"A Quasi-Experimental study to compare the effectiveness of structured teaching programme versus video assisted teaching programme in terms of knowledge in experimental group and control group regarding prevention and management of Postpartum hemorrhage among nursing student of Shimla Nursing College Shurala, Shimla, (H.P) 2023".

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ABSTRACT

BACKGROUND:

AIM:- AIM OF THE STUDY The aim of the study was to compare the effectiveness of structured teaching programme and video assisted teaching programme in terms of knowledge in experimental group and control group regarding prevention and management of Postpartum hemorrhage among nursing students of Shimla Nursing college, Shurala, Shimla.

METHODOLOGY: Quantitative research approach with pre-test and post-test Non - equivalent control group design was used.

SAMPLE AND SAMPLING TECHNIQUE: This study includes 50 samples i.e. 25 for experimental group and 25 for control group of nursing students and Non – randomized sampling technique by lottery method was used.

RESULT:

The pre-test knowledge score in **Experimental group,** 18(72%) had average knowledge, 4(16%) had below average knowledge and 3(12%) had good knowledge regarding prevention and management of postpartum hemorrhage.

 In control group, 22(88%) had average knowledge, 3(12%) had below average knowledge and 0(0%) had good knowledge regarding prevention and management of postpartum hemorrhage.

 With regard to comparison, mean post-test knowledge score of experimental group 23.88 was higher than mean post-test knowledge score of control group 19.48. As evident from paired t-value of experimental group (9.552) and control group (7.239) which was significant at 0.001 level of significance, it showed that structured teaching programme was effective in improving knowledge of nursing students regarding prevention and management of postpartum hemorrhage as compared to video assisted teaching programme.

With regards of the association pre-test knowledge score of experimental group nursing students regarding prevention and management of postpartum hemorrhage was associated with their enrolled courses ($\chi^2 = 9.488$), mother's educational status ($\chi^2 = 15.507$), monthly income ($\chi^2 = 12.592$). The calculated chi-square values were less than t value at the 0.05 level of significance and there was no significance association found between experimental group pre-test knowledge score among nursing students regarding prevention and management of postpartum hemorrhage with other selected demographic variables like age, religion, residential area, type of family, father educational status, any previous knowledge, if yes source of information.

 Whereas post-test knowledge score of experimental group nursing students regarding prevention and management of postpartum hemorrhage was significantly associated with father educational status ($\chi^2 = 15.507$), mother educational status ($\chi^2 = 15.507$), monthly income ($\chi^2 = 12.592$), any previous knowledge ($\chi^2 = 5.991$).The calculated chi-square values were less than t value at the 0.05 level of significance. And there was no significance association found between experimental group post-test knowledge score among nursing students regarding prevention and management of postpartum hemorrhage with selected demographic variables like age, enrolled in, religion, residential area, type of family, if yes source of information.

 Also In control Group Pre-test knowledge of significantly associated with their age ($\chi^2 = 7.815$), father educational status ($\chi^2 = 7.815$). The calculated chi-square values were less than t value at the 0.05 level of significance. And there was no significance association found between control group pre-test knowledge score among nursing students regarding prevention and management of postpartum hemorrhage with selected demographic variables like enrolled in, religion, residential area, type of family, mother educational status, monthly income, any previous knowledge, if yes source of information.

There was no significance association found between control group post-test knowledge score among nursing students regarding prevention and management of postpartum hemorrhage with selected demographic variables like age, enrolled in, religion, residential area, type of family, father educational status, mother educational status, monthly income, any previous knowledge, if yes source of information. The chi-square values were less than the table values were less than table value at the 0.05 level of significance.

CONCLUSION:

From the findings of the study following conclusions were drawn that the majority of nursing students exhibited adequate knowledge scores in the post – test in experimental group. This showed that structured teaching programme was effective to increase the knowledge regarding prevention and management of   Postpartum hemorrhage as compared to video assisted teaching programme.

KEY WORDS: Compare, effectiveness, structured teaching programme {STP}, video assisted teaching programme (VATP), prevention and management of PPH, nursing students, knowledge.

Introduction:

Postpartum hemorrhage is the leading cause of pregnancy related death worldwide. Postpartum hemorrhage (PPH) is leading causes of maternal mortality and morbidity worldwide. Women are prone to get postpartum hemorrhage after the delivery. Blood loss greater than 500 ml during vaginal delivery and blood loss greater than 1000 ml during caesarean delivery.[1]

Postpartum hemorrhage is mostly caused by primary postpartum hemorrhage (occurring within 24hr) Secondary postpartum hemorrhage (occurring after 24 hr of delivery).[2]

Postpartum hemorrhage is the one of major problem in developing countries. It is the most common in reproductive female. Postpartum hemorrhage (PPH) remains a major cause of maternal mortality and morbidity worldwide. Approximately, half a million women die annually from causes related to pregnancy and childbirth. Hemorrhage may occur before, during or after delivery of the placenta.[3]

As far as healthy women is there then so the healthy child and healthy family and nation too. Healthy women and then the healthy child are the healthy generations of our country. As an old quote states "if a man is healthy, the family is healthy; if a woman is healthy the entire generation is healthy". With this point of view the present study researcher focused on preventing the women's life as well as child's life by prevention and management of PPH because the third stage of labor is the most crucial stage of labor. Every individual want children to be healthy for their healthy future generation but nobody thinks about the women who is actually giving the birth to that child and she also have the right to be healthy and happy same as the child. This served as an inspiration for the researcher to select this study.

It was therefore decided to conduct a study to assess the level of knowledge regarding prevention and management of PPH among nursing students. Because there was a need to aware the future nurses who will render the care to the patients in the future to have basic and important knowledge regarding prevention and management of PPH.

2. METHODS AND MATERIALS:

2.1 research approach design: Quantitative research approach was used. Research design used was Quasi Experimental with Pre-test and post-test non-equivalent control group design.

2.2 Setting: the study was conducted at 2 Nursing Colleges of Shimla.

For pilot study:

- Shivalik Institute of Nursing, Bhattakufer, Shimla.

For final study:

- Shimla Nursing College, Shurala, Shimla, Himachal Pradesh.

2.3 Population: In present study:

Population: Nursing students

Target population: Nursing students of selected Nursing Colleges of Shimla, Himachal Pradesh i.e. Shimla Nursing College, Shurala, Shimla, Himachal Pradesh.

Accessible population: Nursing Students of Post Basic B.Sc. 1st year and B.Sc. 4th year and GNM 3rd year.

2.4 sample and sampling technique: This study includes 50 samples i.e. 25 for experimental group and 25 for control group of nursing students and non- randomized sampling technique by lottery method was used.
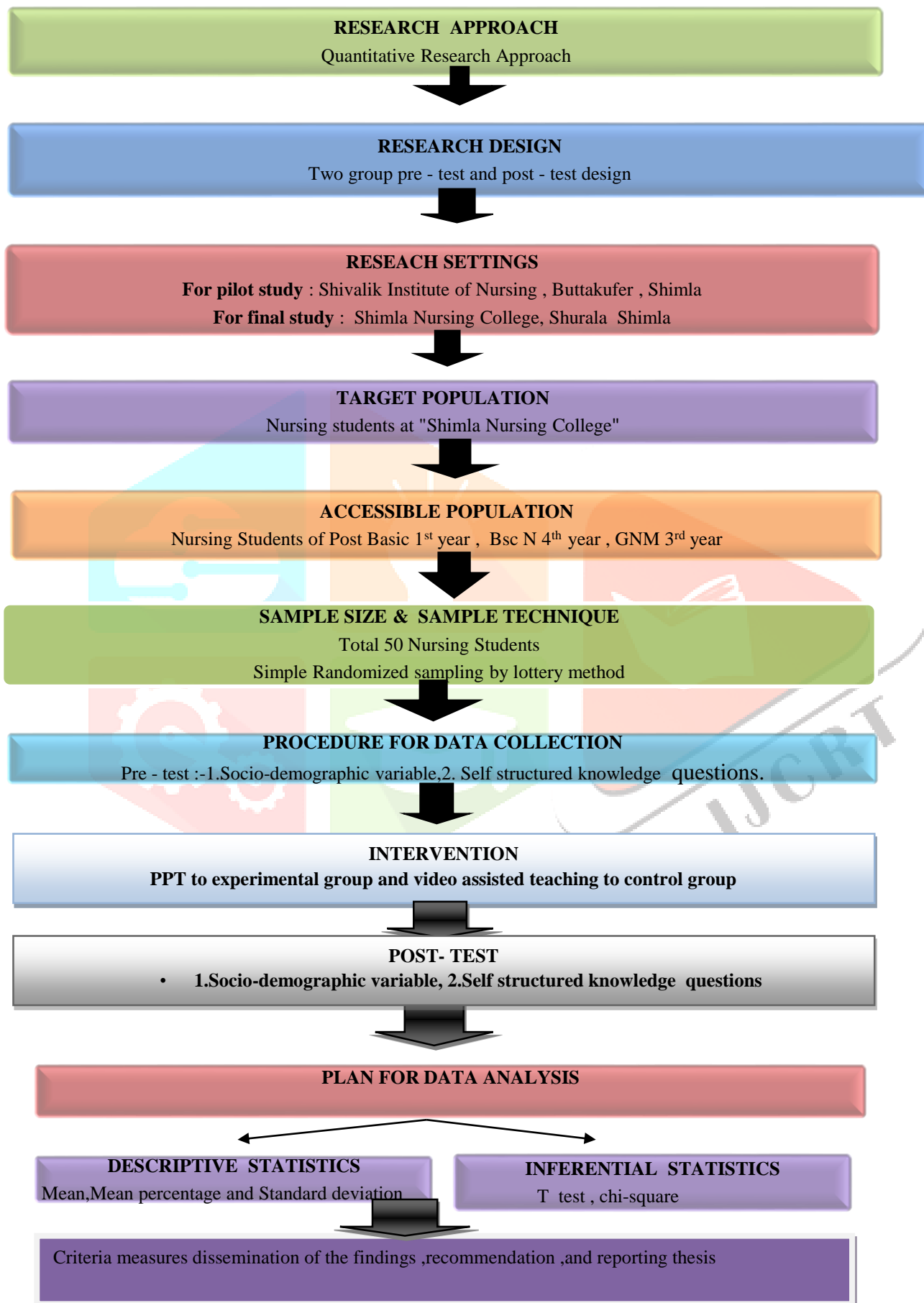
2.5 Data collection tools and technique:

Based on objectives and conceptual framework of the study, the tool developed was divided into two parts:

Part l: This part deals with demographic variables (Age, enrolled in, religion, residential area, type of family, father educational status, mother educational status, monthly income, any previous knowledge , if yes, source of information).

Part ll: this part deals with Self Structured knowledge questionnaires which consist of 30 multiple choice questions. Each item is multiple choice questionnaire with four options.

2. **Ethical consideration:** Written permission was obtained from the principal, research and ethical committee of Shimla Nursing College. Written permission was obtained from the principal of selected college to conduct study. Aim and purpose of the study was explained to the sample and written/verbal consent was taken from the nursing students and confidentiality was maintained.

RESEARCH APPROACH

Quantitative Research Approach

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RESEARCH DESIGN

Two group pre - test and post - test design

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RESEACH SETTINGS

For pilot study : Shivalik Institute of Nursing , Buttakufer , Shimla

For final study : Shimla Nursing College, Shurala Shimla

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TARGET POPULATION

Nursing students at "Shimla Nursing College"

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ACCESSIBLE POPULATION

Nursing Students of Post Basic 1st year , Bsc N 4th year , GNM 3rd year

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SAMPLE SIZE & SAMPLE TECHNIQUE

Total 50 Nursing Students

Simple Randomized sampling by lottery method

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PROCEDURE FOR DATA COLLECTION

Pre - test :-1.Socio-demographic variable,2. Self structured knowledge questions.

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INTERVENTION

PPT to experimental group and video assisted teaching to control group

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POST- TEST

• **1.Socio-demographic variable, 2.Self structured knowledge questions**

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PLAN FOR DATA ANALYSIS

DESCRIPTIVE STATISTICS

Mean,Mean percentage and Standard deviation

INFERENTIAL STATISTICS

T test , chi-square

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Criteria measures dissemination of the findings ,recommendation ,and reporting thesis

Findings related to description of socio-demographic variables among the nursing students in experimental and control group.

Table-1: frequency and percentage distribution of socio-demographic variables variables among the nursing students in experimental and control group.

S. no.	Socio-demographic variables	experimental group (n=25)		Control Group (n=25)	
		Frequency (f)	percentage (%)	Frequency (f)	percentage (%)
1	**Age**				
	a) 20-21 Years	14	56%	12	48%
	b) 22-23 Years	11	44%	11	44%
	c) 24-25 Years	0	0%	1	4%
	d) 26 Or Above	0	0%	1	4%
2	**Enrolled In**				
	a) Post Basic B.Sc Nursing 1st Year	4	16%	4	16%
	b) B.Sc. Nursing 4th Year	16	64%	16	64%
	c) GNM 3rd Year	5	20%	5	20%
3	**Religion**				
	a) Hindu	25	10%	23	92%
	b) Muslim	0	0%	2	8%
	c) Sikh	0	0%	0	0%
	d) Christian	0	0%	0	0%
	e) Other (Jain, Buddhism)	0	0%	0	0%
4	**Residential Area:**				
	a) Rural Area	14	56%	10	40%
	b) Urban Area	11	44%	15	60%

5	Type Of Family:				
	a) Nuclear Family	22	88%	16	64%
	b) Joint Family	3	12%	9	36%
	c) Extended Family	0	0%	0	0%
	d) Separated Family	0	0%	0	0%
6	Father Educational Status				
	a) No Formal Education	1	4	1	4%
	b) Primary Education	5	20	5	20%
	c) Secondary Education	11	44	11	44%
	d) Graduate	6	24	8	32%
	e) Post Graduate	2	8	0	0%
7	Mother Educational Status:				
	a) No Formal Education	2	8%	3	12%
	b) Primary Education	4	16%	7	28%
	c) Secondary Education	14	56%	10	40%
	d) Graduate	4	16%	5	20%
	e) Post Graduate	1	4%	0	0%
8	Monthly Income (In Rs)				
	a) Less Than 10,000 Rs / Month	2	8%	4	16%
	b) 10,001 Rs – 15,000 Rs / Month	4	16%	5	20%
	c) 15,001 Rs – 20,000 Rs/ Month	7	28%	0	0%
	d) Above 20,000 Rs / Month	12	48%	16	64%
9	Any Previous Knowledge				

	a) Yes	24	96%	25	100%
	b) No	1	4%	0	0%
10	**If Yes, Source Of Information**				
	a) Social Media	0	0%	2	8%
	b) Books	11	44%	12	48%
	c) News Paper	1	4%	1	4%
	d) Health Personals And Teachers	13	52%	10	40%
	e) Other (Seminar, Health Education)	0	0%	0	0%

Table 1 Showed the frequency and percentage distribution among nursing students in experimental group and control group socio-demographic variables in terms of age, enrolled in, religion, type of family, residential area, father educational status, mother educational status, monthly income, any previous knowledge, source of information.

Findings related to pre-test and post-test of STP versus VATP in terms of knowledge scores in experimental and control group regarding prevention and management of postpartum hemorrhage among nursing students.

Comparison of pre-test and post-test knowledge scores In Experimental Group And Control Group.

Table -2: pre-test and post-test knowledge scores In Experimental Group

S.No	Level Of Knowledge	Range Of Knowledge Scores	Pre-test		Post-test	
			F	%	F	%
1	Poor knowledge	0-10	4	16%	1	4%
2	Average knowledge	11-20	18	72%	1	4%
3	Good knowledge	21-30	3	12%	23	92%

Table -2: Depicts that in **pre-test of experimental group** 18 (72%) were having average knowledge, 4 (16%) were having good knowledge and 3 (12%) were having poor knowledge regarding prevention and management of postpartum hemorrhage.

Post-test of experimental group shows that, majority Jcof nursing students 23 (92%) were having good knowledge, 1(4%) were having average knowledge and 1 (4%) were having poor knowledge regarding prevention and management of postpartum hemorrhage.

Table -3: pre-test and post-test knowledge scores In Control Group

S.No	Level Of Knowledge	Range Of Knowledge Scores	Pre-test		Post-test	
			F	%	F	%
1	Poor knowledge	0-10	3	12%	0	0%
2	Average knowledge	11-20	22	88%	15	60%
3	Good knowledge	21-30	0	0%	10	40%

Table -3: Depicts that in **pre-test of control group,** majority of nursing students i.e. 22 (8%) were having average knowledge, 3 (12%) were having poor knowledge   and none were having good knowledge regarding prevention and management of postpartum hemorrhage.

Post-test of control group shows that, majority of nursing students 15 (60%) were having average knowledge, 10 (40%) were having good knowledge and none were having poor knowledge regarding prevention and management of postpartum hemorrhage.

It showed that structured teaching programme (STP) was effective in increasing knowledge of nursing students than video assisted teaching programme regarding prevention and management of postpartum hemorrhage.

CONCLUSION:

From the findings of the study following conclusions were drawn that the majority of nursing students exhibited adequate knowledge scores in the post – test in experimental group. This showed that structured teaching programme was effective to increase the knowledge regarding prevention and management of   Postpartum hemorrhage as compared to video assisted teaching programme regarding prevention and management of postpartum hemorrhage.

RECOMMENDATIONS:

Based on the results of the study following recommendations were made:

1. A comparative study to compare the effectiveness of structured teaching programme verses video assisted teaching programme in terms of knowledge regarding prevention and management of postpartum hemorrhage among multipurpose health workers and staff nurses.

2. A pre-experimental study to assess the effectiveness of structured teaching programme in terms of knowledge regarding prevention and management of postpartum hemorrhage among staff nurses working in maternity hospital.

3. A quasi-experimental study to assess the effectiveness of structured teaching programme in terms of knowledge regarding prevention and management of postpartum hemorrhage among staff nurses working in maternity hospital.

4. A cross-sectional study to assess the effectiveness of video assisted teaching programme in terms of knowledge regarding prevention and management of postpartum hemorrhage among staff nurses working in maternity hospital.

5. A descriptive study to assess the knowledge regarding prevention and management of postpartum hemorrhage among staff nurses working in maternity hospital.

LIMITATIONS:

1. Study was limited to limited samples. It cannot be generalized to all.

2. Study was limited to B.Sc nursing 4th year, Post Basic B.Sc., GNM 3rd year and M.Sc. nursing(having specialty in obstetrics and gynecology).

3. This study was limited to those classes having obstetrics and gynecological subject in their syllabus.

ACKNOWLEDGEMENT:

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