



Effectiveness Of VATM Regarding Knowledge on BLS among UG Students of Sumandeep Nursing College, Waghodia

Kevin Christian¹, Ravindra H. N.², Patel Krupali³, Patel Nirali⁴,
Patel Pooja⁵, Rathod Richa⁶

¹Assistant Professor, ²Principal, ³⁴⁵⁶Student
¹²³⁴⁵⁶Department of Medical Surgical Nursing College,
¹²³⁴⁵⁶Sumandeep Vidhyapeeth, Pipariya, Vadodara-391760, Gujarat, India

ABSTRACT

BACKGROUND

Awareness of basic life support among nursing student is very crucial nowadays because nurses play a vital role in bringing changes and creating awareness in community and students group, with this knowledge of nursing students are also important. As Basic Life support knowledge score in 4th-year b.sc nursing student's awareness is a must.

AIMS & OBJECTIVES

To assess the effectiveness of VATM [Video assisting teaching model] on knowledge regarding Basic life support among nursing students at Sumandeep Nursing College.

MATERIAL&METHODS

The pre-experimental design approach: A pre-test & post-test design is used in this study on 26 b.sc nursing students by simple random sampling technique.

RESULTS

The data shows that the χ^2 value computed between the post-test knowledge score of UG students regarding Basic life support with their selected demographic variable such as age ($\chi^2=1.230$), gender ($\chi^2=0.032$), area of living ($\chi^2=4.571$) where found not significance at 0.05 level of Not significance and variable such as family income ($\chi^2=1.654$), place of residence ($\chi^2=3.599$), where not significant at 0.05 level of significances. Thus it can be interpreted that there is a significant association between post-test level of knowledge among UG students with their selected Demographical variable such as place and family income.

CONCLUSION

According that 53.84% majority of the samples had poor knowledge score during their pre-test followed by 46.15% of the samples are having knowledge of average score whereas 0% of samples had good score & during post-test 46.15% of the samples are having average knowledge score followed by 53.84% of the samples had good score during their post-test and 0% of the samples had poor score.

Keywords: *Basic Life Support, Video Assisted Teaching Model, Nursing Students, Knowledge, Pre-Test, Post-Test.*

INTRODUCTION

Life-threatening occur within the confines of the dental office due to an increased level of stress which is often present emergencies can occur anytime, anywhere and to anyone. Such situations are somewhat more likely to. For example, Fear and anxiety may make these patients prone to medical emergencies such as syncope and hyperventilation Basic Life Support (BLS) includes recognition of signs of sudden cardiac arrest (SCA), heart attack, stroke and foreign-body airway obstruction (FBAO); cardiopulmonary resuscitation (CPR); and defibrillation with an automated external defibrillator¹.

Basic life support (BLS) is the foundation for saving life following cardiac arrest. Fundamental aspects of BLS include recognition of sudden cardiac arrest (SCA) and activation of the emergency response system, early cardiopulmonary resuscitation (CPR), and rapid defibrillation with a 1 automated external defibrillator (AED).). It is very important that every person in the community know about Basic Life Support to save lives and improve the quality of community health. At least the doctors, nursing and paramedical staff are expected to know about it, as they are frequently facing life-threatening situations and the knowledge of BLS will be definitely useful. In this study, we wanted to investigate the awareness. Cardio Pulmonary Resuscitation (CPR) is a critical component of basic life support and the established first line before advanced life support.²

OBJECTIVES OF THE STUDY

1. To find out pre-existing knowledge regarding BLS among UG students of the selected nursing college.
2. To find out the effectiveness of VATM regarding knowledge on BLS among UG students of the selected nursing college.
3. To find out the association between post-test knowledge score on BLS with selected demographic variables.

HYPOTHESIS

H1: There will be a significant difference in the pre-test and post-test knowledge score regarding basic life support among nursing students at the human deep nursing college.

H2: There will be a significant association between the selected demographic variables with the pre-test and post-test knowledge regarding basic life support among nursing students at Sumandeep Nursing College.

MATERIAL AND METHODS

RESEARCH APPROACH: Research approach indicated the basic procedures for conduction research. It is an overall plan to carry out the research. The selection of research approach depends on the purpose of the study.

RESEARCH DESIGN: The research design provides an overall plan for conditioning the study. The selection of design depends upon of the study, research approach and variables to be studied. The research design adopted for this study was one group pre-test, post-test design. This design adapted to assess the knowledge gain by final year B.sc nursing students following VATM.

INDEPENDENT VARIABLE: In the present study the independent variable is Video-assisted teaching module on knowledge regarding BLS.

DEPENDENT VARIABLE: In the present study the dependent variable is knowledge regarding BLS among UG students.

TARGET POPULATION: Population denotes the entire group of subjects under study. According to treece and treece (1986) population refers to the largest body of cases on individuals being researched, which conforms to the specific set of particulars for the study the population was UG students, waghodia.

SAMPLE: In this study sample are 4th year's b.sc nursing students who are studying in Sumandeep Nursing College

SAMPLE SIZE: The sample of the study was 26 B.Sc. nursing students of the Sumandeep Nursing College, waghodia.

SAMPLING TECHNIQUE: Sampling technique may be defined as the technique or procedure stands for the sample design itself. In this study, the sampling technique was non-probability purposive sampling.

SAMPLE SELECTION CRITERIA

Inclusion criteria

1. UG students of the sumandeep nursing college who are willing to participate.
2. Only final year B.sc nursing students are included.

Exclusive criteria

1. UG students who are not present at the time of the study.

PROBLEM STATEMENT

“EFFECTIVENESS OF VATM REGARDING KNOWLEDGE ON BLS AMONG UG STUDENTS OF SUMANDEEP NURSING COLLEGE, WAGHODIA

DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool used for research study was structured questionnaires which were prepared after an extensive review of literature and discussion with the experts, to assess the effectiveness of VATM on the knowledge regarding BLS among UG students

DESCRIPTION OF THE TOOL

The structured questionnaires consist of 2 sections covering the following areas.

SECTION A: SOCIO-DEMOGRAPHIC DATA

This section consists of five items on demographic data which include a class of study, age in year, Gender, Area of living, Family monthly Income(in Rs), Place of residence.

SECTION B: STRUCTURE KNOWLEDGE QUESTIONNAIRE ON BASIC LIFE SUPPORT

Structured questionnaires were used to assess the knowledge regarding BLS among UG students. The total number of questions was 20.

SCORING PROCEDURE

It consists of 20 knowledge questionnaire.

- For each correct response score “one” will be assigned.
- For each response score, “zero” will be assigned.
- The total minimum and maximum score of knowledge assessment found to be “0” and “20”.

SCORING INTERPRETATION

The total knowledge score obtained will be classified as follow.

- Poor: <50%
- Average: 51-75%
- Good: >75%

SUMMARY OF THE FINDINGS, CONCLUSION, IMPLICATION, AND RECOMMENDATION

This chapter deal with the discussion of the major findings of the study, summary, and implication to nursing practice and recommendation for further study. The objective of the study was:

OBJECTIVES OF THE STUDY

1. To find out pre-existing knowledge regarding BLS among UG students of the selected nursing college.
2. To find out the effectiveness of VATM regarding knowledge on BLS among UG students of the selected nursing college.
3. To find out the association between post-test knowledge score on BLS with selected demographic variables.

FINDINGS OF THE STUDY AND DISCUSSION

The following are the major findings of the study with discussion:

DEMOGRAPHIC DATA

From the selected 26 samples that majorities (57.69%) of the samples belongs to the age group between 19-21 years followed by 42.30% of the sample are more than 21 years of age. The majority (76.92%) of the samples

belongs to the female gender and followed by 23.07% of the samples are the male majority (84.61%) of the samples belongs to the urban area of living followed by 15.38% of the rural area. The majority (53.84%) of samples are in the category of family income more than 25000rs followed by 19.23% are having 5000-15000rs, 15.38% are having family income 15000-25000rs and 11.53% are having less than 5000rs. The majority (46.15%) of the samples belongs to the place of residence in hostel followed by 42.30% of the sample are day scholar and 11.53% sample are in paying guest.

ASSESSING THE KNOWLEDGE REGARDING THE BLS.

The findings shows that post-test knowledge score of UG students regarding BLS with their selected demographic variable such as area of living (4.571), place of residence (3.599), family income (1.654) where found significance at 0.05 level of Not significance and variable such as Age(1.230), gender (0.0327), where not significant at 0.05 level of significances. Thus it can be interpreted that there is not a significant association between post-test level of knowledge among UG students with their selected demographical variable such as the area of living, place of residence and family income.

IMPLICATION

The findings of the study have definite implication in daily practice, nursing administration, and nursing research.

- **IMPLICATION ON DAILY PRACTICE**

The UG students should enhance the knowledge regarding the BLS. The findings of the study help the UG students regarding the awareness and knowledge regarding BLS. It can be useful for the future generation in the improvement of their knowledge.

- **IMPLICATION FOR NURSING RESEARCH**

The result of the research study contributes to the body of knowledge of nursing. The future investigator can use the methodology as reference material. The suggestion and recommendation can be utilised by the other researchers under conducting further studies to evaluate knowledge and awareness of BLS among UG students.

RECOMMENDATIONS

On the bases of the findings of the study; it is recommended that:

- The study can be utilized to conduct a further research study in the field of knowledge regarding BLS.
- A similar study can be done to prepare self-administer knowledge questionnaire for assessing the knowledge regarding the BLS in UG students.
- A similar study can be done with self-administered questionnaire
- A similar study can be conducted in urban areas.

Characteristics	Category	Respondents	
		Frequency	Percent%
Age group (years)	< 19 years	0	0%
	19-21 Year	15	57.69%
	> 21 years	11	42.30%
Gender	Male	06	23.07%

	Female	20	76.92%
Area of Living	Urban	22	84.61%
	Rural	04	15.38%
Family Monthly Income	< 5000	03	11.53%
	5000-15000	05	19.23%
	15000-25000	04	15.38%
	> 25000	14	53.84%
Place of Residence	Hostel	12	46.15%
	Day Scholar	11	42.30%
	Paying Guest or Rent room	03	11.53%
Total		26	

ORGANIZATION AND PRESENTATION OF DATA

The data collected were edited, tabulated, analyzed, interpreted and finding were presented in form of tables and diagrams represent the following areas.

Section I: Description of demographic variables of the UG students.

SectionII: Assess knowledge score of pre-test and post-test after VATM on CPR.

Section III: Association in post-test knowledge score among BLS with their selected demographic variable

SECTION – I

DEMOGRAPHIC VARIABLES OF UG STUDENTS

Table: Frequency and percentage distribution of UG students by their characteristics such as age, gender, the area of living, family monthly income and place of residence. N=26.

The data given in table 5 show that frequency and percentage distribution of UG students on BLS which includes, age in years, gender, the area of living, family monthly income (in Rs) , place of residence.

CONCLUSION

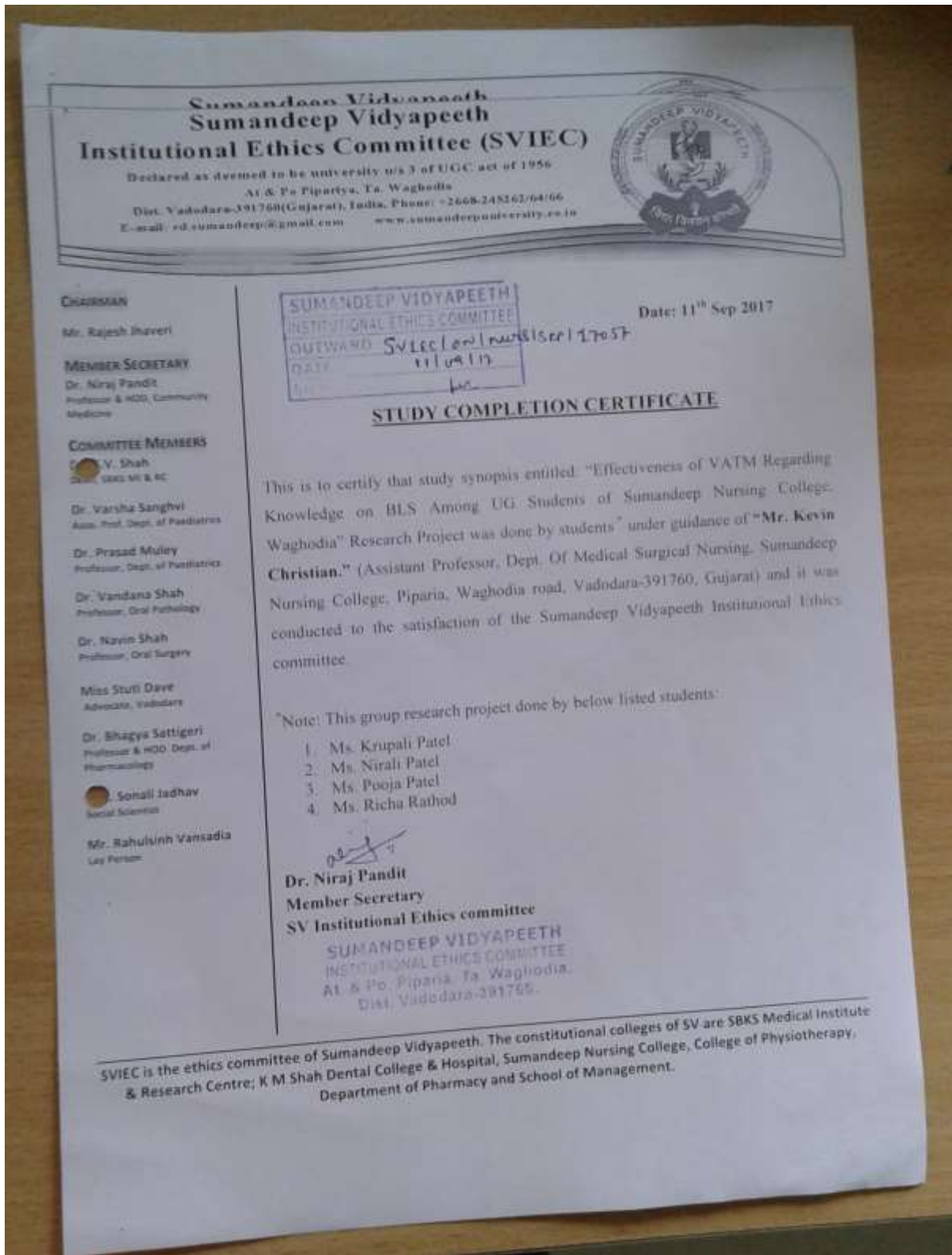
The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature;

The UG students have the adequate knowledge regarding the BLS. The self-administered questionnaire has shown a remarkable association between demographical variables and their knowledge. Using the statistical formula we have computed the association between the demographic variables and their knowledge.

SUMMARY

This chapter presents a brief account of the present study; the conclusion drawn from the findings, implication, and recommendation for further research in the area.

ETHICAL COMMITTEE CERTIFICATE



REFERENCES

1. Patricia Josipovic RN, BN, MN Director of Nursing, Werribee Terrace Aged Care, Victoria, Australia. Michael Webb B. App.Sc (Comp. Med Chiropractic) Senior Lecturer Division of Chiropractic, RMIT University, Victoria, Australia. Ian Mc Grath RN, B. AppSc, MN Senior Lecturer Division of Nursing and Midwifery, RMIT University, Victoria, Australia.
2. Lesnik .D et al. Impact of additional module training on the level of basic life support knowledge of first-year students at the University of Maribor. International journal of emergency medicine. 2011 Dec 1;4(1):1-8.1
3. Baksha F. Assessing the need and effect of updating the knowledge about cardiopulmonary resuscitation in experts. 2010 June, Volume 4, Page 2511-2514.
4. <http://www.safetyfirstseminar.com>. CPR statistics American Heart Association. Executive summary, American Heart Association guidelines for cardiopulmonary resuscitation and cardiovascular care. circ.ahajournals.org. by on December 1 2010

Table 2: Systematic Representation of Research Design Schematic Representation of Research Design

GROUP	PRE TEST	INTERVENTION	POST TEST
UG students Sumandeep Nursing college.	On level of knowledge among UG students, Sumandeep Nursing college.	VATM	On level of knowledge among UG students, Sumandeep Nursing college
	O ¹	X	O ²

TABLE3: SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

N=26

Characteristics	Category	Respondents	
		Frequency	Percent%
Age group (years)	< 19 years	0	0%
	19-22 Year	15	57.69%
	> 21 years	11	42.30%
Gender	Male	06	23.07%
	Female	20	76.92%
Area of Living	Urban	22	84.61%
	Rural	04	15.38%
Family Monthly Income	< 5000	03	11.53%
	5000-15000	05	19.23%
	15000-25000	04	15.38%
	> 25000	14	53.84%
Place of Residence	Hostel	12	46.15%
	Day Scholar	11	42.30%
	Paying Guest or Rent room	03	11.53%
Total		26	

TABLE 4: FREQUENCY AND PERCENTAGE DISTRIBUTION IN ASSOCIATION WITH PRE-TEST AND POST-TEST LEVEL OF KNOWLEDGE

KNOWLEDGE LEVEL	PRE-TEST			POST-TEST		
	CATEGORY	FREQUENCY	PERCENTAGE	CATEGORY	FREQUENCY	PERCENTAGE
Poor	<9	14	53.84%	<9	0	0%
Average	9-17	12	46.15%	9-17	12	46.15%
Good	>17	0	0%	>17	14	53.84%
Total		26	100%		26	100%

SECTION-III

TABLE 5: Association in post-test knowledge score among BLS with their selected demographical variable

N= 26

Sr. No	Variables		Post-test knowledge			Chi-square value	df	Inference
			Inadequate	Moderate	Adequate			
1	Age	A.<19yrs	0	0	0	1.230	2	Not Significant
		B.19-21 yrs	0	15	0			
		C.>21 yrs	11	0	0			
2	Gender	A. Female	06	0	0	0.0327	1	Not significant
		B. Male	0	0	20			
3	Area of living	A. Urban	0	0	22	4.571	1	Not significant
		B. Rural	04	0	0			
4	Family income	A. <5000	03	0	0	1.654	3	Not Significant
		B. 5000-15000	05	0	0			
		C.15000-25000	04	0	0			
		D. >25000	0	14	0			
5	Place of residence	A. Hostel	12	0	0	3.599	2	Not significant
		B. Day scholar	11	0	0			
		C.Paying guest or rate room	03	0	0			

The data shows that the χ^2 value computed between the post-test knowledge score of UG students regarding Basic life support with their selected demographic variable such as age ($\chi^2= 1.230$), gender ($\chi^2=0.032$), area of living ($\chi^2=4.571$) where found not significance at 0.05 level of Not significance and variable such as family income ($\chi^2=1.654$), place of residence ($\chi^2= 3.599$), where not significant at 0.05 level of significances. Thus it can be interpreted that there is a significant association between post-test level of knowledge among UG students with their selected Demographical variable such as place and family income.

FIGURES

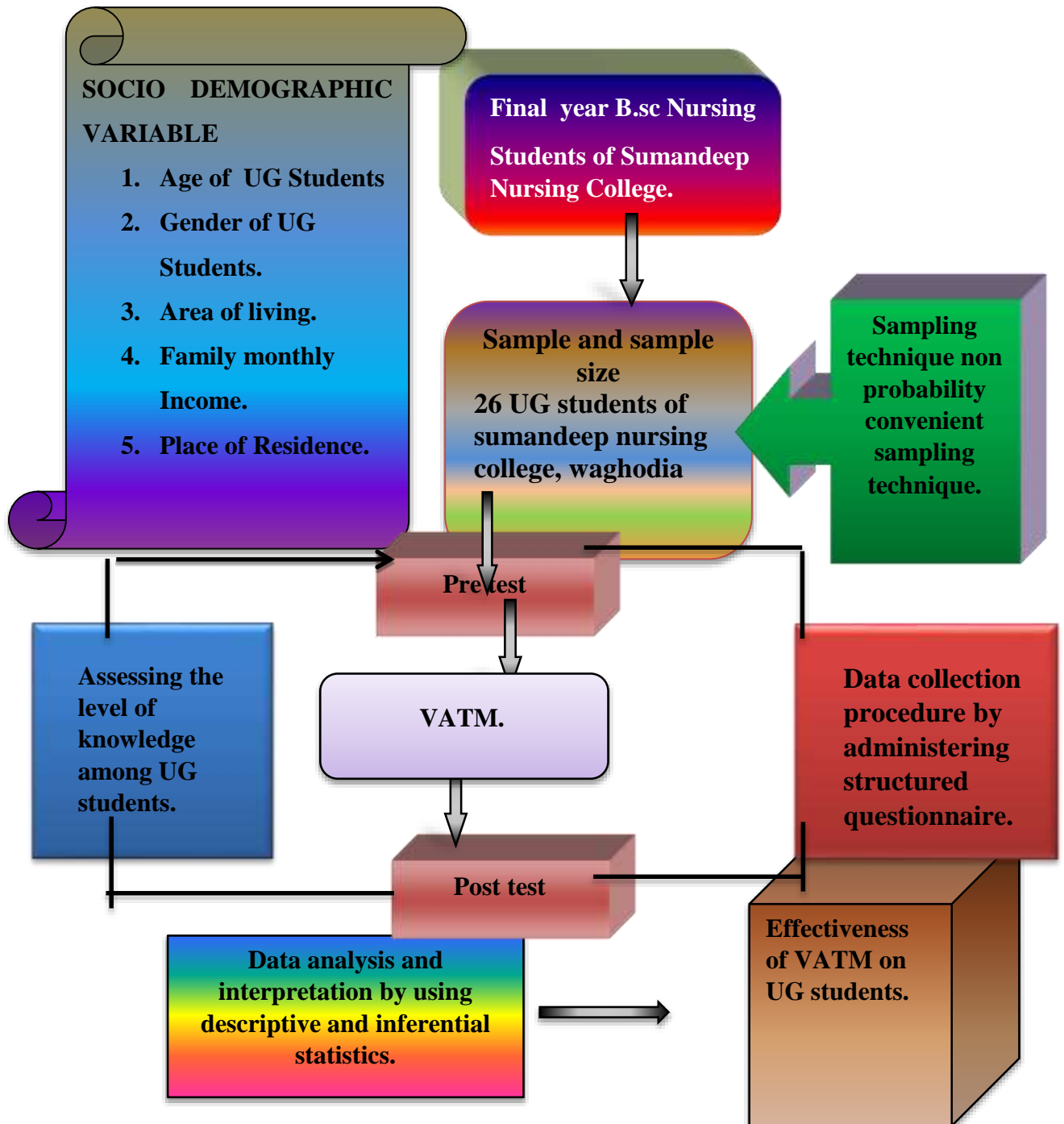
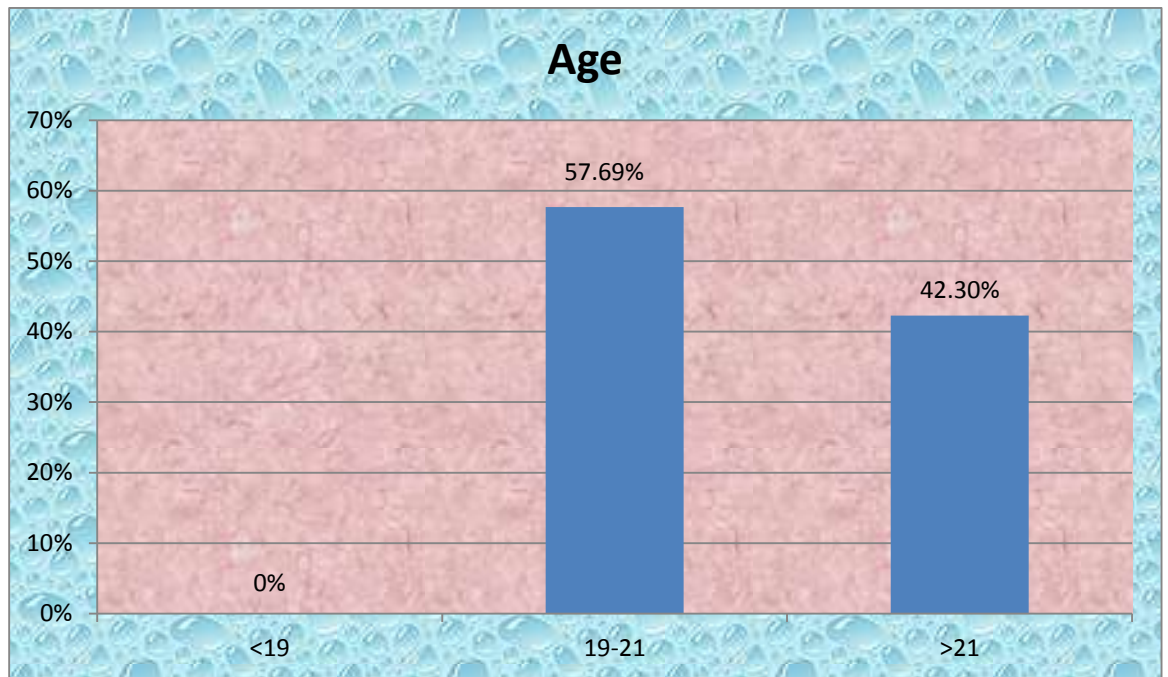
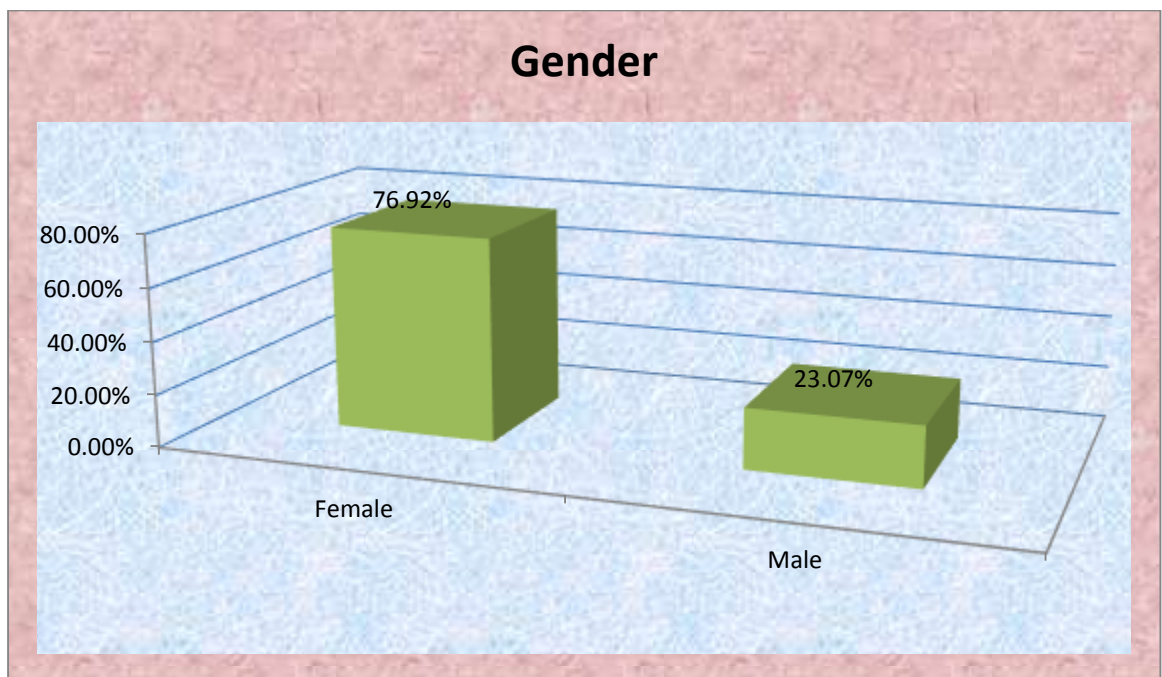


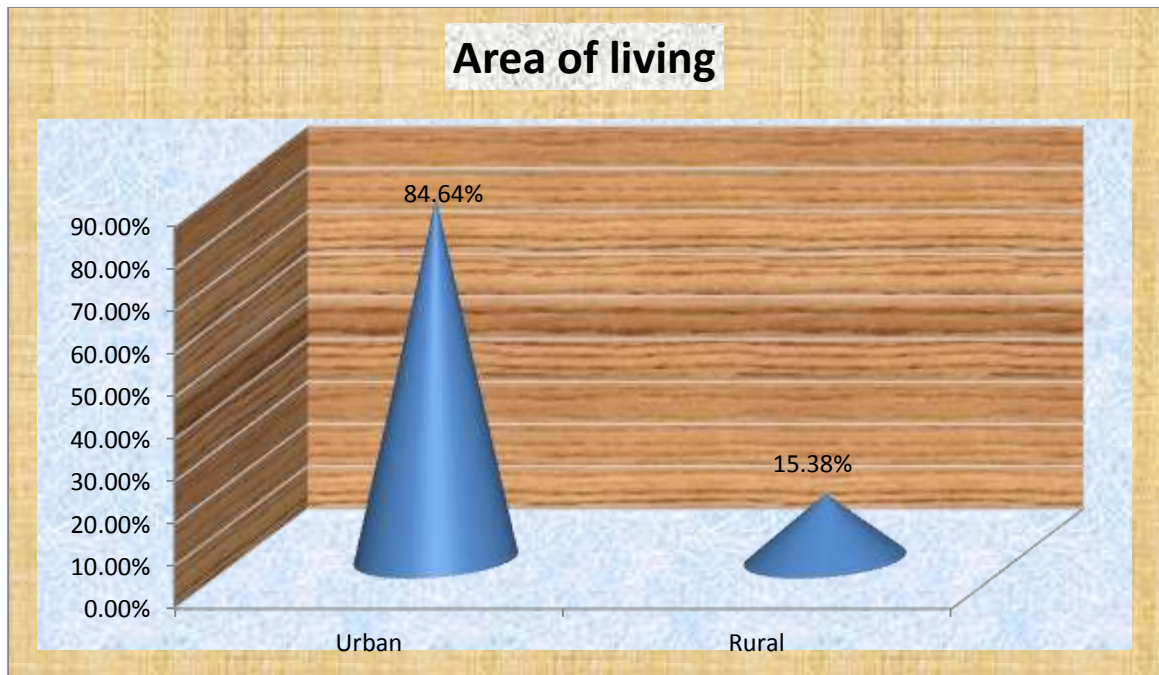
Figure 2: Schematic representation of one group pretest and post test research design used for the present study.



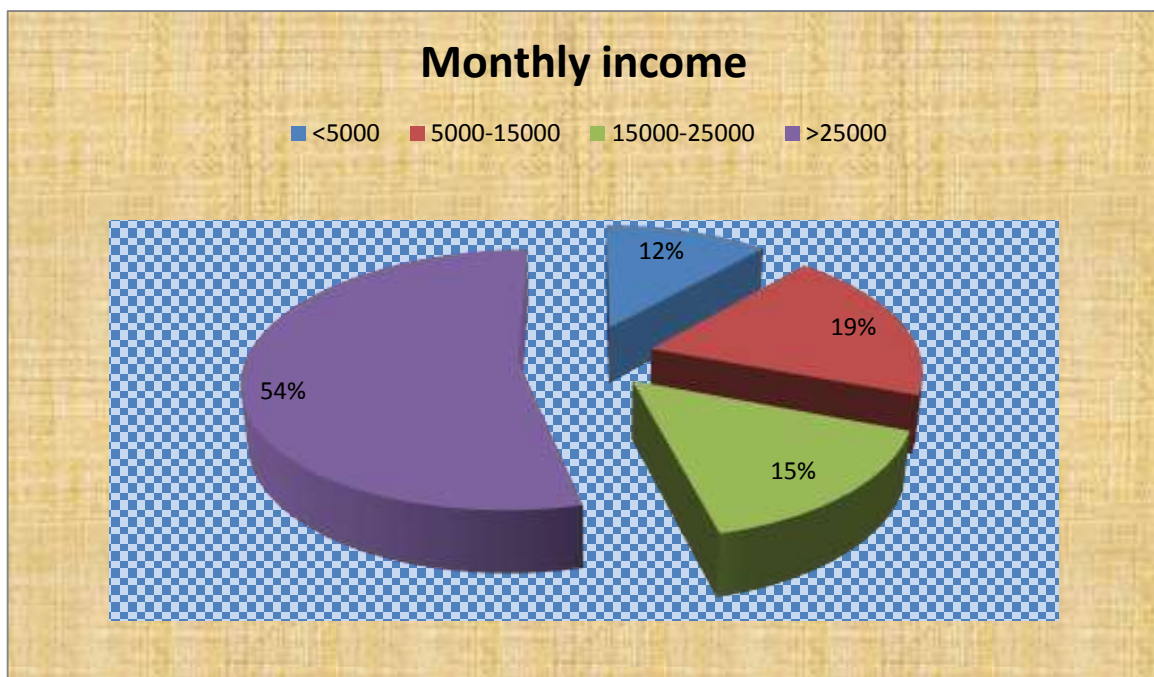
Picture:1 Indicates that majority (57.69%) of the samples belongs to the age group between 19-21 years followed by 42.30% of the sample are more than 21 years of age



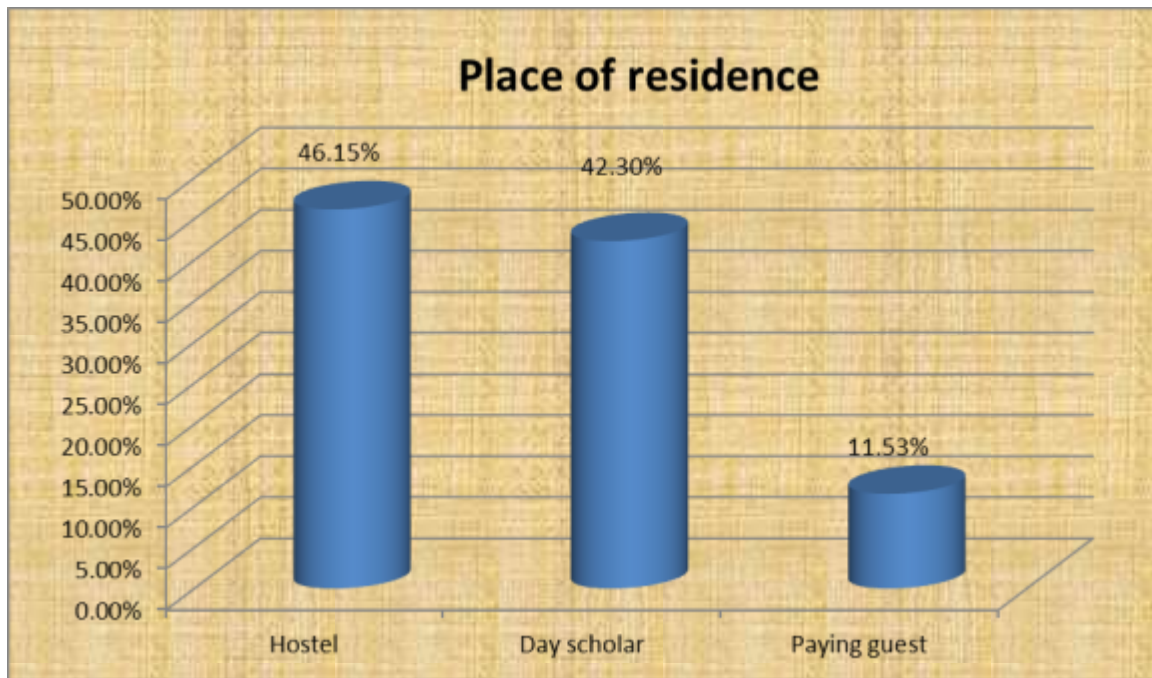
Picture:2 indicates that majority (76.92%) of the samples belongs to the female gender and followed by 23.07% of the samples are male.



Picture 3 indicates that majority (84.61%) of the samples belongs to the urban area of living followed by 15.38% of the rural area.

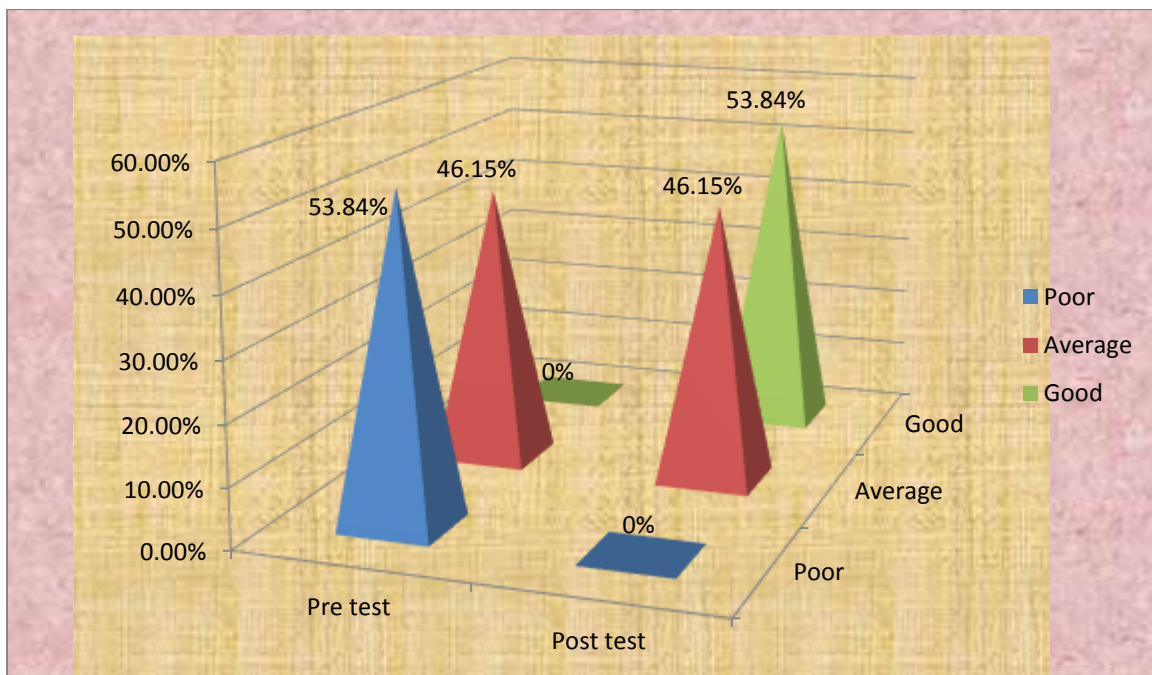


Picture:4 indicates the majority (53.84%) of samples are in the category of family income more than 25000rs followed by 19.23% are having 5000-15000rs, 15.38% are having family income 15000-25000rs and 11.53% are having less than 5000rs.



Picture: 5 indicates that majority (46.15%) of the samples belongs to the place of residence in hostel followed by 42.30% of the samples are day scholar and 11.53% samples are in paying guest.

Pre-test & post-test knowledge score



Picture: 6 Indicates that 53.84% majority of the samples had poor knowledge score during their pre- test followed by 46.15% of the samples are having knowledge of average score whereas 0% of samples had good score & during post-test 46.15% of the samples are having average knowledge score followed by 53.84% of the samples had good score during their post-test and 0% of the samples had poor score.

ACKNOWLEDGEMENT

First of all, we are thankful to the great God who has blessed and he gave us a chance to do this work. He has supported us in many forms as a teacher, friends, and parents for doing our study.

An individual can achieve the aim only when he or she is being assisted and supported by other. In this course of this research we fortunate enough to receive continuous assistance and support from various sources, which help us to the successful completion of this venture.

Our heartfelt thanks to Dr. Ravindra H.N., Principal of the sumandeeep nursing college, Piparia, Vadodara. Who has been the driving force behind this study with valuable suggestions, encouragement and a keen interest in conception, planning, and execution of the study.

We express our special sense of gratitude to the Associate professor and HRRP coordinator Mr. Swami PGN, MSC. Nursing, head of the department of community health nursing, human deep nursing college.

It gives me great pleasure to express my sincere thanks to the faculty of the sumandeeep nursing college, piparia for their constant encouragement, guidance, suggestions and their loving attitude to help us to complete this study.

We extend our appreciation and gratitude to nursing students for readily and willingly sharing their experience with us, this study wouldn't have been possible without their co-operation.