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A pre-experimental study to assess the effectiveness of structured teaching program on knowledge regarding forensic nursing among nursing students of selected nursing colleges of district Mohali, Punjab in the year 2022-2023

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Abstract
Introduction: Forensic nursing is the application of the nursing process to the public or legal proceedings and the application of forensic healthcare in the scientific investigation or death related abuse and violence criminal activity liability and accidents, with the establishment of forensic nursing the role of nurse was changed to addition of the law and healthcare specialty. However, the main goal for the creation of forensic nursing was not to promote future nurses becoming investigators but the goal is to work with possible terms and make sure the proper medical facilities, but also forensic tasks are accomplished.
Aim of study: The aim of the study is to improve the knowledge regarding forensic nursing among the nursing students of selected nursing colleges of District, Mohali.
Design and Methods: A quantitative approach and pre-experimental, one group pre-test post-test design was used to carry out the study. The area selected for the study was selected Nursing Colleges of District, Mohali. A convenient sampling technique was used to select 100 nursing students to improve their knowledge regarding forensic nursing through the socio-demographic profile, self-structured questionnaire and structured teaching programme. Collected data was analyzed by using descriptive and inferential statistics.
Result: The findings of the study showed that a was significant difference between the pre-test and post-test knowledge score of nursing students, the mean comparison of knowledge scores in pre-test and post-test demonstrates the effectiveness of structured teaching programme the mean knowledge score increased from 12.76+_2.978 in the pre-test to 26.90+_1.992in post- test marking a mean difference of 14.140. The result of the intervention proved that statistically significantly higher knowledge was acquired by nursing students of Mohali regarding forensic nursing. Hence, we accept the research hypothesis.
Conclusion: It shows that structured teaching programme was effective in improving knowledge regarding forensic nursing. Therefore, motivation and information were the felt need of nursing students. Our findings highlight the need for more intensive efforts to promote proper and effective knowledge.

Keywords: Structured teaching programme, forensic, forensic nursing, knowledge effectiveness

Introduction
Forensic nursing is the application of the nursing process to the public or legal proceedings and the application of forensic healthcare in the scientific investigation or death related abuse and violence criminal activity liability and accidents, with establishment of forensic nursing the role of nurse was changed to addition of the law and healthcare specialty. But the main goal for the creation of forensic nursing was not to promote future nurses becoming investigators but the goal is to work with possible terms and make sure the proper medical facilities but also forensic tasks are accomplished [1]

According to IAFN, Forensic nursing is defined as the global practice of nursing that result when health care and legal system intersect.

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A forensic nurse is a registered or advance practice nurse who has received specific education and training forensic nurses provides specialized care for patients who are experiencing acute and long-term health consequences associated with the victimization or violence and have unmet evidentiary needs relative to having been victimized or accused of victimization. In addition, forensic nurse provides consultation and testimony for civil and criminal proceedings relatives of practice nursing practices, care given, and opinions regarding findings. Forensic nursing care is not separate and distinct from other form of medical care, but rather integrated into the overall care needs of individual patients [2].

Need of study

Teach the students about forensic nursing and provide information regarding forensic nursing and scope of forensic nursing nowadays. The studies recalled that there is lack of knowledge among nursing students regarding forensic nursing mostly nursing students are unaware about forensic guidelines role of nurses in forensic cases care of victim's collection and preservation of evidence and their importance in legal cases. So, and their importance in legal cases so there is need to provide knowledge regarding forensic nursing to nursing students.

It helps to gather knowledge regarding forensic nursing and provide awareness well over the world among nursing students it will provide knowledge regarding the latest financing nursing guidelines and help to improvement in knowledge the present study will help to introduce the forensic nursing in college's area and enhance the knowledge score of nursing students.

Problem statement

A Pre-Experimental Study to assess the effectiveness of structured teaching program on knowledge regarding forensic nursing among students of Selected Nursing College of District, Mohali, Punjab.

Aim of study

The aim of the study is to improve the knowledge regarding forensic nursing among the nursing students of selected nursing colleges of District, Mohali.

Objectives

- To develop the tool to assess the pre-test knowledge regarding forensic nursing.
- To develop and implement structured teaching programme on forensic nursing.
- To assess the pre-test knowledge regarding forensic nursing.
- To compare pre-test and post-test knowledge score.
- To find out the association between post-test knowledge score with selected demographic variables.
- To disseminate the findings.

Operational Definitions

- **Effectiveness:** It refers to power of bringing changes in knowledge regarding forensic Nursing.
- **Structured teaching program:** It refers to a pre-planned teaching program prepared on forensic Nursing.
- **Knowledge:** It refers to awareness regarding forensic nursing.

- **Forensic Nursing:** Forensic nursing is a nursing specialty that integrates nursing and the legal system to bridge the gap between the health care system and the criminal justice system.

Hypothesis

H_1: There was a significant difference between the pre-test mean knowledge score and the post-test mean knowledge score of nursing students.

H_2: There was a significant difference between the pre-test mean knowledge score and the post-test mean knowledge score of nursing students.

Methodology

Research design

Research Design is a blueprint to conduct a research study, which involves the description of the research approach, study setting, sampling size, sampling technique, tool, and method of data collection and analysis to answer specific research questions or for testing research hypothesis. The design for the present study was a pre-experimental design.

Research setting

The study setting is the location in which the research is conducted. This study was conducted at selected nursing colleges of district Mohali, Punjab.

Target population

It is the entire population in which the researchers are interested and to which they would like to generalize the research findings. In the present study, the population was 100 nursing students from courses of selected nursing colleges of District Mohali, Punjab.

Sample size

The sample is a part or subset of the population selected to participate in a research study, the total sample size of the present study was 100 Nursing students of selected nursing colleges of district Mohali, Punjab.

Sample technique

Convenient sampling technique in which subjects are chosen from a group who are easy to contact and reach, was used to select the sample for the present study.

Inclusive criteria

- Students who were present at the time of data collection.
- Students who were willing to participate in the study.
- Both male and female students.

Exclusive criteria

- Students who were absent at the time of data collection.
- Students who were not willing to participate.

Selection of research tool

The tool was formulated according to the needs of the study.

Socio-Demographic Performa

Datasheet deals with demographic variables such as age, gender, source of information, previous knowledge, educational status of mother and father, and occupation of mother and father. Habitat, socio-economic status.

Self-Structured Questionnaire
The data was collected through a well-prepared multiple-choice questionnaire. It consists of 30 questions and the total score was 30.

Structured Teaching Program
The part consists of a structured teaching program on introduction, definition, purposes, principles and precautions to enhance the knowledge regarding forensic nursing. Teaching was given by using AV aids such as charts and flash cards.

Validity of Tool
The tool was prepared along with a problem statement, objectives, and structured program, self-structured questionnaire on forensic nursing and given to the experts for content validity who were from the nursing field. All suggestions for tool validation were incorporated and modified. The final tool was prepared after the consultation with the research guide.

Reliability of Tool
It is a degree of consistency or dependability with which an Instrument measures the attributes. The reliability of the tool was calculated by the split half method and Karl person method.

Pilot Study
The pilot study was conducted to find out the practicality of the study. It was conducted on 10% of total sample size in selected nursing college i.e., Rayat Bahra College of Nursing, Mohali, Punjab.

Ethical Consideration
- Written permission was taken from the Director Principal of Rayat Bahra College of Nursing, Mohali.
- Written permission was taken from principals of selected nursing colleges, Mohali, Punjab.
- An informed consent was taken from study subjects
- Confidentiality and anonymity of the subjects will maintain throughout the study.

Data Collection Procedure
Before data collection researchers were introduce themselves, explain the purpose of Study, clarifies queries 60 subjects were selected by convenient sampling according to Inclusion and exclusion criteria. Data was collected from subjects regarding socio-demographic variables.
Knowledge regarding forensic nursing through structured questionnaire.

Time: The time to conduct the study was from 9 am-2 pm.

Permission of the study
A written permission was taken from Director-Principal, RBCN Mohali.

Plan for data analysis
Analysis of data was done according to the objectives using descriptive and inferential statistics measures frequency, chi square was used to find out association and paired test was done to assess the effectiveness of structured teaching program.

Data analysis and interpretation

Table 1: demographic profile of the subjects

Variables	Opts	Percentage (%)	Frequency (f)
Age	20-22 Years	95.0%	95
	23-25 Years	5.0%	5
	26-28 Years	0.0%	0
	>28 Years	0.0%	0
Gender	Male	8.0%	8
	Female	92.0%	92
	Others	0.0%	0
Nursing Class	B.Sc. Nursing 3rd year	55.0%	55
	B.Sc. Nursing 4th year	45.0%	45
Residence	Urban	77.0%	77
	Rural	23.0%	23
Education of Mother	No formal education	11.0%	11
	Primary	22.0%	22
	Secondary	48.0%	48
	Senior secondary	10.0%	10
	Graduate	9.0%	9
Education of Father	No formal education	30.0%	30
	Primary	10.0%	10
	Secondary	30.0%	30
	Senior secondary	15.0%	15
	Graduate	15.0%	15
Occupation of Father	Business	45.0%	45
	Govt. job	13.0%	13
	Private job	30.0%	30
	Others	12.0%	12
Occupation of Mother	Home maker	63.0%	63
	Private job	19.0%	19
	Govt. job	9.0%	9
	Others	9.0%	9
Previous Knowledge	Yes	31.0%	31
	No	69.0%	69
Source of Information	Books	36.0%	36
	Educational institutes	14.0%	14
	Internet	28.0%	28
	Others	22.0%	22

Table 2: Knowledge regarding forensic nursing among nursing students in pre-test

Knowledge Level	Score	Frequency	Percentage (%)
Poor	0-10	27	27%
Good	11-20	12	72%
Excellent	21-30	1	1%
Minimum score	6		
Maximum score	21		
Mean +-SD	12.76+-2.978		42.50%

Maximum: 30 Minimum: 0

Table 3: Knowledge regarding forensic nursing among nursing students in post- test.

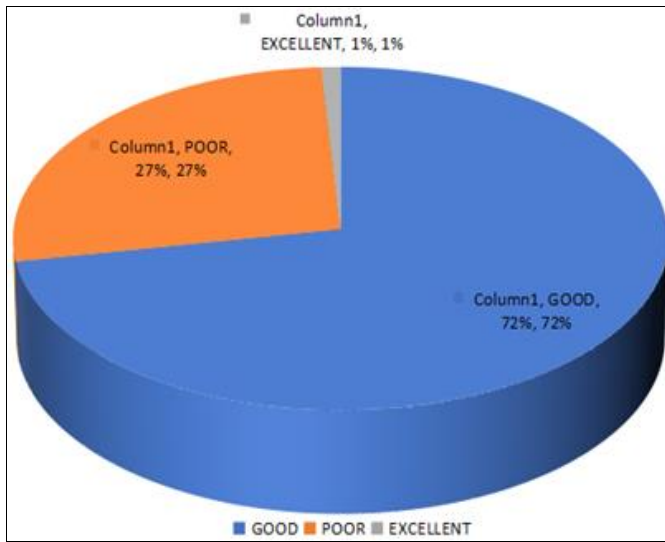| Knowledge Level	Score	Frequency	Percentage (%)
Poor	0-10	27	0%
Good	11-20	12	4%
Excellent	21-30	1	96%
Minimum score	19		
Maximum score	30		
Mean +-SD	26.90+-1.992		89.70%

Maximum: 30 Minimum: 0

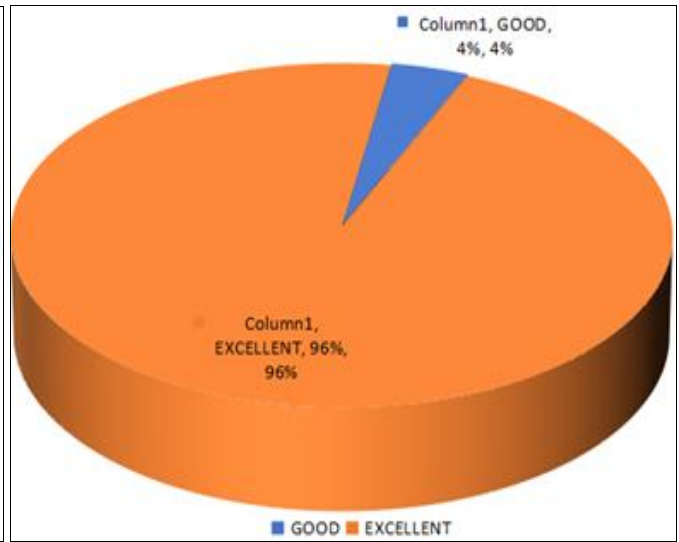**Fig 1:** Knowledge level of nursing students in Pre – Test

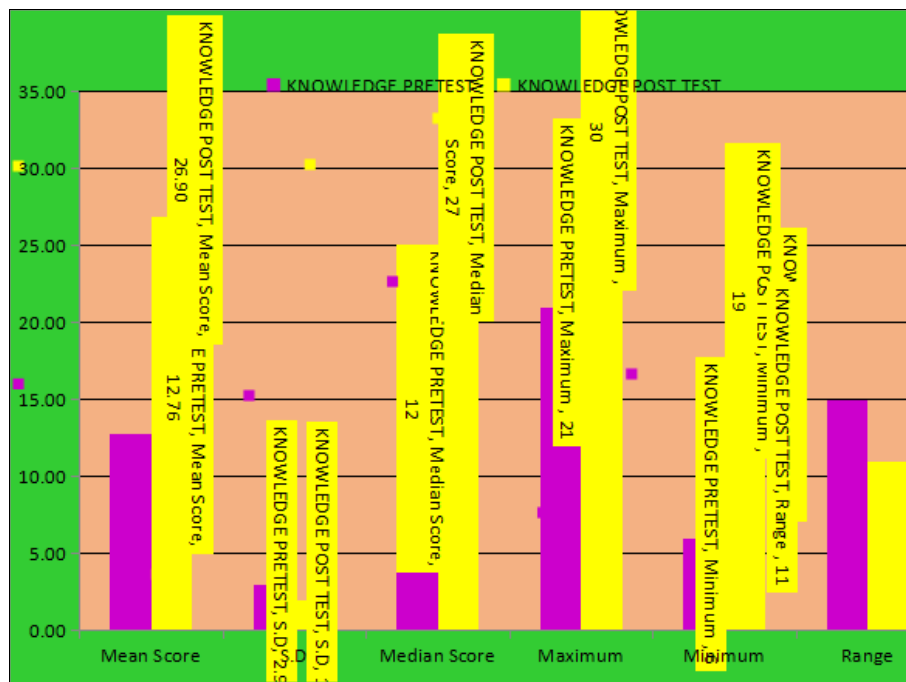**Fig 2:** Knowledge level of nursing students in post test

Fig 3: Mean comparison of pre-test and post-test knowledge scores.

Table 5: Association of knowledge with age group

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Age	20-22 Years	12.72	2.86	95	98	0.646	0.520	Not Significant
	23-25 Years	13.60	5.13	5				
	26-28 Years							
	>28 Years							

Table 6: Association of knowledge with gender

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Gender	Male	11.50	1.77	8	98	1.251	0.214	Not Significant
	Female	12.87	3.04	92				
	Others							

Table 7: Association of knowledge with nursing class

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Nursing Class	B.Sc. Nursing 3rd year	12.75	2.63	55	98	0.054	0.957	Not Significant
	B.Sc. Nursing 4th year	12.78	3.39	45				

Table 8: Association of knowledge with residence

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Residence	Urban	12.83	2.87	77	98	0.436	0.664	Not Significant
	Rural	12.52	3.37	23				

Table 9: Association of knowledge with education of mother

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Education of Mother	No formal education	13.55	3.17	11	4/95	1.706	0.155	Not Significant
	Primary	13.50	2.28	22				
	Secondary	12.52	3.05	48				
	Senior secondary	13.20	3.46	10				
	Graduate	10.78	2.82	9				

Table 10: Association of knowledge with education of father

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Education of Father	No formal education	12.67	2.81	30	4/95	0.496	0.739	Not Significant
	Primary	13.80	2.25	10				
	Secondary	12.93	3.42	30				
	Senior secondary	12.47	3.34	15				
	Graduate	12.20	2.54	15				

Table 11: Association of knowledge with occupation of father

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Occupation of Father	Business	12.29	2.55	45	3/96	0.839	0.476	Not Significant
	Govt. Job	12.92	2.36	13				
	Private job	13.03	3.51	30				
	Others	13.67	3.65	12				

Table 12: Association of knowledge with occupation of mother

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Occupation of Mother	Home maker	12.86	3.26	63	3/96	0.110	0.954	Not Significant
	Private job	12.58	2.65	19				
	Govt. Job	12.89	2.47	9				
	Others	12.33	2.29	9				

Table 13: Association of knowledge with previous knowledge

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Previous Knowledge	Yes	13.03	3.14	31	98	0.610	0.543	Not Significant
	No	12.64	2.92	69				

Table 14: Association of knowledge with source of information

Variables	Opts	Mean	SD	N	DF	F/T Test	P Value	Result
Source of Information	Books	12.19	2.94	36	3/96	0.933	0.428	Not Significant
	Educational institutes	12.50	3.48	14				
	Internet	13.36	3.15	28				
	Others	13.09	2.45	22				

Discussion

The findings of present study show that the mean knowledge score increased from 12.76+-2.978 in pre-test to 26.90+-1.992 in post-test marking a mean difference of 14.140. The result of intervention proved that statistically significantly higher knowledge was implementation of structured teaching programme. The findings of present study shows that in the post test results majority of respondents i.e 96% is excellent level of knowledge whereas 4% is good level of knowledge and 0% is poor level of knowledge regarding forensic nursing.

The findings were supported by other study conducted by

S.V.L Padamkumari (2022) [1] reveals that majority (39%) of staff nurses were in the age group 20 – 30 years and minimum of 23% (14) were in the age group of 41-50 years, were practiced in studies. The knowledge level of staff nurses were 53.3% had inadequate knowledge, 46.6% were having moderate knowledge and none of these staff nurses had adequate knowledge on forensic nursing.

Zeynus. Firuki *et al*. (2022) [2] reveals that t mean post education score for knowledge in intervention group was higher than in two control group (12.52% vs. 7.67%) and the post education score for clinical decision making in the interventional group was higher than in Control group (16.96% vs. 13.64%).

Gulferbektas *et al*. (2021) [3] reveals that The level of knowledge of the collection of forensic evidence and production of what evidence was Statistically higher among the participants who previously received training on the collection, preservation, and transfers of forensic evidence

versus those who are not previously trained ($p < 0.001$ for both). Simranjeet Kaur and Thiruvengadam D. (2019) reveals the increases the knowledge level and the pre-test score was 15.64 and post test score was 22.86 and its result becomes positive on the study conducted on 20 students.

Dillk Qzden, Husna Qzvern Likin Yilmaz (2018) reveals that the pre-test score was 23.63% and the post test score was 33.32%.the study revealed that course of forensic taken by students has a positive impact on knowledge on 98 students of 2nd year.

Conclusion
The conclusion was drawn on the basis of finding of study. The finding showed that Posttest was greater than pre-test knowledge regarding forensic nursing among nursing students of selected nursing colleges of District Mohali, Punjab.

Recommendations
On the basis of findings of study, it is offered that
- The study can be replicated with large samples to generate the findings.
- The study can be done in different settings.
- The study can be conducted by using different health education methods such as lectures.
- A comparative study can be done between different colleges of nursing.
- A same study can be done on different sample.
- A study may be done to assess the knowledge of the nursing students regarding forensic Nursing.

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Reference
1. Padma Kumari SVL. The need of Forensic Nursing in Emergency department; c2022. p. 217. www.ijsrp.org;
2. Firuki Z. Effect of Forensic Nursing virtual Education course on knowledge and clinical decision making of masters Nursing students; c2022. https://www.pubmed.ncbi.nil.nih.govt
3. Gulferbektas. Awareness of Forensic cases among nurses; c2021. http://www.pubmed.ncbi.nil.nih.govt
4. Igor de Oliveria reis. Performance of Forensic Nursing from the perspective of undergraduate Nursing students; c2021. www.researchgate.com.net
5. Patti Mc Fadden. The assessment and exploration of Forensic Nursing concepts in undergraduate nursing Nursing curricula: a mixed methods study; c2021. http://www.pubmed.ncbi.nil.nih.govt
6. Stacy E Drake. Evaluation of fundamental Forensic knowledge and perceived ability in Emergency Nurse practioner Education via simulation; c2020. www.researchgate.com.net
7. Gancalo Pedro Oliveira Ribeiro. Knowledge of Forensic practices: Efficacy of an intervention for Nursing Students; c2020. http://www.pubmed.ncbi.nil.nih.govt
8. Newman C. Forensic mental health Nursing and evidence -based practice; c2020. http://www.pubmed.ncbi.nil.nih.govt
9. Muchado BP. Forensic Nursing practice -What do the Students know anyway; c2020. www.researchgate.com.net
10. Ozfan D, Ozveren H. The impact of Forensic Nursing course on Students knowledge level on Forensic evidence; c2019.