"Disease Can Be Rarely Eliminated Through Early Diagnosis Or Good Treatment, But Prevention Can Eliminate The Disease."[1]

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INTRODUCTION

AIDS stands for Acquired Immune Deficiency Syndrome. AIDS is a serious condition that weakens the body's immune system, leaving it unable to fight off illness. AIDS is the last stage in a progression of diseases resulting from a viral infection known as the Human Immunodeficiency Virus (HIV or AIDS virus). The diseases include a number of unusual and severe infections, cancers and debilitating illnesses, resulting in severe weight loss or wasting away, and diseases affecting the brain and central nervous system.

AIDS is an immunodeficiency disorder. Lymphocytes (white blood cells) are one of the main types of immune cells that make up the immune system. There are two types of lymphocytes: B cells and T cells. (T cells are also called CD4 cells, CD4 T cells, or CD4 cell lymphocytes). B cells secrete antibodies (proteins) into the body's fluids to ambush and attack antigens. T cells directly attack and destroy infected or malignant cells in the body. There are two types of T cells: helper T cells and killer T cells. Helper T cells recognize the antigen and activate the killer T cells. Killer T cells then destroy the antigen. When HIV is introduced into the body, this virus is too strong for the helper T cells and killer T cells. The virus then invades these cells and starts to reproduce itself, thereby not only killing the CD4 T cells, but also spreading to infect otherwise healthy cells. The HIV virus cannot be destroyed and lives in the body undetected for months or years before any sign of illness appears. Gradually, over many years or even decades, as the T cells become progressively destroyed or

inactivated, other viruses, parasites or cancer cells (called "opportunistic diseases") which would not have been able to get past a healthy body's defense, can multiply within the body without fear of destruction. Commonly seen opportunistic diseases in persons with HIV infection include: pneumocystis carinii pneumonia, tuberculosis, candida (yeast) infection of the mouth, throat or vagina, shingles, cytomegalovirus retinitis and Kaposi's sarcoma.

There is no cure for HIV infection or AIDS nor is there a vaccine to prevent HIV infection. However, new medications not only can slow the progression of the infection, can also markedly suppress the virus, thereby restoring the body's immune function and permitting many HIV-infected individuals to lead a normal, disease-free life. [3]

BACKGROUND OF THE STUDY:

Research found that HIV is related to SIV and there are many similarities between the two viruses. HIV-1 is closely related to a strain of SIV found in chimpanzees, and HIV-2 is closely related to a strain of SIV found in sooty mangabeys. In 1999, researchers found a strain of SIV (called SIVcpz) in a chimpanzee that was almost identical to HIV in humans. The researchers who discovered this connection concluded that it proved chimpanzees were the source of HIV-1, and that the virus had at some point crossed species from chimps to humans. The same scientists then conducted more research into how SIV could have developed in the chimps. They discovered that the chimps had hunted and eaten two smaller species of monkeys (red-capped mangabeys and greater spot-nosed monkeys). These smaller monkeys infected the chimps with two different strains of SIV. The two different SIV strains then joined together to form a third virus (SIVcpz) that could be passed on to other chimps. This is the strain that can also infect humans. The most commonly accepted theory is that of the 'hunter'. In this scenario, SIVcpz was transferred to humans as a result of chimps being killed and eaten, or their blood getting into cuts or wounds on people in the course of hunting. Normally, the hunter's body would have fought off SIV, but on a few occasions the virus adapted itself within its new human host and became HIV-1

HIV continues to be a major global public health issue, having claimed 36.3 million [27.2–47.8 million] lives so far. There is no cure for HIV infection. However, with increasing access to effective HIV prevention, diagnosis, treatment and care, including for opportunistic infections, HIV infection has become a manageable chronic health condition, enabling people living with HIV to lead long and healthy lives. There were an estimated 37.7 million [30.2–45.1 million] people living with HIV at the end of 2020, over two thirds of whom (25.4 million) are in the WHO African Region. In 2020, 680 000 [480 000–1.0 million] people died from HIV-related causes and 1.5 million [1.0–2.0 million] people acquired HIV. To reach the new proposed global 95–95–95 targets set by UNAIDS, we will need to redouble our efforts to avoid the worst-case scenario of

million HIV-related deaths over the next 10 years, increasing HIV infections due to HIV service disruptions during COVID-19, and the slowing public health response to HIV.[4]

Problem statement

A study to assess the effectiveness of planned teaching program on knowledge regardingpremarital HIV testing among adult in selected community area.

Objectives:

1. To assess the previous knowledge of premarital HIV testing.
2. To identify the effectiveness of planned teaching program on Premarital HIV testing.
3. To assess the association between pre- test score knowledge with the selecteddemographic variables to identify effectiveness of planned teaching program.

REVIEW OF LITERATURE:

A literature review is a search and evaluation of available literature in a given subject. It provides guidelines about background for understanding what has been already learned on topic and illuminates the significance of new study.

Methodology:

Research approach	Quantitative experimental approach
Research design	Pre-experimental one group pre-test post-test design
Target population	Adults in selected community area.
Accessible population	Adults in selected community area.
Sample and size	30
Sampling technique	Non probability convenient sampling

Tools of research	Semi structured questionnaire
Collection of data	Self-reported method
Method of data analysis and presentation	Descriptive and inferential statistics data presented in the form of table and figure

Findings and interpretation:

The findings have been illustrated in the following graphs and tables.
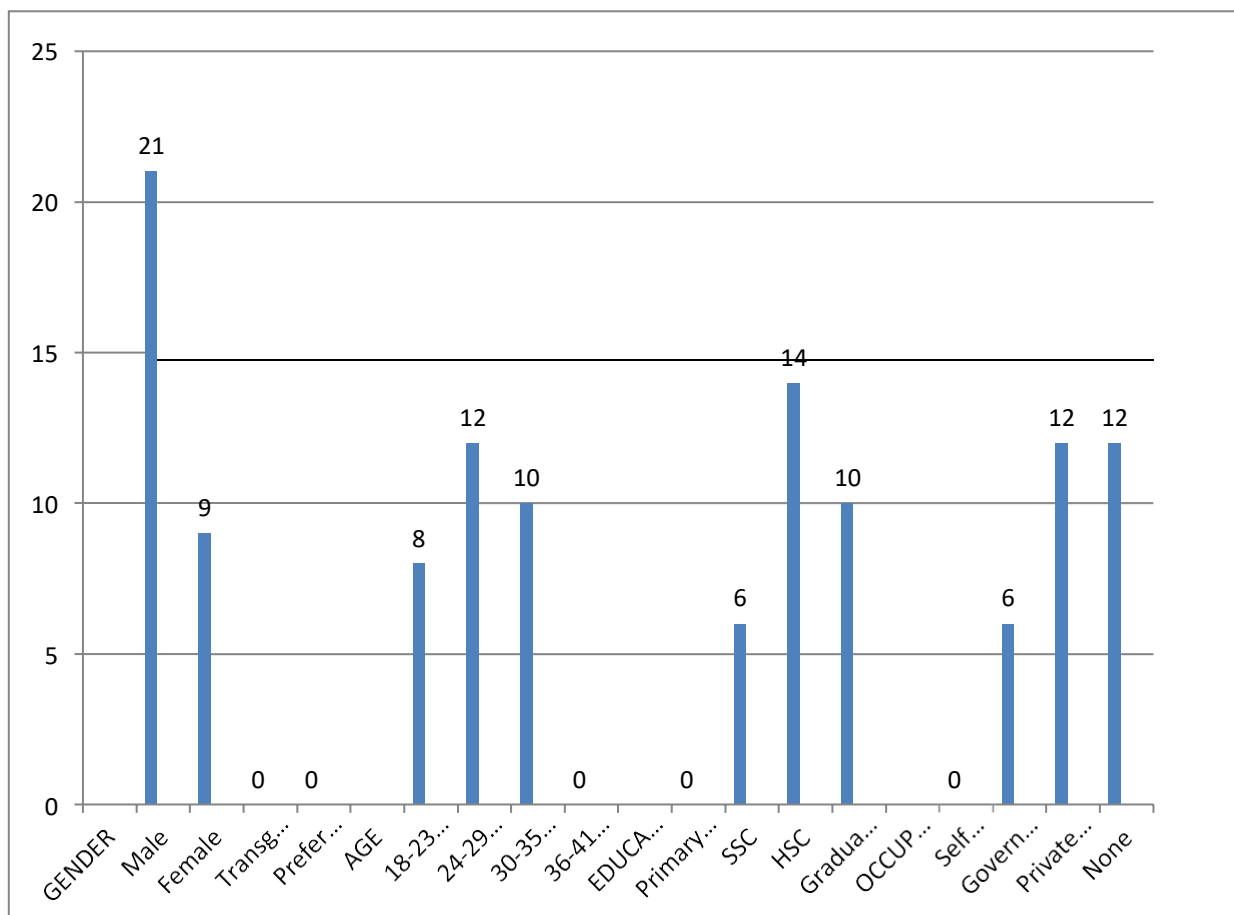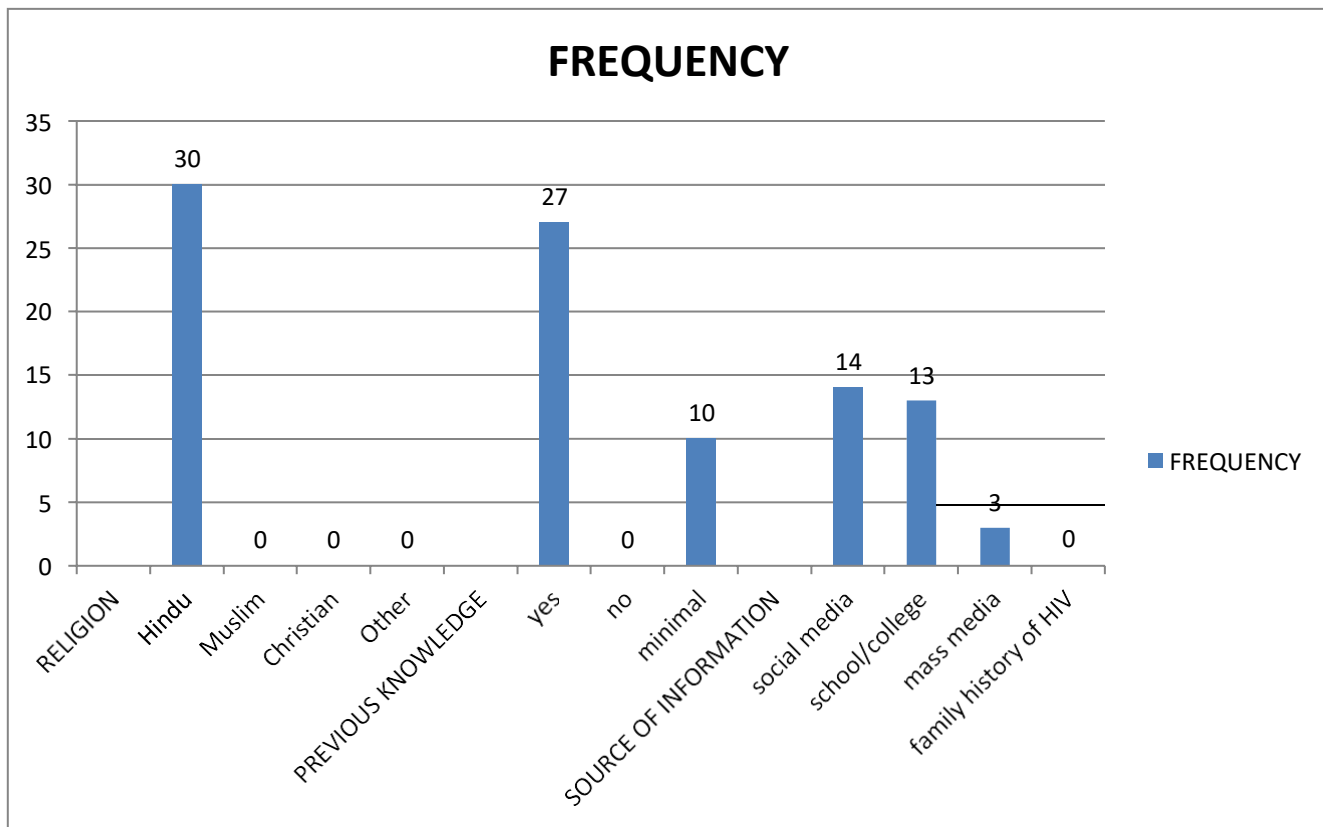
Section 1

Table 1

Distribution of samples according to gender, age, education, occupation, religion, previousknowledge regarding topic and source of information.

SR NO.	DEMOGRAPHIC DATA	FREQUENCY	PERCENTAGE
1	GENDER		
	Male	21	70%
	Female	09	30%
	Transgender	00	0%
	Prefer not to say	00	0%
2	AGE		
	18-23 years	8	26.67%
	24-29 years	12	40%
	30-35 years	10	33.33%
	36-41 years	0	0%
3	EDUCATION		
	Primary education	0	0%
	SSC	06	20%
	HSC	14	46.67%
	Graduated	10	33.33%
4	OCCUPATION		
	Self-employment	0	0%
	Government job	06	20%
	Private job	12	40%
	None	12	40%
6	RELIGION		
	Hindu	30	100%
	Muslim	0	0%
	Christian	0	0%
	Other	0	0%

7	PREVIOUS KNOWLEDGE		
	Yes	27	90%
	No	0	0%
	Minimal	3	10%
8	SOURCE OF INFORMATION		
	Social media	14	46.67%
	School/college	13	43.33%
	Mass media	03	10%
	Family history	00	0%

This section deals with analysis of demographic data, of sample under study.

It is analyzed and presented in form of frequency and percentage table. Gender, age in years, educational status, occupation, religion &previous knowledge regarding topic.

Majority of samples (70%) were male, majority of samples (40%) fall in age group between 24 to 29 years, most of the samples (46.67%) were HSC passed, and maximum samples were in private job and jobless (40%).

Religion of all of samples were Hindu (100%), most of the samples (90%) have previous knowledge regarding premarital HIV testing, majority of samples(46.67%) source of informationwere social media

SECTION 2:

Data analysis related to assessment of knowledge on adults before planned teaching program aboutpremarital HIV Testing in adults.

Table 10:-assessment of knowledge of subjects in pretest.

n=30

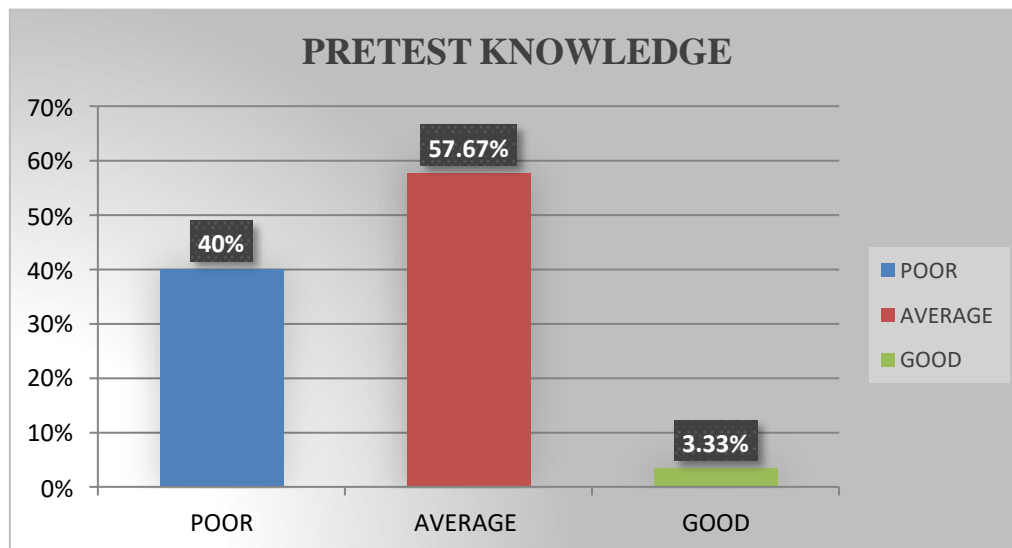| KNOWLEDGE	PRETEST	
	FREQUENCY	PERCENTAGE
Poor (0-6)	12	40%
Average score (7-13)	17	57.67%
Good score (14-20)	01	3.33%
Total	30	100%

Fig. no.10: Distribution of subjects according to pretest knowledge.

Conclusion: figure 11 shows that 40% (12) people have poor knowledge whereas 57.67% (17)people have average knowledge and 3.33% (1) person has good knowledge is pretest

Section-III:

Data analysis related to the effectiveness of planned teaching program on knowledge of adultsabout premarital HIV testing.

Table 11:-assessment of knowledge of subjects in posttest.

n = 30

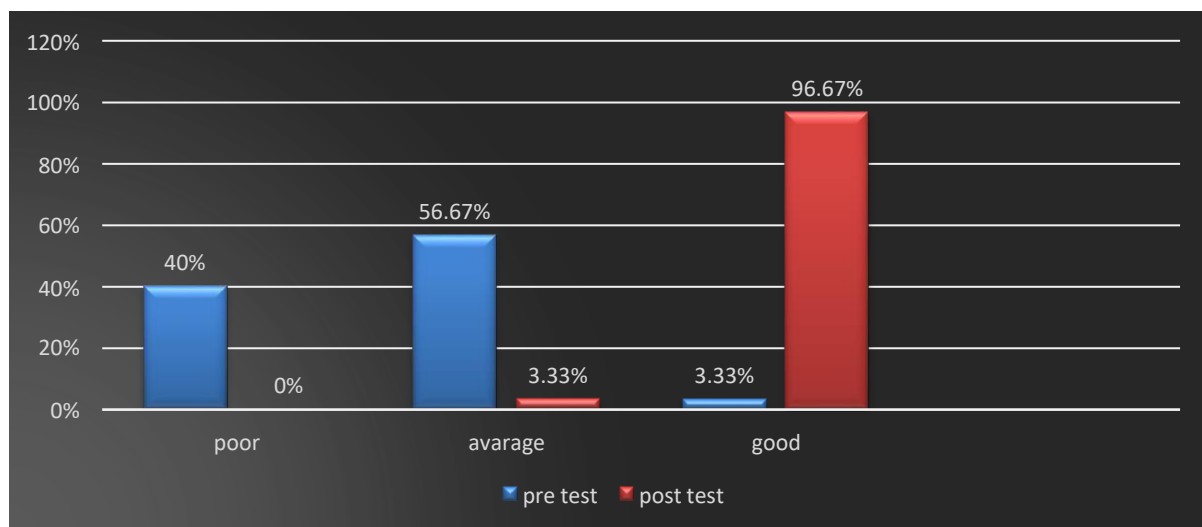| KNOWLEDGE	PRETEST		POSTTEST	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Poor (0-6)	12	40%	00	00%
Average score (7-13)	17	56.67%	01	3.33%
Good score (14-20)	01	3.33%	29	96.67%
Total	30	100%	30	100%

Fig. no 11: assessment of knowledge of subjects in post test

 Conclusion: Figure 12 is assessment of knowledge subjects in post-test. In pretest there are only 3.33% (1) person has good score out of 30 samples whereas in post –test 96.67% (29) samples have good knowledge.

Table no.12: comparison of overall knowledge

comparison	Mean (M)	Standard deviation	Mean difference	Standard error SEDM	t.test
Pretest	7.47	2.99	-10.6	0.5	16.60
Post test	18.06	1.70			
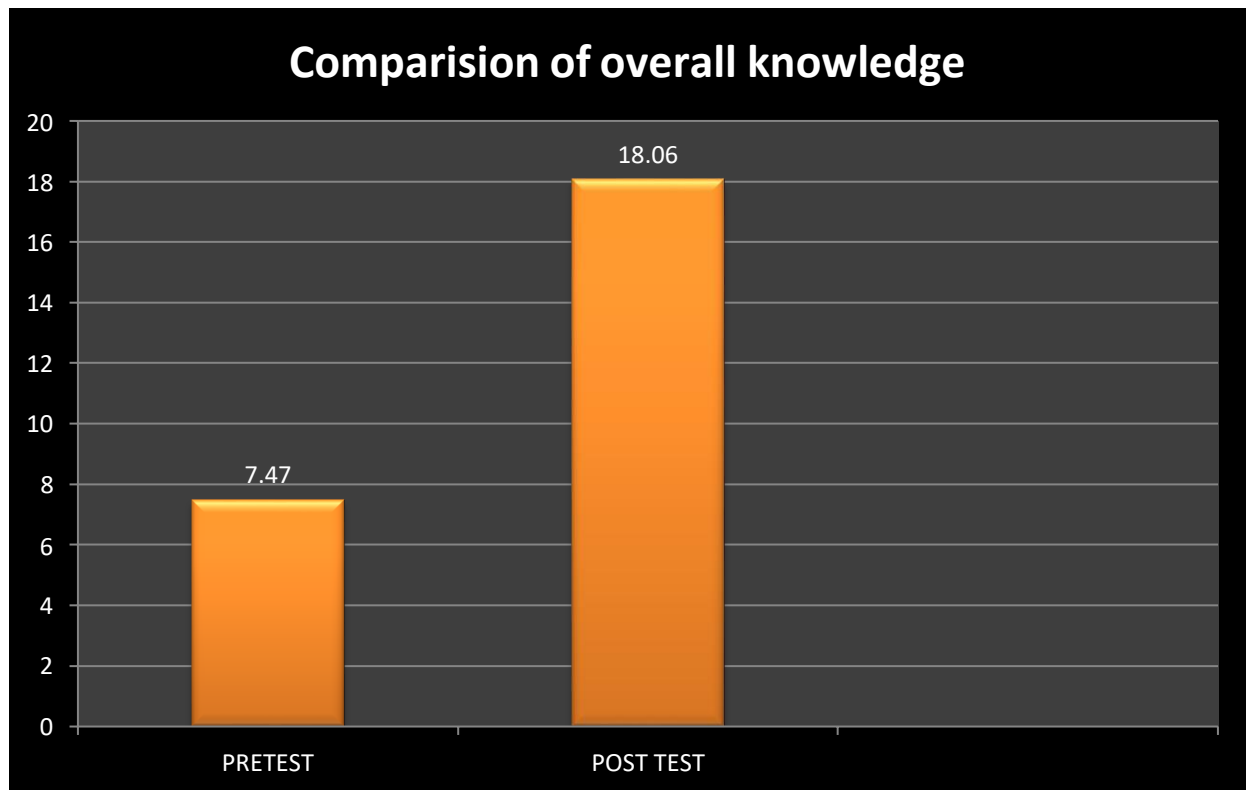
Score calculation:

Treatment1

N_1:30

$df_1 = N - 1 = 30 - 1 = 29$

M_1:7.47 SS_1:259.47

$s^2_1 = SS_1/(N - 1) = 259.47/(30-1) = 8.95$

Treatment2

N_2:26

$df_2 = N -1 = 26-1 = 25$

M_2:18.23SS_2:56.62

$s^2_2 = SS_2/(N -1) = 56.62/(26-1) = 2.26$

T-valueCalculation

$s^2_p = ((df_1/(df_1 + df_2))* s^2_1) + ((df_2/(df_2 + df_2))* s^2_2) = ((29/54)*8.95) + ((25/54)*2.26) = 5.85$

$s^2_{M1} = s^2_p/N_1 = 5.85/30 = 0.2$

$s^2_{M2} = s^2_p/N_2 = 5.85/26 = 0.23$

$t = (M_1 - M_2)/\sqrt{(s^2_{M1} + s^2_{M2})} = -10.76/\sqrt{0.42} = 16.6$

The t value is 16.60. The p- value is $< .00001$.the result is significant at $p < .05$.

KEYWORDS

N – Number of sampledf- degree

of freedom M –mean

ss – Sum of sample

S –standard deviation

Referring to tabulated t – value at 29 df, for the 0.05 level of significance. Calculated t – value is 16.6, which is greater than tabulated t value (2.5) at 29 degree of freedom, thus we reject null hypothesis and infer that there are some effect of hypothesis in knowledge of sample

FINDINGS OF THE STUDY

Section 1:

This section deals with analysis of demographic data, of sample under study.

It is analyzed and presented in form of frequency and percentage table. Gender, age in years, educational status, occupation, religion &previous knowledge regarding topic.

Majority of samples (70%) were male, majority of samples (40%) fall in age group between 24 to 29 years, most of the samples (46.67%) were HSC passed, maximum samples were in private job and jobless (40%), religion of all of samples were Hindu (100%), most of the samples (90%) have previous knowledge regarding premarital HIV testing, majority of samples (46.67%) source of information were social media.

Section 2:

This section deals with assessment of knowledge in pre-test. Pre-test knowledge regarding premarital HIV testing among adults in selected community area was 40% poor knowledge, (57.67%) average knowledge and 3.33% were good knowledge.

Section 3:

This section deals with assessment of knowledge of subjects in post test. In pretest there are only 3.33% (1) were good score, whereas in post-test as 96.67% (29) samples were good knowledge.

Paired test is calculated as follows: score calculation

$$s^2_p = ((df_1/(df_1 + df_2))* s^2_1) + ((df_2/(df_2 + df_2))* s^2_2) = ((29/54)*8.95) + ((25/54)*2.26) = 5.85$$

$$s^2_{M1} = s^2_p/N_1 = 5.85/30 = 0.2$$
$$s^2_{M2} = s^2_p/N_2 = 5.85/26 = 0.23$$

$$t = (M_1 - M_2)/\sqrt{(s^2_{M1} + s^2_{M2})} = -10.76/\sqrt{0.42} = 16.6$$

Referring to tabulated t – value at 29 df, for the 0.05 level of significance. Calculated t – value is 16.6, which is greater than tabulated t value (2.5) at 29 degree of freedom, thus we reject null hypothesis and infer that there are some effect of hypothesis in knowledge of sample.

IMPLICATION OF THE STUDY:

Community health nursing services

Community health nursing includes preventive, promotive& rehabilitative services. Nurses play an important role in teaching the community people about premarital HIV testing.

Community health nursing education:

Health teaching by community health during home visiting, while providing nursing care in community area will create awareness among premarital HIV testing in adults.

Nursing administration

This study can be used by nursing administrator to prepare a protocol for premarital HIV testing .the study can be used to improve the knowledge regarding premarital HIV testing .the teachingmaterial can be used for the health education.

Nursing research

The methodology, tools and findings of this study can add to nursing literature in India .futureresearch can be done to strengthen this study. More areas can be selected for further studies.

LIMITATION OF THE STUDY

1. The study is limits to adult between age group 18-41 years in selected community area.The study is limited adult who are present at teaching program

RECOMMENDATION FOR FURTHER STUDY:

On the basis of the present study following recommendations are made:

- The study can include more areas of knowledge related aspects.
- Practice can be observed directly
- The result of the study can be used to make policy changes and increase involvement fromother health care members through teaching program and counselling sessions.
- The study can be done using larger sample size among community peoples.

RESULT:

Analysis and interpretation gives description of the study. Result shows that the level of knowledge regarding premarital HIV Testing in adults after planned teaching program was increased. The knowledge mean score of adults in pretest score was 7.47 whereas post test was

18.06 with 't' value obtained is 16.60

CONCLUSION:

The study shows that maximum adults in selected community had less knowledge regarding premarital HIV testing. The knowledge of premarital HIV testing was improved after administration of planned teaching program. Hence it was effective strategy for improving the knowledge of adults regarding premarital HIV testing.