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A Study To Assess The Attitudes Towards Using Simulation Technology In Nursing Education Among 2nd Sem B.Sc Nursing Students At College Of Nursing SVIMS, Tirupati.

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Abstract

Education plays an important role in the globalization era as competition increasing in the education sector. Thus each college / University need to have added values to complete with other colleges/ Universities and win the competition in order to achieve this goal, they have increase un capabilities to meet the demands of the society for format education. The aim of the study was to assess the attitude towards using simulation technology in nursing education. Participants were recruited from 2nd semester B.Sc Nursing using a quantitative method in the College of Nursing SVIMS University during the period from 2022-2023. Kid Sim ATTITUDES questionnaire was used as a tool. The findings suggested that most of the student shows moderate attitudes towards using simulation technology in nursing education expressed about their agreed-strongly agreed regarding Relevance of Simulation in nursing. In general, this study has found that SVIMS, College of Nursing students has 78% moderate attitudes 16% had high attitude and 6% had low attitudes towards using simulation in their teaching and training. There was a statistically significant association between attitude and selected demographic variables like Education, Residence, Occupation of head of the family and area of living : $P \leq 0.05$ level respectively. Simulation remains an excellent bridge between theoretical framework and application.

Keywords: Attitudes, Nursing simulation

INTRODUCTION:-

Education plays an important role in the globalization era as competition increasing in the education sector. Thus each college / University need to have added values to complete with other colleges/ Universities and win the competition in order to achieve this goal, they have increase in capabilities to meet the demands of the society for format education. Higher education is a strategic sector that can generate high quality human resources. Integration of information technology is of an importance assumed for modern education toy for System as it acts an effective tool for the delivery of education to its users Education and research complements technology which in return provide innovations in learning methods.

Information technology has accelerated Process; broaden scope and access to education the uses of information technology system and application have gone through tremendous growth in the last decade. Twenty-one century is characterized with remarkable rapid advance in the field of nursing education.

Teachers and nurses face great difficulties and challenges in bridging the gap between laboratory teaching, simulations, and the transfer of information and skill to applied in the practice for providing direct nursing care to patients. It is clear that the simulation system provides good educational opportunities, but from the point of view of many, the place of direct clinical trials should not be replaced. Simulation is a rising subject recently, along with the methods and application techniques of simulation researching deeply, with digital computer the simulation to practice system or imaginary system has been with digital computer the simulation to practice system or imaginary system has been more and more recognized.

OBJECTIVES OF THE STUDY

1. To Assess the student attitudes towards simulation technology in nursing education among 2nd sem B.Sc nursing students in College of Nursing, SVIMS, Tirupati.

2. To find out the association between the level of attitude towards simulation technology in nursing education among 2nd sem B.Sc Nursing with their selected demographic variables.

METHODOLOGY

Methodology of research indicates the general pattern of organizing the procedures for gathering valid and reliable data for the problem under investigation.

Ethical considerations

The study was approved by the Principal SVIMS, College of Nursing, Tirupati. Formal permission was obtained from the Principal, class coordinator and consent was taken from the students before the study and the protection of their identities were ensured.

Research approach:

Research approach used in this study was qualitative research approach.

Research design:

The research design selected for the present-study was cross sectional research design.

By employing quantitative descriptive modes of enquiry, the authors attempt to illuminate the attitudes of the nursing students towards using simulation in nursing education as a dependent variable.

Variables of the study:

Dependent variable: nursing students attitudes towards using simulation in nursing education as a dependent – variable.

Independent – variable:

It is investigated the extent to which these trends were influenced by the students gender, semesters in which the student is enrolled is independent variables.

Setting of the study:

This study was conducted in a College of Nursing SVIMS University, Tirupati.

Population:

The population chosen for this study was 2nd semester B.Sc nursing students at College of Nursing, SVIMS University, Tirupati.

Sample:

- 2nd sem B.Sc nursing students were selected as sampling

Sample size:

- 100, 2nd sem B.Sc nursing students

Sampling technique:

- Convenient sample technique

Inclusion criteria:

- Students who were having experience in first sem, available during data collection and participate in the study

Exclusion criteria:

- Students who were not willing to participate in this study, not interested and not cooperative
- Absent during data collection

Research tool:

Kid Sim Attitudes questionnaire: it was a 30 item questionnaire proposed by sigalet et.al.(2012) as a tool to evaluate students attitudes towards, using simulation technology in nursing education the time required to complete the scale is approximately 15 to 20 minutes likert type scale that range from agree, strong agree and neutral and total score ranged between 30 to 90 there is no reverse coding . 30 questions divided under 5 sub components viz Relevance of simulation –6, Opportunities–7, Communication- 8, roles and responsibility -6 and simulation awareness -3.

Data collection:

Data was collected in the College of Nursing SVIMS, Tirupati among 2nd sem, B.Sc nursing students. 30 questions self administered questionnaires were given to each students and the researcher explained how to answer the question.

Statistical analysis:

Data management and analysis were performed using spss 25 frequency and chi-square for association and ANOVA.

Result:

Table : 1

Distribution of Demographic variables:

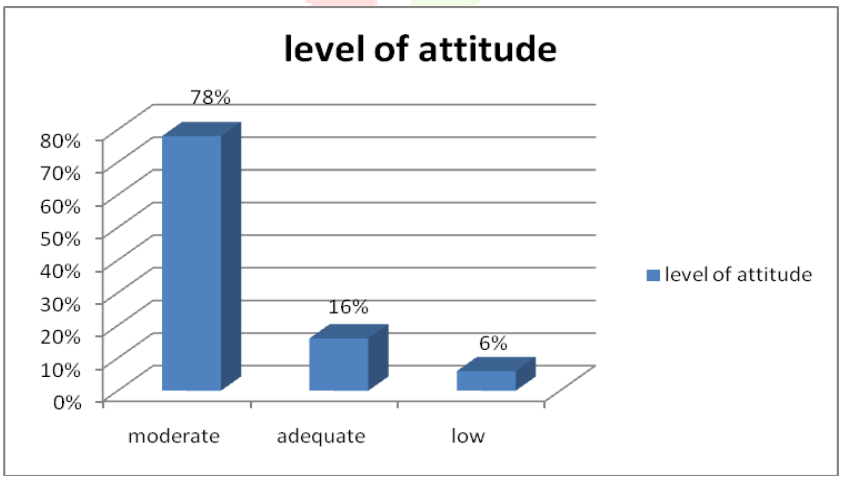
N = 100

Sl. No.	Demographic Data	Frequency
1.	Age	18 & 19 years
2.	Female	86
3	Education	87
4	Religion (Hindu)	75
5.	Un married	90
6.	Hostler	73
7.	Occupation of father Skilled workers, Shop & Market sale workers	28
8.	Father education High school certificates	29
9.	Living area Rural	57

There is a statistically significant association between attitude and selected demographic variables like Education, Residence, Occupation of head of the family and area of living: 0.05 level respectively.

2. Level of Attitude on simulation technology in Nursing Education:

N = 100



The 2nd sem B.Sc Nursing students had 78% of moderate attitude, 16% of adequate attitude and 6% of low attitude.

Table 3. Mean, Standard deviation, and percentage of student attitudes on Situation Awareness subscale

N = 100

Sl, No	Situation Awareness	N	Mean	Std. Deviation	%	Scores Weight
1	I will speak up if I perceive a Problem regardless of who might be affected	100	2.01	0.46	79	Strongly Agree
2	Patient care is improved when all team members have a shared understanding about the assessment and treatment	100	2.33	0.53	61	Strongly Agree
3	Team leaders should provide frequent summaries of patient findings to keep team members oriented to patient needs	100	2.11	0.60	63	Strongly Agree
Chi-square =22.165 Df= 4 :P value=0.001						

The above table show that attitudes of Nursing students were strongly agreed in five subscale; Relevance of simulation 83%, Opportunities 73%, Communication 73%, Roles and Responsibilities 74% and when the participants were asked about "situation awareness" majority responses 79%. Shows moderate attitude and statistically significance at p≤0.001 level. Over all for all 30 items in attitude scale nursing students opinion was strongly agree. Female students shows more positive attitude than the male attitude in Relevance of simulation at t-3.773, p≤0.000. In subcomponent Roles and Responsibilities comparison between student's attitudes according to their gender was at t-2.194, p≤0.031 respectively.

In this study the second objective result shows that there was a statistically significant association between attitude and selected demographic variables like Education, Residence, Occupation of head of the family and area of living : P ≤ 0.05 level respectively.

Discussion

The purpose of the study was to assess student's attitudes towards using simulation technology in nursing education. This study was conducted for the purpose of measuring the attitudes of nursing students towards simulation technology in nursing education. The study offers some important insights into nursing education modes. The most interesting finding was that majority of the participating students had positive attitudes toward the simulation system in teaching nursing skills. The students

believed that the simulation technology provided them with opportunities to develop their skills before applying caring the patients in real practice and they also believed that the simulation offer opportunities to learn with other health care professionals and increased understanding of their roles.

Conclusion:

The ability to simulate patients has become more sophisticated with great technological advances and virtual reality has become fairly real in terms of education and training nursing education and training is progressing remarkably and requires a high level of attention in assessment methods, such as problem solving and critical thinking. The simulation offers opportunities for education and training in a safe and secure environment. Current research is not enough to support the idea that simulation replaces clinical education, but simulation remains an excellent bridge between theoretical framework and application. This study has found that generally, female nursing students had positive attitudes towards using simulation in their teaching and training.

Recommendation

Nursing educators should be familiar with the ways in which simulation technology can be used as an important learning tool, being aware of its benefits and how to motivate students to master it. The use of appropriate scenarios may be of great benefit to the understanding and considerate of the skills of students in solving problems. Therefore, the nursing teachers should be very careful. in the adoption of the means of student's assessment needs and implement course plan and evaluation the outcome.

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