"A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING BASIC CARDIAC LIFE SUPPORT AMONG B.ED. COLLEGE STUDENTS IN FATMA B.ED. COLLEGE, CHANDWE, RANCHI."

UNDER THE GUIDANCE OF: -

Dr. Sudhir Kumar Khuntia

Associate Professor

Dept. Of Medical Surgical Nursing

Florence College Of Nursing

Irba, Ranchi

SUBMITTED BY: -

Miss Akansha Tiwary

Miss Arzoo Nisha

Miss Dipika Tirkey

Miss Florence Hansdak

Miss Muskan Perween

Miss Nuzhat Fatima

Miss Rajni Kumari

Miss Sahiba Firdous

Miss Sana Afrin

Miss Simmi Swaraj

Miss Sofia Perween

Mr. Ritwick Goswami

ABSTRACT

Basic life support is a type of medical care used on someone with a life-threatening injury or condition until full medical care can be given. Basic life support is provided in even respiratory failure. So, it is resuscitation in event of cardiac and respiratory arrest. An emergency responder or someone trained in BLS can provide this critical care. Basic life support consists of cardiopulmonary resuscitation and, when available, defibrillation using automated external defibrillators (AED). Basic Life Support training is gaining more importance in nursing education. The Basic Life Support is an essential skill taught to the nursing students. Conceptual model for the present study was based on general system theory by Ludwig Von Bertalanffy (1968). General system theory by Ludwig Von Bertalanffy (1968) says about human system, subsystem, input, thru put, and output in terms of feedback. Pre-experimental one group pre-test and post-test research design was utilized to assess the effectiveness of structured teaching programme on knowledge regarding basic cardiac life support among B.Ed. students of Fatma B.Ed. College, Chandwe, Ranchi where subjects were selected by purposive sampling. Pilot study was conducted in the month of March 24-04-23 to 29-04-23 at Uday Memorial College. The reliability of the tool was calculated using Karl Pearson methods. The tool was found to be reliable (r=0.9) for data collection. The data was collected after taking formal approval from principal of Uday Memorial College. Purpose of the study was explained to the group and confidentiality was assured. Pre-test was given on day one to the group planned teaching programme administered. Post test was conducted on other day. The result of the study indicates that there is a significant difference between knowledge scores among B.Ed. students the "t" test value obtained from pretest knowledge score (mean 16.5, SD 5.07), and post-test knowledge score (mean 26.9 SD 7.28), "t" table value at degree of freedom 39 is 2.02 at 0.05 value, which is greater than t table value and which is highly significant (p<0.01). The study reveals in posttest knowledge score the calculated value of chi square for Chi-score for any family member belongs to medical profession (8.8) and previous knowledge (8.83) were significant. The findings have implications for nursing practice, nursing administration, nursing education and nursing research.The findings of the study suggests that both overall and area wise analysis B.Ed. students gained knowledge about basic cardiac life support.

Keywords: Basic life support, knowledge, B.Ed. Student, effectiveness.

INTRODUCTION

Health is a dynamic state. It is continually changing from minute to minute, day to day and year to year as we grow. Health is an important factor for everyone because when we are healthy, we can enjoy life. In the past, health was considered to be the exact opposite of illness.

Basic life support (BLS) is a level of medical care which is used for victims of life- threatening illnesses or injuries until they can be given full medical care at a hospital. It can be provided by trained medical personnel, including emergency medical technicians, paramedics, and by laypersons who have received BLS training.

Basic life support is a type of medical care used on someone with a life-threatening injury or condition until full medical care can be given. Basic life support is provided in even respiratory failure. So it is resuscitation in event of cardiac and respiratory arrest. An emergency responder or someone trained in Basic Life Support can provide this critical care. Basic life support consists of cardiopulmonary resuscitation and, when available, defibrillation using automated external defibrillators (AED). The keys to survival from sudden cardiac arrest (SCA)

are early recognition and treatment, specifically, immediate initiation of excellent CPR and early defibrillation.

NEEDFORTHESTUDY

Cardiovascular disease is the world's leading killer. According to world Health Organization (WHO) estimates, 16.7 million people around the globe, die of cardiovascular disease each year. This is over 29 percent of all deaths globally. Cardiovascular diseases now more prevalent in India and China than all economically developing countries in the world combined. Cardiovascular disease in India quadrupled in the last 40 years. WHO estimates that by 2020 close to 60% of cardiac patients worldwide will be India.

WHO census statistics mortality due to cardiac causes has overtaken mortality due to all cancers put together. Yearly totals of sudden cardiac death in people ages 15 to 34 rose from 2,719 in 1989 to 3,000 in 1996. Alarmingly, though the numbers are very small, the death rate increased by 30 percent in young women. Death rates were also higher among young African Americans than among Caucasians.

Basic Life Support competency is considered a fundamental skill for health careworkers. In the wider community, it is an expectation that knowledge and competence in Basic

Cardio Pulmonary Resuscitation is one of the greatest inventions in the history of medicine in which the success depends on the motivation and performance of the rescuers. It is a subject of great interest, because its full potential, the saving of life, a powerful potential indeed is not realized. The investigator felt the professional responsibility to update and maintain proficiency in Cardio Pulmonary Resuscitation skills. The need was also felt to impact the knowledge regarding

recent advancement in Cardio Pulmonary Resuscitation as the release of new resuscitation guidelinehasaprofoundeffectonresuscitationteachingandpractices.The investigator selected students as they are often the first person to come across a patient in cardiac arrest and sound evidence based on scientific knowledge prepares them to do the best in an ultimate emergency where there is no time to consult anyone.

PROBLEM STATEMENT

A Study To Assess The Effectiveness Of Video Assisted Teaching Program On Knowledge Regarding Basic Cardiac Life Support Among B.Ed. College Students In Fatma B.Ed. College, Chandwe, Ranchi.

OBJECTIVES

- To assess the pre-test and post-test knowledge regarding basic cardiac life support.

- To assess the effectiveness of video assisted teaching programme on knowledge regarding basic cardiac life support measures by comparing pre-test and post-test knowledge score.

- To associate the pre-test and post-test knowledge regarding basic cardiac life support with their selected socio demographic variables.

HYPOTHESIS

H1: There will be no significant difference between pre -test and post-test knowledge regarding basic cardiac life support

H2: There will be significant difference between pre-test and post-test knowledge regarding basic cardiac life support

METHODOLOGY

The methodology of research indicates a general pattern for organizing the procedure of gathering valid and reliable dates for an investigation. This chapter deals with the methodology adopted to assess the knowledge of B.Ed. college students regarding basic life support of Fatma B.Ed. College Chandwe, Ranchi.

RESEARCHAPPROACH

The present study aimed at assessing the knowledge regarding basic cardiac life support among B. Ed college students of Fatma B.Ed. college Chandwa, Ranchito accomplish the

RESEARCHDESIGN

A one group pre-test and post-test design for assessment of knowledge regarding basic cardiac life support among B.Ed. college students is used in the present study.

SETTING OF THE STUDY

Fatma B.Ed.college Chandwe, Ranchi was setting of the study.

VARIABLES:

Variables are properties or characteristics of person, think or situation that change or

vary.

INDEPENDENTVARIABLES

In this study independent variable is video assisted teaching programme regarding Basic Cardiac Life Support

DEPENDENTVARIABLES

Knowledge of B.Ed. college student's student regarding BasicCardiacLifeSupport.

SELECTION AND SETTING OF THE STUDY

The field for study selected was B.Ed. college auditorium because our comparison of study will to assess the knowledge of B.Ed. college student regarding Basic Cardiac Life Support.

POPULATION:

TARGETPOPULATION

Target population usually has varying characteristics and it is also known as the theoretical population. In the present study target population includes the all-B.Ed. college students of Fatma B.Ed. College Chandwe, Ranchi.

ACCESSIBLEPOPULATION

It is from the accessible population includes the 40 sample of B.Ed. college students of Fatma B.Ed. College Chandwes, Ranchi.

SAMPLE

The sample of the present study is 40 B.Ed. college students of Fatma B.Ed. College Chandwe, Ranchi.

SAMPLING TECHNIQUE

A representative sample was selected by using Non probability purposive sampling form the population of all B.Ed. college students of Fatma B.Ed. College Chandwe, Ranchi

SAMPLIING SIZE

For the present study, 40 B.Ed college students of Fatma B.Ed.College Chandwe, Ranchi were selected.
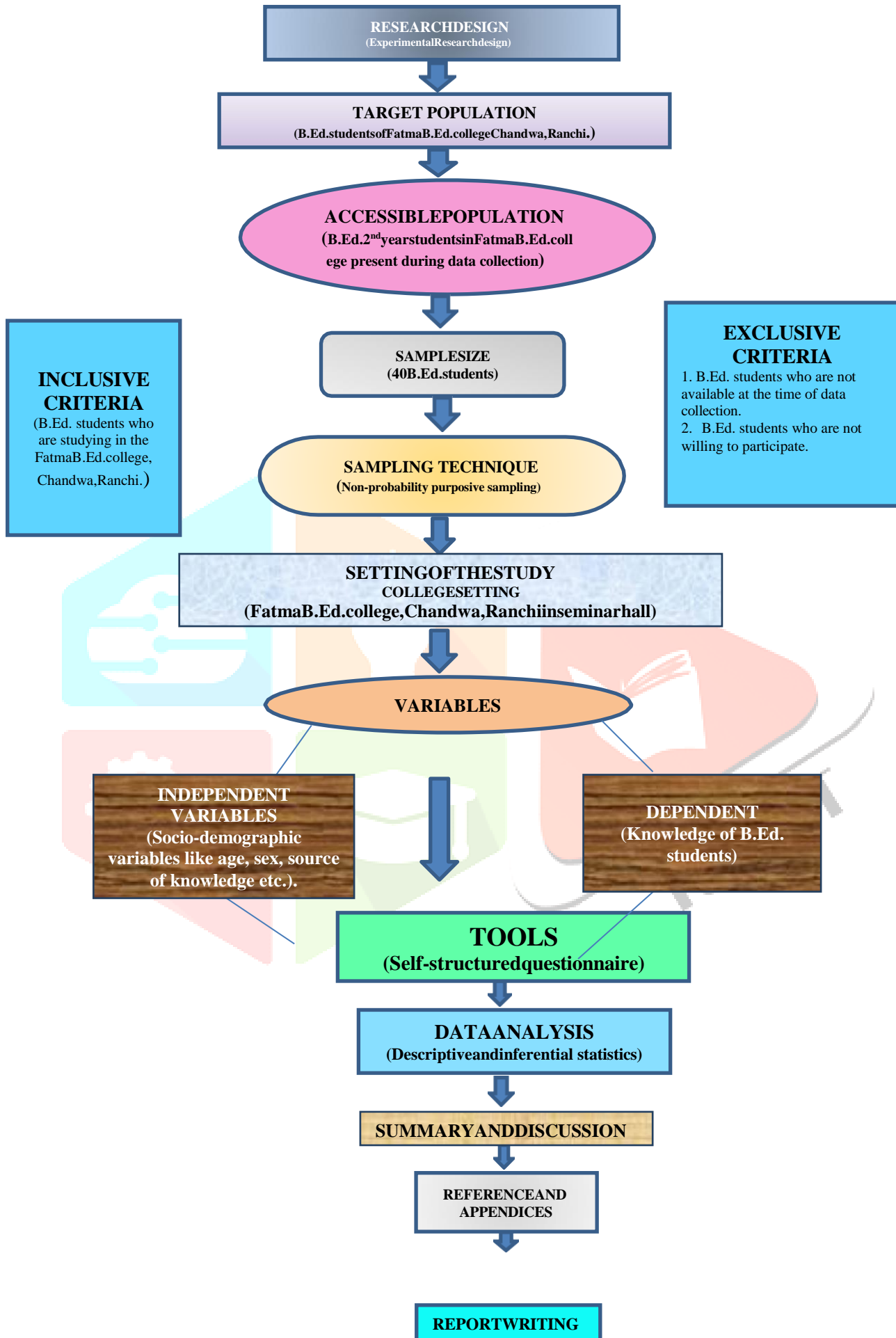
SAMPLING CRITERIA

Inclusion criteria

(1) B.Ed. college student who are studying in Fatma B.Ed. College Chandwa,Ranchi

Exclusion criteria

(1) The B.Ed. students who are not available at the time of data collection.

(2) The B.Ed. students who are not willing to participate in the students

SCHEMATIC PRESENTATION OF RESEARCH DESIGN:

RESEARCHDESIGN
(ExperimentalResearchdesign)

TARGET POPULATION
(B.Ed.studentsofFatmaB.Ed.collegeChandwa,Ranchi.)

ACCESSIBLEPOPULATION
(B.Ed.2ⁿᵈyearstudentsinFatmaB.Ed.coll ege present during data collection)

INCLUSIVE CRITERIA
(B.Ed. students who are studying in the FatmaB.Ed.college, Chandwa,Ranchi.)

SAMPLESIZE
(40B.Ed.students)

EXCLUSIVE CRITERIA
1. B.Ed. students who are not available at the time of data collection.
2. B.Ed. students who are not willing to participate.

SAMPLING TECHNIQUE
(Non-probability purposive sampling)

SETTINGOFTHESTUDY
COLLEGESETTING
(FatmaB.Ed.college,Chandwa,Ranchiinseminarhall)

VARIABLES

INDEPENDENT VARIABLES
(Socio-demographic variables like age, sex, source of knowledge etc.).

DEPENDENT
(Knowledge of B.Ed. students)

TOOLS
(Self-structuredquestionnaire)

DATAANALYSIS
(Descriptiveandinferential statistics)

SUMMARYANDDISCUSSION

REFERENCEAND APPENDICES

REPORTWRITING

SECTION-I

Distribution of subject according to socio demographic variable by frequency and percentage.

TABLE-1

Distribution of subjects according to Age

N=40

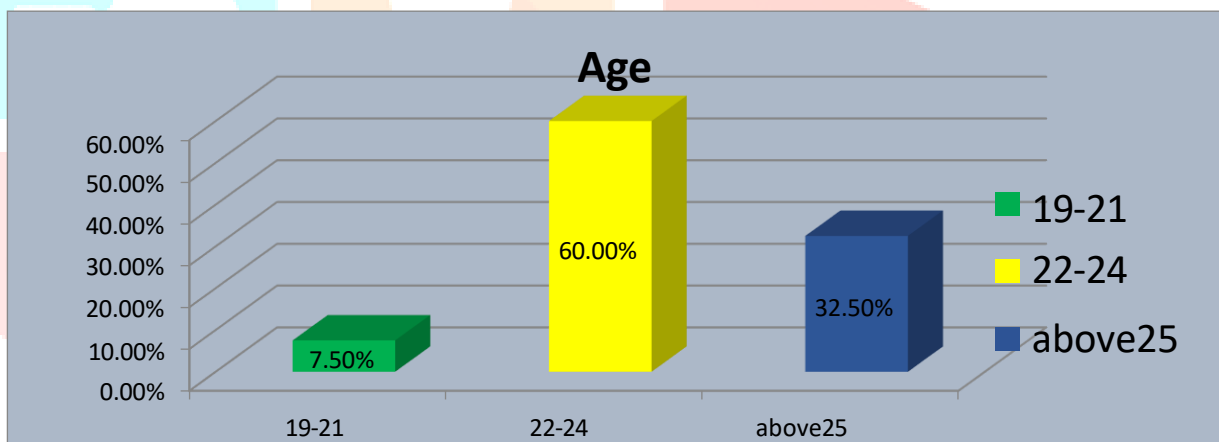| S.NO	AGE(INYEARS)	FREQUENCY (f)	PERCENTAGE(%)
1.	19-21	3	7.5
2.	22-24	24	60.0
3.	Above25	13	32.5
	Total	**40**	**100**

Figure no. 3 Clustered column diagram showing the percentage distribution of the subjects according to age groups.

 Table 1, It depicts that maximum subject 24 (60.o%) belonged to age group 22-24years of age, 3(7.5%) belonged to age group 19-21years, and 13(32.5%) belong to the age group above 25years of age.

TABLE-2

Distribution of subjects according to Gender

N=40

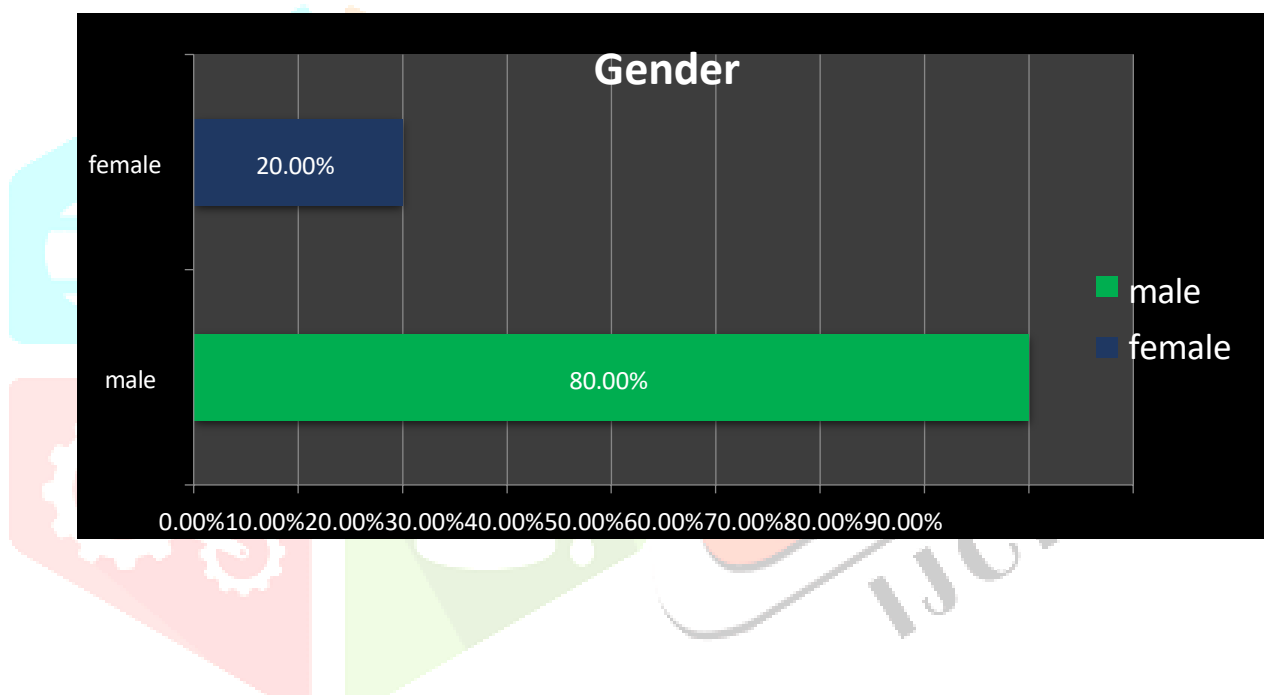| S.NO	GENDER	FREQUENCY(f)	ENTAGE (%)
1.	Female	32	80
2.	Male	8	20
	Total	**40**	**100**

Figno:4 Bar diagram showing percentage distribution of subjects according to gender

Table2: It depicts that maximum subjects 32(80%)were female,and8(20%)were male.

TABLE-3

Distribution of subjects according to family income

N=40

S.NO	FAMILYINCOME	FREQUENCY(f)	PERCENTAGE(%)
1.	BelowRs5,000	3	7.5
2.	Rs5,001-10,000	3	7.5
3.	Rs10,001-15,000	7	17.5
4.	AboveRs15,001	27	67.5
	TOTAL	**40**	**100**
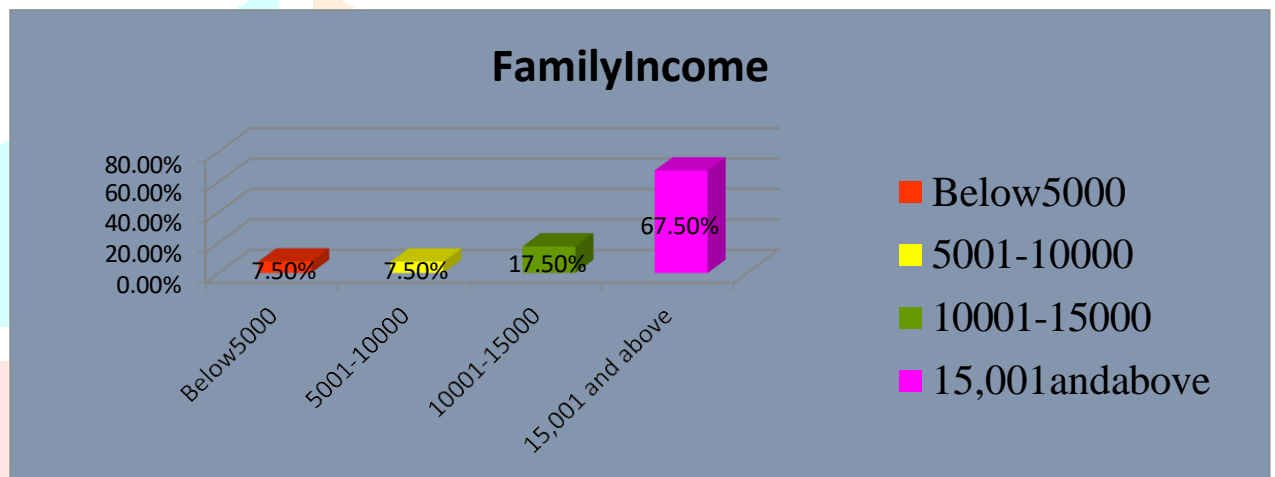
- **Fig no 5;** Bar diagram showing percentage distribution of subjects according to family monthly income.
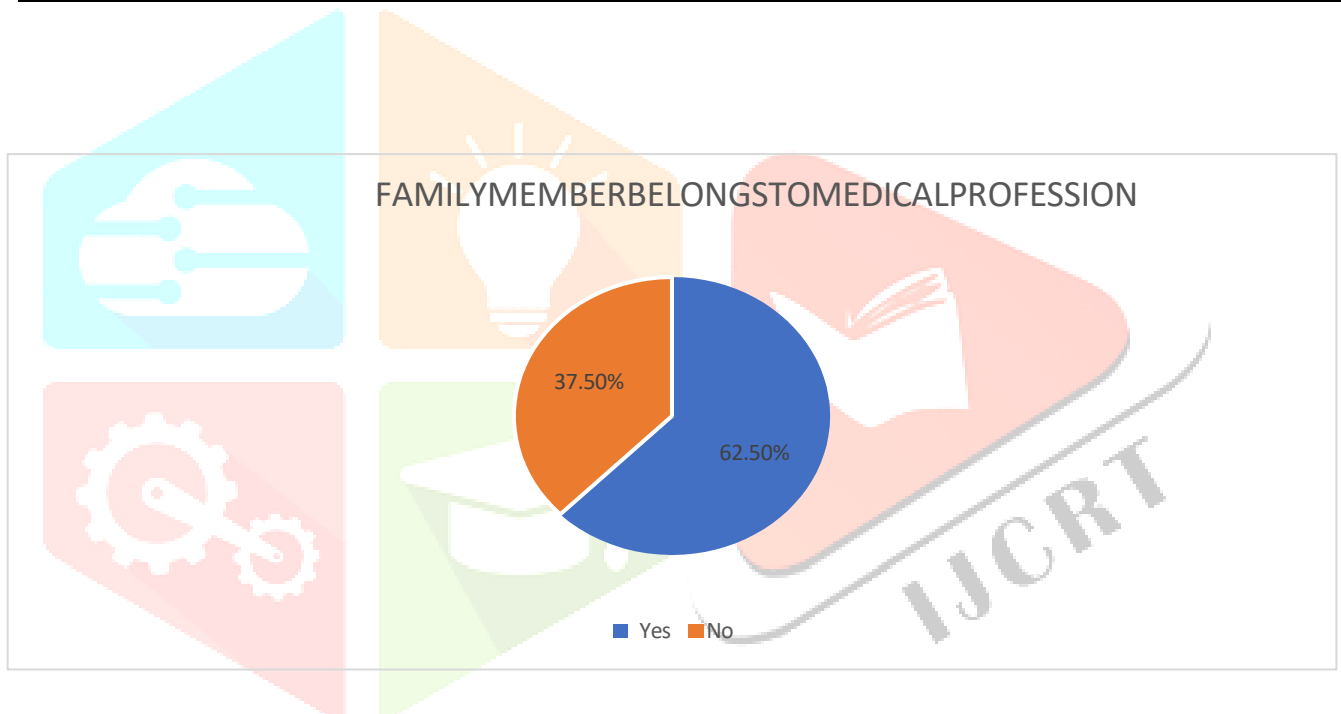
Table 3: It depicts that maximum subjects 27(67.5%) were having Rs 15,001 and above family income, 7(17.5%) were having Rs 10,001-15,000 family income, 3(7.5%) were having Rs 5,001-10,000 income and 3(7.5%) were having less than Rs 5000 income.

TABLE4

According to any family member belongs to medical profession

<div align="right">**N=40**</div>

S.No	ANYFAMILY MEMBERBELONG TO MEDICAL PROFESSION	FREQUENCY (f)	ENTAGE (%)
1.	Yes	25	62.5
2.	No	15	37.5
	TOTAL	**40**	**100**

Figno6;Pie diagram showing percentage distribution of subjects according to any family member belongs to medical profession

Table 4: It depicts that maximum subject 25(62.5%%) were having family member which belongs tomedical profession, 15(37.5%) were not having family member which belongs to medical profession.

TABLE5

Distribution of subjects according to previous knowledge.

N=40

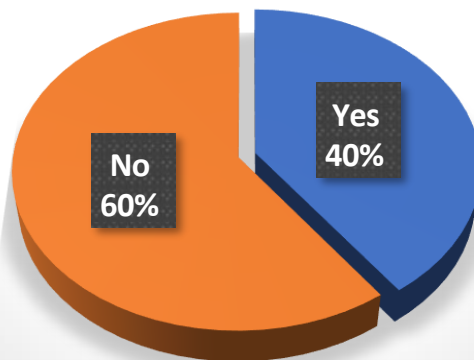| S.NO	PREVIOUS KNOWLEDGE	FREQUENCY (f)	ENTAGE (%)
1.	Yes	16	40
2.	No	24	60
	Total	40	100

TABLE:6

Distribution of subjects according to source of information

N=40

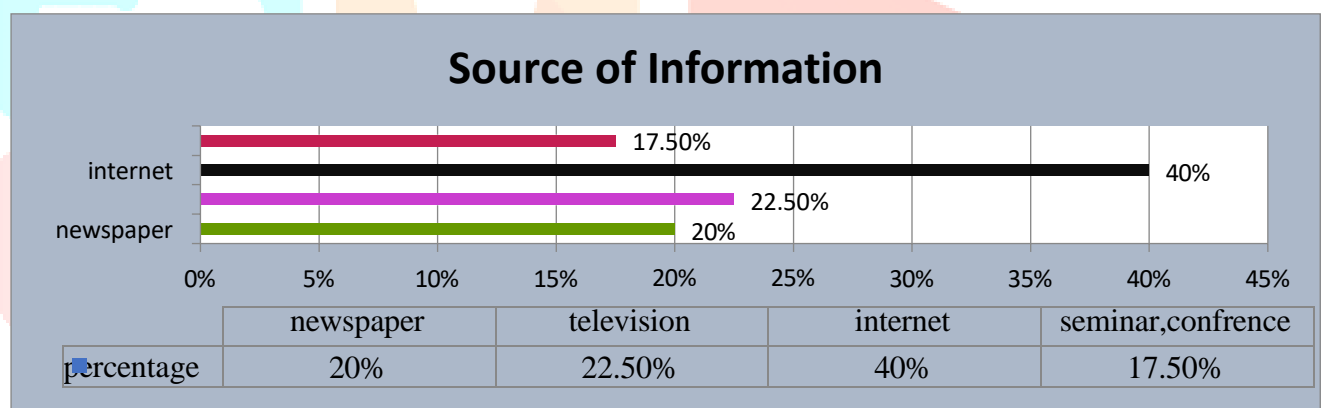| S.NO	SOURCEOF INFORMATION	FREQUENCY (f)	PERCENTAGE (%)
1.	Newspaper	8	20%
2.	Television	9	22.5%
3.	Internet	16	40%
4.	Seminar, conference	7	17.5%
	Total	**40**	**100%**

Fig no 8; bar diagram showing percentage distribution of subjects according to source of information.

Table 6: It depicts that maximum subjects 16(40.0%) were having information from internet, 9(22.5%) were having information from television, 8(22%) were having information from newspaper and 7(17.5%) were having information from seminar, conferences.

SECTION –II

FREQUENCY AND PERCENTAGE DISTRIBUTION OF OVERALL PRE-TEST AND POST-TEST KNOWLEDGE SCORE

N=40

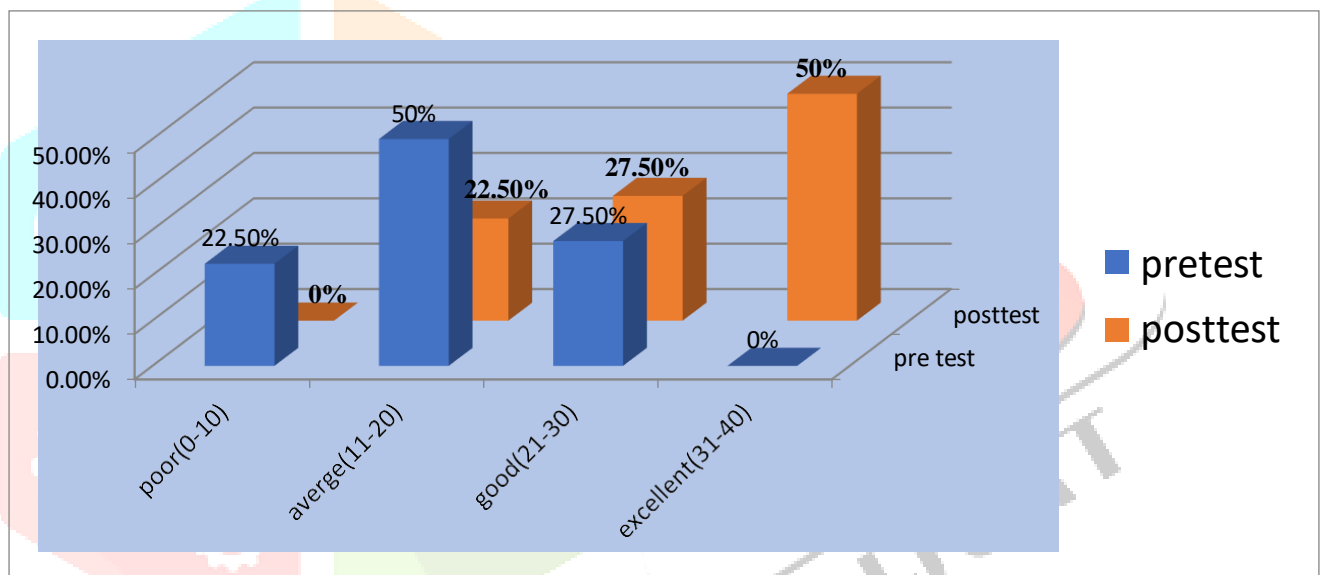| S.NO	CATEGORY	PRE-TEST		POSTTEST	
		FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
1.	POOR(0-10)	9	22.5	0	0
2.	AVERAGE(11-20)	20	50	9	22.5
3.	GOOD(21-30)	11	27.5	11	27.5
4.	EXCELLENT(31-40)	0	0	20	50
	TOTAL	40	100	40	100

Fig 9: Multiple bar diagram showing percentage distribution of overall analysis of pre-test and post -test knowledge score.

Table 7, It depicts that pre- test and post- test knowledge score regarding basic cardiac life support among B.Ed. students. In pre-test, 9(22.5%) are having poor knowledge, 20(50%) are having average knowledge 11(27.5%) are having good knowledge and 0(0%) are having excellent knowledge whereasin post- test 0(0%) are having poor knowledge, 9(22.5%) are having average knowledge, 11(27.5%) are having good knowledge and 20(50%) Students are having excellent knowledge.

SECTION:III

ANALYSIS OF FINDING THE DIIFERENCE IN PRE AND POST TEST SCORE BY USING MEAN, MEAN PERCETAGE AND STANDARD DEVIATION

OWLEDGE LEVEL	MEAN	MEAN PERCENTAGE	MEAN DIFFERENCE	MEAN PERCENTAGE DIFFERENCE	SD
PRE-TEST	16.05	40.1%	10.85	27.13	5.071
POST-TEST	26.9.	67.2%			7.28

Table 8: it depicts that different in pre-test and post-test knowledge score by using mean, mean percentage and standard deviation.

SECTION IV

EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME BY USINGDIFFERENCEBETWEENPRE-TESTMEANPERCENTAGEAND POST-TEST MEAN PERCENTAGE.

TABLE:9

"T" TEST VALUES SHOWS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME.

N=40

Knowledge	Mean	SD	Df	Paired ttest	Pvalue	Table value	Inferences
							V>TVAt P>0.05
Pre-test	16.5	5.07	39	2.05	0.05	2.02	Significance
Post-test	26.9	7.28					

Table 9: The data in the table 9 shows that the pre-test and post-test score or the group has a completed t-value of 2.05 at 39 degree of freedom completed P value in 0.05, which is statistically significant, as it is less than level of significant (P<0.05) inferring that the post-test knowledge score was higher than pre-test score at 0.05level.

SECTION:V

Table-10

CHI-SQUARE ANLYSISI TO FIND OUT THE ASSOCIATION BETWEEN PRE-TEST KNOWLEDGE SCORE WITH THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES.

S.NO	DEMOGRAPHIC VARIABLE	Poor	Average	Good	Excellent	Chi-Square	Table Value	D.F	Inference
1.	Age (in years)								
	19-22	1	2	0	0	2.7	12.59	6	Significant p>0.05
	22-24	6	10	8	0				
	Above25	2	8	3	0				
2.	Gender								
	Female	8	15	9	0	1.04	7.28	3	Significant p>0.05
	Male	1	5	2	0				
3.	Family member belongs to medical profession								
	Yes	8	6	2	0	8.8	7.82	3	**SIGNIFICANT** P<0.05
	No	3	14	7	0				
4.	Family income								
	BelowRs.5000	1	1	1	0	3.5	16.92	9	Significant p>0.05
	Rs.5001-10,000	0	2	1	0				
	Rs.10,001-15,000	2	5	0	0				
	AboveRs.15,001	12	6	9	0				
5.	Previous Knowledge								
	Yes	7	14	4	0	8.83	7.82	3	**SIGNIFICANT** p<0.05
	No	2	6	7	0				
6.	Source of information								
	Newspaper	4	3	1	0	8.05	16.92	9	Significant p>0.05
	Television	0	7	2	0				
	Internet	3	8	5	0				
	Seminar, Conference	2	2	3	0				

- Table 10- It shows the association between pre-test level of knowledge of B. Ed. students with their socio demographic characteristics such as age, gender, any family member belongs to medical profession, family income, previous knowledge and source of information.

- The calculated value of chi square for any family member belongs to medical profession (8.8) and previous knowledge (8.83) were significant were as age (2.7), gender (1.04), familymonthly income (3.5, and source of information (8.05) were not significant

- Henceitisconcludedthatareaofresidencewasassociatedwithpre-testlevelofknowledgewere as age, gender, family monthly income, and source of information were not associated with pre- test level of knowledge

CONCLUSION

This study assessed the effectiveness of video assisted teaching programme on knowledge regarding basic cardiac life support among B.Ed. students in Fatma B.Ed. college, Chandwa, Ranchi. Hence the calculated value 't' value is 2.05 was greater than table value 2.02 at 0.05 level of significance. It was concluded as video assisted teaching programme was very effectiveness in improving knowledge of B.Ed. students regarding basic cardiac life support. Thus, research hypothesis(H1) was accepted.

BIBLIOGRAPHY

1. Rebecca. Quasi-experimental research to investigate the retention of basic cardiopulmonary resuscitation skills and knowledge by qualified nurses following a course in professional development. Journal of Advanced Nursing. 1996, 23(5); 1016-1023.

2. Suresh K. Sharma. Textbook of Nursing Research and Statistics. Published by – Elsevier, (2011) P: 30.

3. Shanta Chandrasekaran, Sathish Kumar, Textbook of Awareness of basic life support among medical, dental, nursing students and doctors,2010, vol-54, page-121-126.

4. Treece E.W. and Treece JW. Elements of research in Nursing's. Louis C.V. Mosby; (1968), P: 42-43.

5. Williams Lippincott & Wilkins (2006), Lippincott Manual of Nursing practice,8th edition. New Delhi, Jaypee Brothers, P-772.

6. Wood G.H and Haber J. nursing research. 5th edition (2002). Published by; Mosby Elsevier. westline industrial drive. St Louis Missouri. P-369-372.

7. Woods Susan L, Erika S. Sivarajan, Froelicher, Sandra Underhill motzer & Elizabeth j. bridges, Text book of cardiac nursing, edition 5th, Philadelphia: Lippincott, 2005.

8. Zuzelo,Textbookofclinicalnursespecialist, P:921.