



## Research Article

## Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Digital Documentation among Nursing Students


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### Abstract

**Background:** In the healthcare industry, patient care is important, and it is achieved by good patient communication. Usually, doctors provide handwritten prescriptions and maintain each patient's case file physically. Traditional documentation scatters patient health records, which directly impacts patient care. Hence, adopting a Modern digital document management System solves issues such as missed records, manual mistakes, and delays in clinical decisions.

### Objectives:

1. To assess the knowledge of Nursing students regarding Digital documentation through pretest
2. To evaluate the effectiveness of STP regarding knowledge on Digital documentation through a post-test among Nursing students.
3. To find an association between post-test knowledge scores of Nursing students regarding Digital documentation and these selected socio-demographic variables:

**Methodology:** A quantitative approach with a descriptive design was used for the study. 100 sample selected by using the purposive sampling technique.

**Results:** The study results show that the overall Knowledge among 100 nursing students 49(49%) had poor knowledge, 45 (45%) had average knowledge and only 6(6%) had good knowledge, and after intervention 2 (2%) had poor knowledge, 56(56%) had average Knowledge and 42(42%) had good knowledge regarding digital documentation.

**Conclusion:** The findings suggest that the STP was effective in enhancing knowledge regarding digital documentation among nursing students.

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**KEYWORDS:** Digital Documents, STP, Nursing Students.

## 1. INTRODUCTION

Digital documentation refers to the process of recording, storing, and managing patient-related nursing information using electronic devices or digital systems such as computers, tablets, electronic health records (EHRs), or hospital information systems by nursing students. In this study, it specifically denotes the knowledge aspects assessed through a structured questionnaire before and after the Structured Teaching Programme. In recent years, India has accelerated its shift toward digital healthcare systems through initiatives such as the National Digital Health Mission (NDHM), hospital information systems, and e-governance in healthcare settings. Nurses, being the largest group of healthcare professionals, play a critical role in ensuring the accuracy and completeness of digital records. Effective digital documentation prevents medical errors, supports evidence-based practice facilities' timely reporting, and strengthens the legal protection of both patients and nurses. A Structured Teaching Programme (STP) is an organised educational intervention designed to provide systematic knowledge on a specific topic. It ensures clarity, guided learning, and standardisation of content. When applied to digital documentation, an STP can enhance students' understanding of EHR components, data entry procedures, confidentiality measures, advantages, limitations, and the professional responsibilities associated with digital record-keeping.

## 2. REVIEW OF LITERATURE

Miao et al. (2021) digital documents facilitate more efficient Information Management, enhance accessibility, and support the development of a paperless culture within academic institutions. The authors argue that digitisation leads to improved operational efficiency, easier document retrieval, and streamlined Communication among faculty and students. Bowers et al. (2020) identify key barriers such as resistance to change, initial costs of technology implementation, and the need for training. These challenges can impact the overall effectiveness of the transition and necessitate careful planning and support to ensure successful implementation. Sharma et al. (2020) suggest that such policies provide a Supportive framework for digitisation efforts in educational institutions by encouraging investment in technology and fostering a culture of innovation.

## 3. OBJECTIVES

1. To assess the knowledge of Nursing students regarding Digital documentation through pretest
2. To evaluate the effectiveness of STP regarding knowledge on Digital documentation through a post-test among Nursing students.
3. To find an association between post-test knowledge scores of Nursing students regarding Digital documentation and these selected socio-demographic variables:

## 4. HYPOTHESIS

**H<sub>1</sub>:** There will be a significant Increase in the mean post-test knowledge scores of Nursing Students & studing in selected nursing colleges at Bareilly regarding Digital documentation.

**H<sub>2</sub>:** There will be a significant association between post-test knowledge Scores regarding digital documentation and the selected socio-demographic variables among Nursing students working in selected Nursing Colleges at Bareilly (UP).

## 5. RESEARCH METHODOLOGY

**Research Approach:** In view of the nature of the problem selected for the study and the objective to be accomplished, an evaluative approach was considered as an appropriate research approach for the present study.

**Research design:** The research design used for the study was a one-group pre-test post-test research design.

**Setting:** The present study was conducted in Jyoti College of Management Science and Technology (Nursing department) in Bareilly (UP).

**Sample:** The target population in this study was the nursing Students. The accessible population in this study was the Nursing students studying in Jyoti Nursing College, Bareilly (UP).

**Sample Size:** The sample size consists of 100 Nursing students studying in Jyoti Nursing College, Bareilly (UP)

**Sample technique:** Sampling refers to the process of selecting a portion of the population to represent the entire population. The investigator had utilised a non-probability sampling technique in which the purposive sampling technique had been used for the selection of the subjects.

### Criteria For the Selection of The Sample

#### Inclusion Criteria:

- Students who are available at the time of data Collection
- Students who are willing to participate in the study.
- Students who are enrolled under Atal Bihari Vajpayee University and up state medical faculty.

#### Exclusion Criteria

- Students who are on leave at the time of data Collection.
- Students who have already been a part of a similar seminar/ workshop, etc.
- Students who do not understand Hindi and English

**Data Collection Instrument-** It is divided into 2 sections.

- **Section A:** Sociodemographic variables
- **Section B:** Question on knowledge related to digital document, with the highest score being 22, and the lowest score being 0. Scoring- Each question has one correct option, and each correct response is assigned one mark, and the wrong answer carries zero marks.
- **Statistical analysis:** The data were analysed by using both descriptive and inferential statistics.

**6. RESULT**

- This section describes the demographic characteristics of the sample under study. The data obtained describes the characteristics pertaining.

**Table 1:** Demographic profile of the subjects N=100

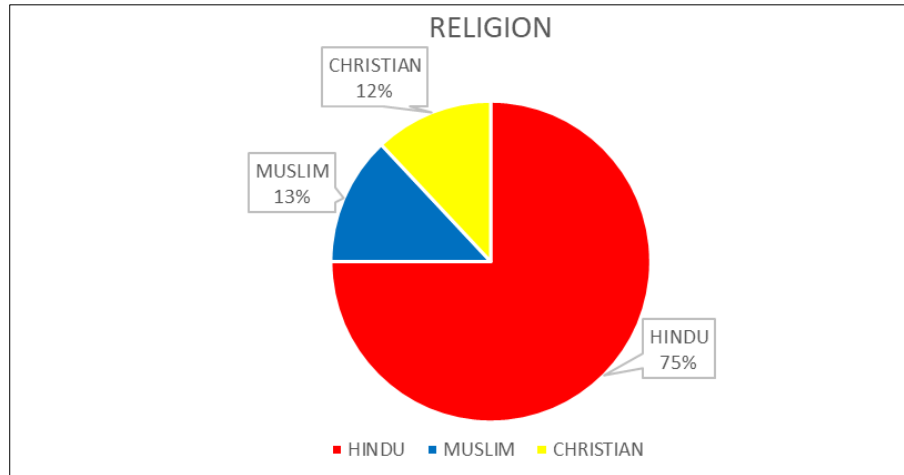
Age		
Age	Frequency	Percent
18-20	49	49.0
21-23	38	38.0
24-26	6	6.0

>26	7	7.0
Total	100	100.0

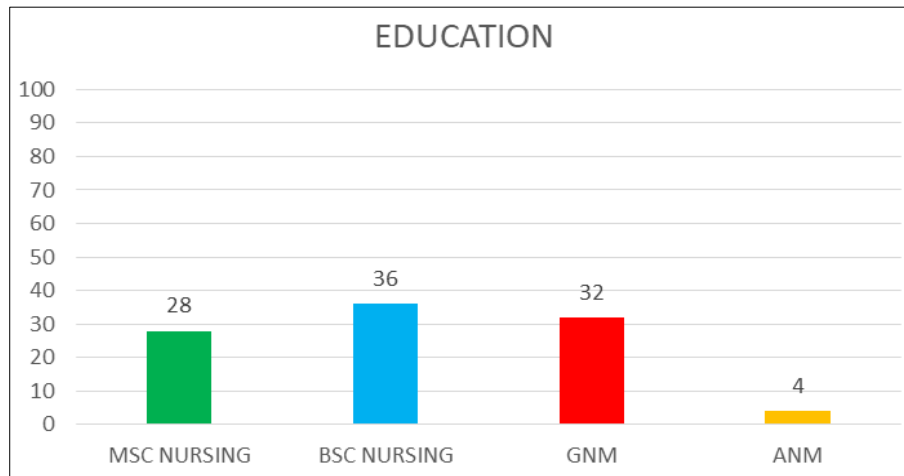
n=100

Sex		
Sex	Frequency	Percent
Male	30	30.0
Female	70	70.0
Total	100	100.0

n=100



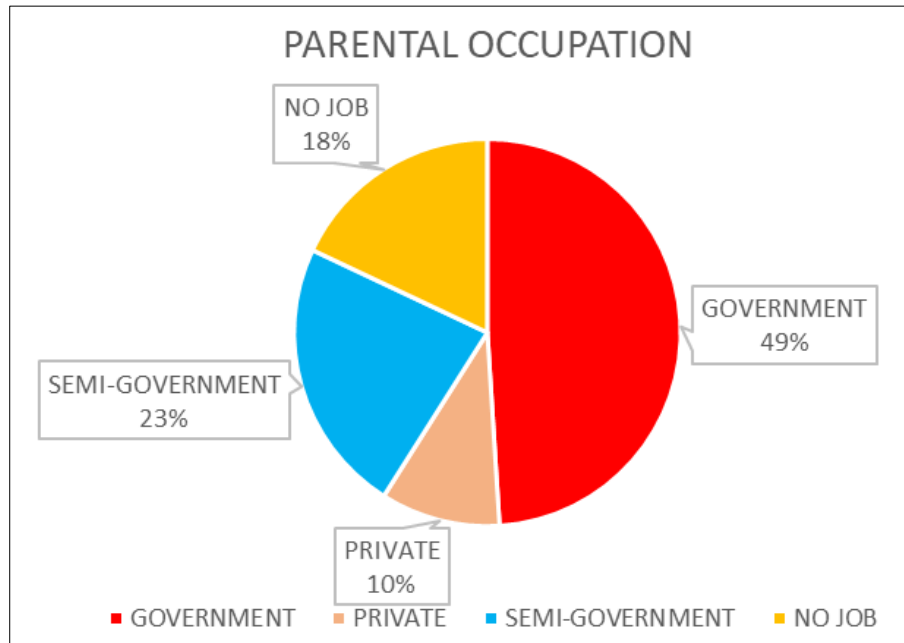
n=100



n=100

Family structure		
Family Structure	Frequency	Percent
Nuclear	52	52.0
Joint	48	48.0
Total	100	100.0

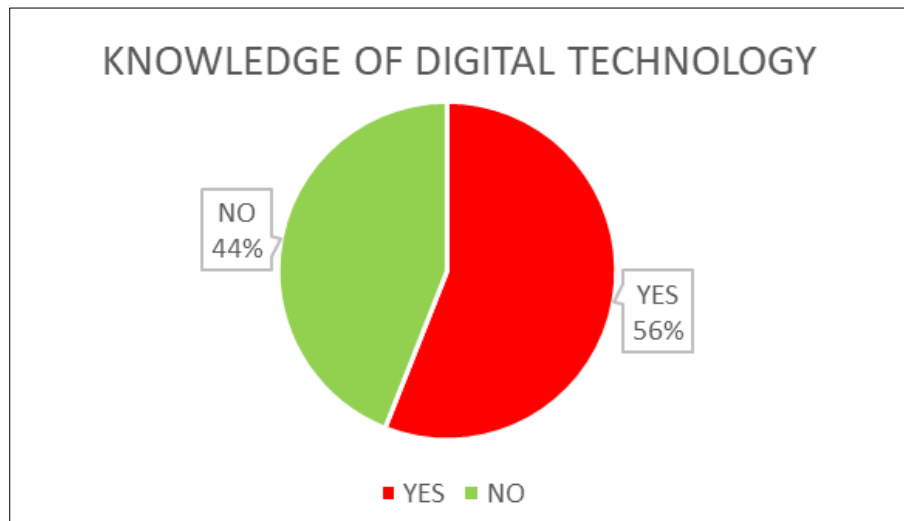
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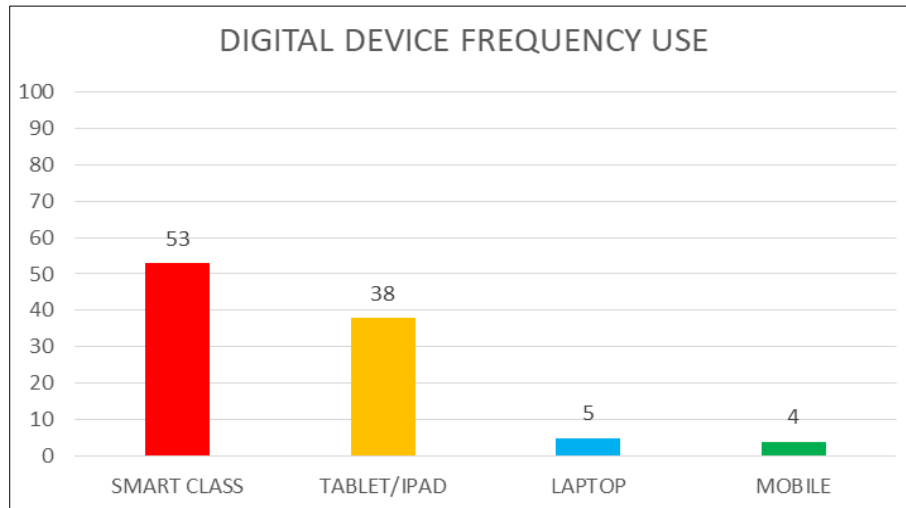
n=100

Place of Residence		
Place of Residence	Frequency	Percent
Urban	64	64.0
Rural	36	36.0
Total	100	100.0

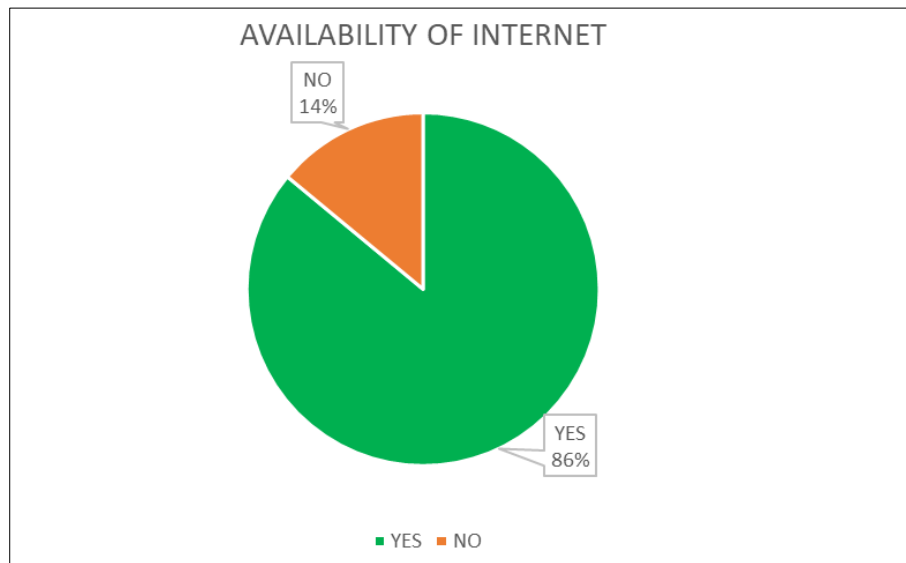
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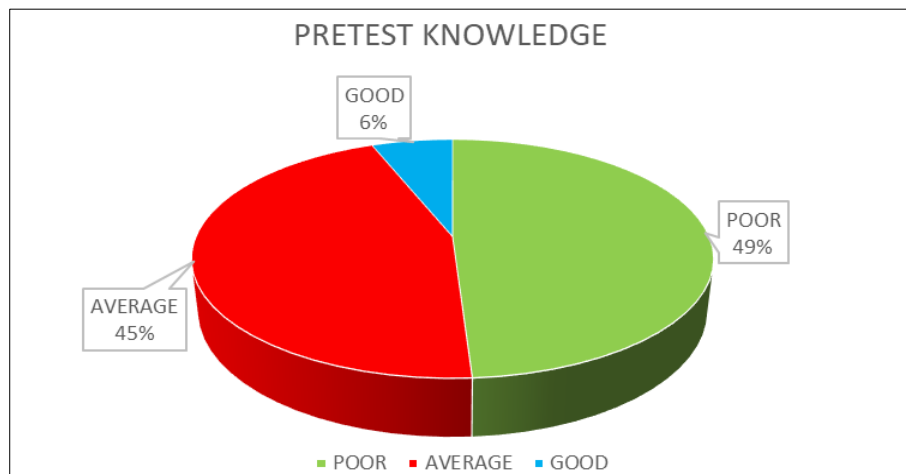
n=100



n=100

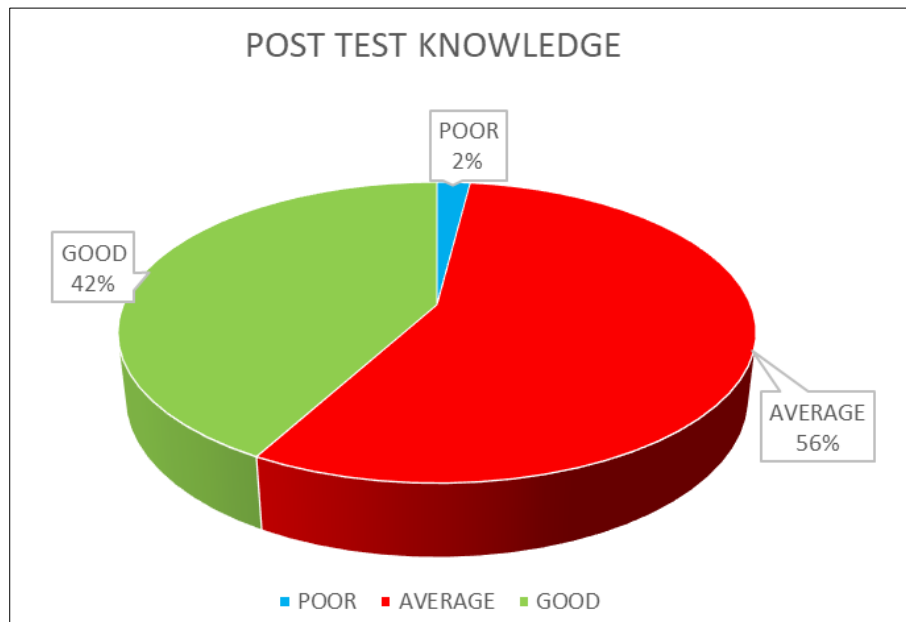


Frequency and percentage distribution of the subject based on pre-test and post-test knowledge score, n=100



n=100

Pre test						Post test			
Group	Category	F	%	Mean	SD	F	%	Mean	SD
Experimental (n=100)	Poor	49	49.0	1.57	0.607	2	2.0	2.40	0.531
	Average	45	45.0			56	56.0		
	Good	6	6.0			42	42.0		



Mean difference, Paired T test and p-value of the difference between pre and post Knowledge score of Experimental Group n= 100

Groups	Mean difference	Paired t Test	P value
Experimental group	1.12	0.000***	0.000

\*\*\* Significant at 0.001 level

Association between post-test knowledge scores n=100

Variables	Level of knowledge						Chi square	df	P value
	Poor		Average		Good				
	f	%	f	%	f	%			
<b>Age</b>									
18-20	2	2	27	27	20	20	3.27	6	.77
21-23	0	0	20	20	18	18			
23-26	0	0	4	4	2	2			
>26	0	0	5	5	2	2			
<b>Religion</b>									
Hindu	2	2	40	40	33	33	3.28	4	.522
Muslim	0	0	10	10	3	3			
Christian	0	0	6	6	6	6			
<b>Family Structure</b>									
Nuclear	2	2	11	11	32	32	39.3	6	.000***
Joint	0	0	45	45	10	10			
<b>Sex</b>									
Male	0	0	16	16	8	8	2.80	6	.832
Female	2	2	40	40	34	34			
<b>Education</b>									
MSC Nursing	1	1	25	25	2	2	30.03	6	.000***
BSC Nursing	1	1	11	11	24	24			
GNM	0	0	20	20	12	12			
ANM	0	0	0	0	4	4			
<b>Parental Occupation</b>									
Government	2	2	32	32	15	15	30.7	6	.000***
Private	0	0	5	5	5	5			
Semi Government	0	0	3	3	20	20			
No Job	0	0	16	16	2	2			

Place of Residence									
Urban	1	1	38	25	25				
Rural	1	1	18	18	17	17	.98	4	.912
Knowledge of Digital Technology									
Yes	2	2	27	27	27	27			
No	0	0	29	29	15	15	6.42	6	.377
Digital Device Frequency Use									
Smart class	1	1	24	24	28	28			
Tablet/iPad	1	1	26	26	11	11			
Laptop	0	0	4	4	1	1			
Mobile	0	0	2	2	2	2	6.59	6	.360
Availability of Internet									
Yes	2	2	46	46	36	36			
No	0	0	10	10	6	6	4.36	6	.627

\*\*\* Significant at 0.000 level (Education, Parental Occupation and Family Structure have an association)

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**CONFLICT OF INTEREST:** None declared

## REFERENCES

- Adrita MM, Brem A, O'Sullivan D, Allen E, Bruton K. Methodology for data-informed process improvement to enable automated manufacturing in current manual processes. *Applied Sciences*. 2021;11(9):3889.
- Ahmed Z, Mohamed K, Zeeshan S, Dong X. Artificial intelligence with multi-functional machine learning platform development for better healthcare and precision medicine. *Database*. 2020;2020:baaa010. doi:10.1093/database/baaa010.
- Asmirajanti M, Hamid AYS, Hariyati RTS. Nursing care activities based on documentation. *BMC Nursing*. 2019;18:1-5.
- Kamil H, Rachmah R, Wardani E. What is the problem with nursing documentation? Perspective of Indonesian nurses. *International Journal of Africa Nursing Sciences*. 2018;9:111-114.
- Raija K, Smolander N, Isokoski A, Gogova T, Hyrkäs K, et al. *DigiNurse Model: A New Approach to Digital Coaching for Nursing Students*. Tampere: Tampere University of Applied Sciences; 2021.
- <https://www.recordnations.com/articles/guide-improving-document-management-system-dms/>
- <https://www.techradar.com/news/top-5-best-document-management-systems>
- <https://uottawa.scholarsportal.info/ottawa/index.php/ILOB-OLBI/article/view/1105/955>
- [https://en.m.wikipedia.org/wiki/Document system#Components](https://en.m.wikipedia.org/wiki/Document_system#Components)

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