems, educational simulation is a teaching method that assesses participants' knowledge and ability levels. The guidelines are established by the instructor to ensure a secure setting for experiential learning.

What Simulations Are for Simulation is fundamentally used to illuminate the underlying mechanics that govern a system's behaviour. The future behaviour of a system can be predicted (forecasted) using simulation, and you can use it to figure out what you can do to influence that future behavior [1, 2].

One of the key methods for filling knowledge gaps in the classroom is the use of simulations. A simulation is a teaching technique in which computer commands, fractional errand test systems, and highly detailed full-body life-sized models are used to create false representations of real patient emotions. Simulators have the advantage of enabling the repetition of a comparable circumstance in an illegal manner while also accurately simulating silent consideration situations. By enabling expert execution without endangering the patient, this lowers the likelihood of a clinical error. Additionally, the record and critique options in modern test systems make them a useful tool for evaluating understudies. The ideal environment for learning is provided by simulation-based learning (SBL). It also aids in enhancing teamwork abilities [3, 7, 9].

These skills are essential for students since delivering medical care has increasingly become a multidisciplinary endeavour. As expected, past research has supported the integration of SBL within the traditional clinical educational strategy. The importance of SBL is currently being recognised by health administrations and medical organizations all over the world, who are increasing the number of skill laboratories in simulated clinical settings. Administrative groups have also begun to realise the benefits of promoting more time spent on simulation exercise as a bridge to certain clinical settings or employable skills [4-6].

SBL has advanced there, but it hasn't been integrated into the curriculum.

The necessity of employing simulation in medical education has been recognised in India. Institutions are increasingly creating centralised simulation training facilities, while certain departments already have such. A large portion of this predates the new National Medical Commission curriculum, which now requires that all teaching institutions set up simulation laboratories for undergraduate medical students to receive skills training. Despite this increase in interest in simulation, there are still several gaps and barriers to SBE's widespread adoption in India [9, 10]. To assess the knowledge on simulation-based teaching-learning among nursing students of selected nursing institutions of Pune City.

MATERIAL AND METHODS

Design of Research study: Cross-sectional study

Sampling Technique used: Non Probability Purposive Sampling technique

Setting of the study: Nursing colleges of Pune City.

Sample size was 89.

Tool: used was a 5 point likert scale

On a 5-point Likert scale, each response to the question intended to gauge attitudes about SBL was graded as follows: "strongly disagree," "disagree," "neutral," "agree," and "strongly agree." Chi-square test was used to determine whether a variable was associated with an attitude at $P < 0.05$.

Ethical clearance was taken from the institute ethical committee. Written Informed consent was obtained from the participants stating the purpose of the study.

RESULTS

The result was divided in II Sections:

Section –I: Analysis of data related to knowledge on simulation-based teaching-learning among nursing students.

Section II: Analysis of data related to nursing students attitude toward simulation-based teaching learning among nursing students.

Section – III: Analysis of data related to Association of Socio Demographic Variables with Attitude towards SBL among Participants

Section I

Analysis of data related to knowledge on simulation-based teaching-learning among nursing students.

N=89

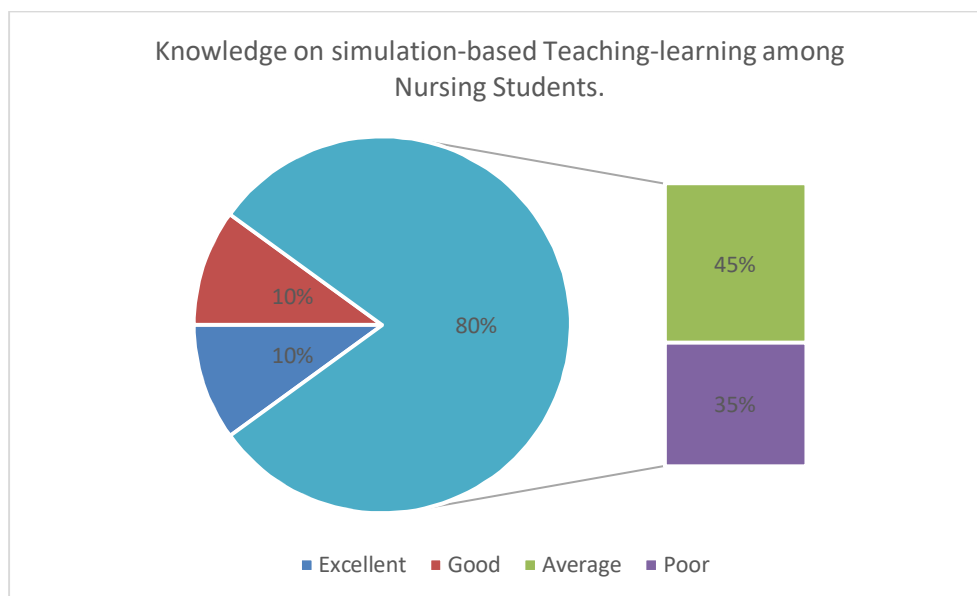


Fig 1: Description of data related to knowledge on simulation-based teaching-learning among nursing students.

According to Figure 1, the majority of individuals (80%) had Excellent Knowledge, 10% had Good Knowledge, 45% had Average Knowledge, and 35% had Poor Knowledge. Based on scores, the level of knowledge was categorised into four groups: Poor knowledge (0-8), Average knowledge (9-15), Good knowledge (16-22), and Excellent knowledge (23-30).

Section II

Analysis of data related to nursing students attitude towards Simulation-Based Teaching learning among Nursing Students. N-89

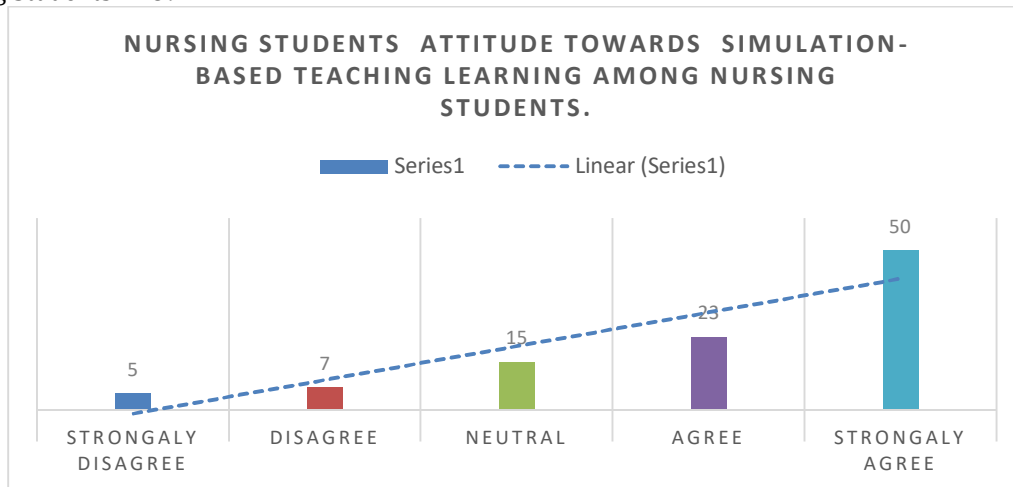


Fig 2: Description of data related to attitude on simulation-based teaching-learning

Figure 2 show that the majority of subjects—50%—strongly supported the simulation-based approach to teaching and learning. 23 percent of the participants agreed with the statement. 15% of respondents disagreed .Moreover, 52% of participants found it neutral. On simulation-based teaching and learning, 7% of subjects disagreed, and 5% of subjects disagreed entirely. The majority of participants firmly believe that collecting cord blood is vital.

Section III

Analysis of data related to association of attitude of nursing students with selected demographic factors.

N=89

Table 1: Analysis of data related to association of attitude of nursing students with selected demographic factors.

Socio Demographic Characteristics	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	P Value
Age						
< 18 Years	2	0	3	7	10	0.89
19-23Years	1	0	7	8	3	
24-28 Years	1	0	5	9	7	
4> 28 Years	1	1	6	7	10	
Gender						
Male	1	1	1	8	10	0.02
Female	1	1	4	31	30	
Course perusing						
GNM	0	0	6	7	10	0.67
B.Sc Nursing	0	0	7	8	3	
P.B.Sc Nursing	0	0	8	9	7	
M.Sc Nursing	0	0	6	7	10	
Year of Perusing current course						
I Year	2	4	3	8	7	0.87
II Year	3	3	3	7	8	
III Year	4	0	0	5	8	
IV Year	5	6	0	7	6	
Have you attended any Simulation based teaching learning course ,workshop, seminar conference						
Yes	0		10	7	5	0.03
No	0		11	20	36	

Table No. 3 shows that gender and previous experience were found to be significantly associated with attitudes toward simulation-based teaching and learning, with a p-value of <0.05. Participants who are female and those with prior experience have positive attitudes. The relationship between knowledge and socio-demographic factors was found using the chi-square test.

DISCUSSION

The nursing students expressed favourable opinions on SBL. The majority of participants demonstrated a good comprehension of and attitude toward SBL. The fact that there aren't many studies especially on SBL in India may be another reason why it isn't widely used in Indian nursing colleges. The integration of simulation into nursing curricula is expanding right now, yet the implementation of simulation is still quite imperfect. The infrastructure at very few nursing colleges is sufficient for simulation labs. Staff for that has been trained at fewer colleges.

A similar cross-sectional study involving 247 participants from the fourth, sixth, and eighth semesters as well as an internship was carried out in May 2013 at a private medical college in Mangalore, Karnataka, India. The study's findings showed that 72.5 percent of participants (179/247) had good opinions about SBL, scoring 92 to 118 out of a possible 118 points. The number of female students and senior MBBS students in the sixth and eighth semesters who had a favourable opinion of SBL was substantially higher ($P = 0.04$, $P = 0.05$). 90.7 percent of students (224/247) felt that simulations help them strengthen their clinical skills. As many as 29.6% (73/247) participants felt that simulated patients might take the place of real patients in practical exams. Similarly In the current study result majority of subjects—50%—strongly supported the simulation-based approach to teaching and learning [2].

Another study was done on the nursing community's knowledge of simulation-based learning in nursing education at a few Indian nursing institutions. In this study, the researchers used a quantitative research methodology to give participants in a two-day virtual training session a deep and comprehensive understanding of simulation-based nursing education. 203 nurses in total were chosen using a practical sampling technique. At the conclusion of the programme, a post-test was given, and each participant was asked for input on the training. According to the study's findings, the majority of the sample had high scores for their knowledge of simulation in nursing education, and the participants gave positive comments on the training [1-4]. Therefore, when compared to the findings of the current study, indicate that majority of individuals (80%) had Excellent Knowledge, 10% had Good Knowledge, 45% had Average Knowledge, and 35% had Poor Knowledge. Based on scores, the level of knowledge was categorised into four groups: Poor knowledge (0-8), Average knowledge (9-15), Good knowledge (16-22), and Excellent knowledge (23-30).

Another study comparing the retention of birthing care using simulation with traditional teaching methods seventy seven B.Sc. Nursing Fourth Year students from R.R. College of Nursing and SGT University Gurugram were chosen using the convenience sampling technique. According to the study's knowledge score, the simulation group's knowledge (23.05) was superior to that of the traditional instruction group (17.87) When it came to helping students retain their knowledge and abilities about childbirth care, simulation-based training was more successful than traditional methods of instruction. When compared to the findings of the current study, it is expected that nursing students' knowledge of simulation teaching and learning was ordinary and inadequate and there is need to conduct an training session for nursing students on simulation based learning [3-5].

CONCLUSION

The use of simulation-based learning in nursing education is particularly beneficial since it bridges the theoretical and practical knowledge gaps through creative teaching and learning methods. Both the learner and the teacher become interested in it. Prior to practicing on actual patients, students get to practise their operation on standardised patients.

Ethical Consideration: Institutional Ethical Committee approval was taken

Any Conflict of Interest: No

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