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## RESEARCH ARTICLE

# EFFECTIVENESS OF PANEL DISCUSSION ON NURSING INFORMATICS AMONG B.SC NURSING STUDENTS, SVIMS, COLLEGE OF NURSING, TIRUPATI, AP.

\*Dr. Sreelatha M. and Dr. Usha Kiran, C.

Associate Professors, Community Health Nursing & Obstetrics and Gynaecological Nursing, College of Nursing, SVIMS, Tirupati, Andhra Pradesh, India

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\*Corresponding author:  
Dr. Sreelatha M.

### ABSTRACT

A study to assess the on "Effectiveness of Panel Discussion on Nursing Informatics Among 4th Year B.sc Nursing Students, SVIMS, At Tirupati"

#### Objectives

- To assess the level of knowledge on nursing informatics among 4th Year B.Sc nursing students.
- To evaluate the effectiveness of panel discussion on nursing informatics among 4th Year B.Sc nursing students.
- To find the association between demographic variables and the level of knowledge regarding nursing informatics among 4th Year B.Sc students.

**Methodology:** By using Non-Probability Convenient sampling technique, a pre experimental research design was adopted, 50 B.Sc (N) 4<sup>th</sup> year students were taken as a samples. Data collection was done by using a self instructed questionnaire. **Results:** the results revealed that out of 50 students majority 20 (40%) had in adequate knowledge, 18(36%) had moderate adequate knowledge and only 12 (24%) had in adequate knowledge in pre test, where as in post test 33 students had adequate knowledge, 12 (24%) had moderate knowledge and only 5(10%) had in adequate knowledge.

**Conclusion:** Due to increase in day to day advancement every field is gaining its importance even the educational field also gaining its importance in order to improve the educational status and to increase the concentration of students it is needed to change the method of teaching and panel discussion had proven to be one of the best method of imparting knowledge.

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## INTRODUCTION

Health care is delivered in dynamic, complex, and ever changing environment. Changes in medical treatments, regulations for federal and state reimbursement and public knowledge create growing demands for information. Computer has moved from "nice to know" luxury item to "need to know". On average medical/ surgical nurse spent 34% of their time handling information<sup>1</sup>. Nurse informatics specialist is the new concept in India moreover it's a kind of challenge in the highly populated All India Institute of medical sciences, a quaternary care premium medical institute in India to digitalise all the medical / administrative paper work. The paper emphasizes on nature of duties for nursing Informatics practioner, desirable skills, challenges and finally implementing nursing Informatics concept in India, in All

India Institute of Medical sciences. For the first time the nursing informatics concept is used and implemented in India, and I am the part of this concept.<sup>2</sup> I will be further sharing my experiences of Nursing informatics practice in India. Information systems used in health care include the people, structures, processes, and manual as well as automated tools that collect, store, interpret, transform, and report practice and management information. At present, nursing informatics is an emerging field of study. National nursing organizations support the need for nurses to become computer literate and vested in the dynamics of nursing informatics.<sup>5</sup> We are at a transition period. Becoming educated in nursing informatics is, for the most party, a self-directed and independent endeavor. Programs that offer basic and further education in nursing informatics are beginning to spring up around the globe, but many more are needed to provide easy access for motivated nurses.

## NEED FOR THE STUDY

1966 “Informatika” Sackett and Erdley (2002), a Russian Scientist in 1966 coined the term informatika and defined it as “The discipline of science which investigates the structures and properties (not specific content) of scientific information.” (Collen as cited in Sackett & Elderly). 1970 “Informatique” A Frenchman, in the 1970’s, Francois Gremy is credited with coining the term informatique medical, translated to medical informatics It was defined as the informational technologies which are concerned with patient care and the medical decision making process<sup>11</sup>. Another definition stated that medical informatics is the complex data processing by the computer to create new information. 1980 “Nursing Informatics” The term “nursing informatics”, was probably used and defined by Scholes and Barber in 1980 in their address to the MEDINFO conference that year in Tokyo. Health- care informatics, however, is truly interdisciplinary. In its truest form it focuses on the care of patient, not a specific discipline. Thus although there are specific bodies of knowledge for each health care profession, nursing, dentistry, dietetics, pharmacy, medicine, etc.. They interface at the patient.<sup>12</sup>

Until 1948, primary care remained in the home. With the development of Hill-Burton Act of 1948, money was provided for the building of hospitals and promoted a catalyst for change in healthcare. In the 1960’s, Medicare and Medicaid provided reimbursement for services to many individual patients and the health insurance industry grew. This provision of funding allowed many new innovations: new drugs, advanced surgical procedures, new technologies and equipment, and sophisticated diagnostic procedures. All of which led to the development of medical specialties, each treating a different part of the patient and creating its own records for what patient (Thede, 2003). Nursing informatics impacts nurses today. Today, evolving standards of practice increase the nurse’s accountability. The malpractice crisis has strengthened accountability and increased emphasis on complete and detailed nursing documentation. Changes in reimbursement methods are affecting nursing care delivery. Cost containment and consumerism place additional pressures on not only the individual nurse but also the entire nursing profession.

## MATERIALS AND METHODOLOGY

**Research approach:** Pre experimental one group pre test post test research design.

**Setting of the study:** College of Nursing, SVIMS, Tirupati.

**Study population:** Students studying 4<sup>th</sup> year B.Sc Nursing.

**Study sample:** Students studying 4<sup>th</sup> year B.Sc Nursing, in college of nursing, SVIMS, Tirupati.

**Sample size:** 50 students were taken.

**Sampling technique:** Non – Probability Convenient sampling technique was adopted for the present study.

### Criteria for sample selection

#### Inclusion criteria

#### Students who are

- Willing to participate in the study
- Available at the time of data collection
- 4<sup>th</sup> year B. Sc Nursing

#### Exclusion criteria

#### Students who are

- Not available at the time of study
- Not willing to participate
- Studying in other than SVIMS college
- 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year B. Sc nursing

## DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool acts as an instrument to collect data from the respondent of the study (Polit and Beck, 2004) and at the same time it adds to the body of general knowledge in the discipline, that enables to collect the data or to answer the researcher question or to test hypothesis and evaluate outcome of particular collection. The researcher developed the tool based on the objectives of the study. A closed ended Structured Questionnaire is used to collect the necessary data from the samples. The same tool was developed in English. The tool consists of I & II sections.

### Section-I: Socio-demographic data

It consists of variables such as age, gender, religion, monthly income of the family, area of residence, type of family, year of study, educational status of the father and mother, occupational status of father and mother, source of information about informatics.

### Section-II: Structured Questionnaire on Knowledge regarding nursing informatics

Structured questionnaire consists of items to assess the knowledge regarding nursing informatics. All the items were multiple choice questions, A total of 42 each correct answer carries 1 mark and wrong answer carries 0 mark the maximum score was 42.

**CONTENT VALIDITY:** Content validity refers to which the items of an instrument adequately represents the universe of the content for the content of being measured. The tool was submitted to 9 experts, Tirupati. Based on the suggestions given by the experts the necessary modifications of the tool were made and final draft was prepared and incorporated in pilot study.

**RELIABILITY OF THE TOOL:** Reliability of the tool is defined as the expert to which the important fields the same results in repeated measures. It concerns with stability internal consistency and homogeneity. It was conducted in SVIMS, Tirupati. To establish the reliability of Cronbach’s Alpha Reliability method was used. Tool was administered to 5 members who were not included in the pilot study. The reliability score was  $r=0.96$  which means tool was highly reliable.

**PILOT STUDY:** The pilot study is small version of traits runs done in preparation for major studies, formal permission was obtained from the school authority. Pilot study was conducted on 5 students were taken from Chaitanya college of Nursing, Tirupati who fulfil the exclusion criteria were selected, obtained consent from them by establishing good rapport and the sample for pilot study was based on non-probability convenience sampling technique. Investigator administered the questionnaire to assess knowledge regarding nursing informatics among 4<sup>th</sup> year Nursing students and instructions were given to them to answer questionnaire frankly. After the questionnaire was answered panel discussion done to the participants statistical analysis was done by using descriptive and inferential statistics. Findings of the study revealed that the tool was feasible and practicable to conduct the study.

**PROCEDURE FOR DATA COLLECTION:** The investigator initially establishes rapport with the study subjects, then the questionnaire was used to collect data from Nursing students. The time limit of 30 minutes was taken, by the investigator to each sample. The investigator maintained confidentiality and had no difficulty in collecting the data.

**PLAN FOR ANALYSIS:** The study was planned to analyze based on the study objectives with the help of descriptive and inferential statistics.

## RESULTS

### Frequency of level of Knowledge on nursing informatics among B. Sc nursing students in pre test

Level of Knowledge	Pre-test knowledge	
	Frequency (f)	Percentage (%)
Inadequate (<50%)	20	40
Moderate (51-75%)	18	36
Adequate (>75%)	12	24
Total	50	100

Table: 2 the above table shows the distribution of knowledge among nursing students regarding nursing informatics, majority 20 (40%) had in adequate knowledge, 18(36%) had moderate adequate knowledge and only 12 (24%) had in adequate knowledge.

### EFFECTIVENESS OF LEVEL OF KNOWLEDGE ON NURSING INFORMATICS AMONG 4<sup>TH</sup> YEAR BSC NURSING STUDENTS IN PRE TEST AND POST TEST

Level of Knowledge	Pre-test knowledge		Post-test knowledge	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Inadequate <50%)	20	40	5	10
Moderate (51-75%)	18	36	12	24
Adequate (>75%)	12	24	33	66
Total	50	100	50	100

Table: 3 the above table shows the effectiveness of panel discussion, pre test shows majority 20 students had in adequate knowledge, 18(36%) had moderate adequate knowledge and only 12 (24%) had in adequate knowledge. And in post test shows 33 students had adequate knowledge, 12 (24%) had

moderate knowledge and only 5(10%) had in adequate knowledge

### Mean & Standard deviation of pre test and post test scores of BSc nursing students

Level of Knowledge	Pre test		Post test		t-table
	Mean	Standard deviation	Mean	Standard deviation	
	0.6	0.06	0.78	0.15	1.6766*

Table: 4 shows the mean and standard deviation of pre test as 0.6 and 0.06 and mean and standard deviation of post test was 0.78 and 0.15 respectively. T- value was 1.6766 which is significant at 0.05 level.

## DISCUSSION

This chapter deals with discussion part to the results from statistical analysis based on the study, the reviewed literature, hypothesis, which was selected for the study. The present study was conducted to assess the effectiveness of panel discussion on nursing informatics among 4<sup>th</sup> year B.Sc Nursing students.

### Objectives of the study

- To assess the level of knowledge on nursing informatics among 4th Year B.Sc nursing students.
- To evaluate the effectiveness of panel discussion on nursing informatics among 4th Year B.Sc nursing students.
- To find the association between demographic variables and the level of knowledge regarding nursing informatics among 4th Year B.Sc students

**The major findings of the study:** The findings of the study was the panel discussion had a greater impact among the students which was clearly evident by the results it revealed that the majority of the students gained the knowledge on nursing informatics after panel discussion. Among 50 students 33 students had adequate knowledge after post test. The first objective of the study is to assess the level of knowledge on nursing informatics, majority 20 (40%) had in adequate knowledge, 18(36%) had moderate adequate knowledge and only 12 (24%) had in adequate knowledge. The second objective of the study to evaluate the effectiveness of panel discussion, which can be evident that majority 33 students had adequate knowledge, 12 (24%) had moderate knowledge and only 5(10%) had in adequate knowledge, the third objective of the study is to find the association between demographic variables and the level of knowledge and found that religion and source of information shows significant relationship at  $p < 0.05$  level and year of study shows significance at  $p < 0.01$  level.

## CONCLUSION

In this study knowledge among nursing students 20 (40%) had in adequate knowledge, 18(36%) had moderate adequate knowledge and only 12 (24%) had in adequate knowledge. These findings suggested that extensive health education programmes were needed to bring awareness among nursing students .So nursing institutions need to encourage to improve knowledge among student nurses regarding nursing

informatics by organizing structured teaching programs in schools to bring down the mortality and morbidity to make nation healthy.

## REFERANCES

- Nursing management and administration, JAYPEE brothers medical publications, 1<sup>st</sup> edition, type: paper back, new condition 2013.
- Potter, perry, stockert, hall, suresh k. sharma, 2<sup>nd</sup> south asia edition, Elsevier publications, 2017.
- Audrey bermon, shirlee j. Snyder, GERALYN, 10<sup>th</sup> edition, peason publications, 2018, nursing fundamentals of nursing.
- nursing education. Front cover. B. T. Basavanthappa. Japee brothers, medical publications, 2003.
- Kritsotakis G, Andreadaki E, Linardakis M, Manomenidis G, Bellali T, Kostagiolas P. Nurses' ehealth literacy and associations with the nursing practice environment. *Int Nurs Rev.* 2021 May 18. doi: 10.1111/inr.12650. Epub ahead of print. PMID: 34004022.
- Farzandipour M, Mohamadian H, Akbari H, Safari S, Sharif R. Designing a national model for assessment of nursing informatics competency. *BMC Med Inform DecisMak.* 2021 Feb 2;21(1):35. doi: 10.1186/s12911-021-01405-0. PMID: 33531023; PMCID: PMC7852364.
- Azami M, Sharifi H, Alvandpur S. Evaluating the relationship between information literacy and evidence-based nursing and their impact on knowledge and attitude of nurses working in hospitals affiliated to Kerman University of Medical Sciences on medication errors. *J Family Med Prim Care.* 2020 Aug 25;9(8):4097-4106. doi: 10.4103/jfmprc.jfmprc\_5\_20. PMID: 33110816; PMCID: PMC7586513.
- Khezri H, Abdekhoda M. Assessing nurses' informatics competency and identifying its related factors. *J Res Nurs.* 2019 Nov;24(7):529-538. doi: 10.1177/1744987119839453. Epub 2019 Apr 16. PMID: 34394572; PMCID: PMC7932237.
- Mansoori MH, Benjamin K, Ngwakongnwi E, Al Abdulla S. Nurses' perceptions of the clinical information system in primary healthcare centres in Qatar: a cross-sectional survey. *BMJ Health Care Inform.* 2019 Aug;26(1):e100030. doi: 10.1136/bmjhci-2019-100030. PMID: 31395596; PMCID: PMC7062336.
- Moghaddasi H, Rabiei R, Asadi F, Ostvan N. Evaluation of Nursing Information Systems: Application of Usability Aspects in the Development of Systems. *Healthc Inform Res.* 2017 Apr;23(2):101-108. doi: 10.4258/hir.2017.23.2.101. Epub 2017 Apr 30. PMID: 28523208; PMCID: PMC5435582.

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