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“A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING (VAT) ON KNOWLEDGE ABOUT INJECTABLE CONTRACEPTIVES UNDER ANTARA SCHEME AMONG MARRIED WOMEN OF REPRODUCTIVE AGE GROUP IN SELECTED RURAL AREAS OF KANPUR, UTTAR PRADESH”.

Divyanshi Bose, Minu S.R

1- M.Sc Nursing student, 2- Associate Professor, Faculty of Nursing, Rama University

ABSTRACT

In our country woman's family planning experiences are shaped by several factors such as age, culture, place of residence, social economic class, religion and gender norms. However common genders roles play a significant role in influencing woman family planning experience and family planning affects multiple domain or woman's life domestic, economic and community. The awareness and knowledge regarding contraceptive devices also play crucial role in acceptance of family planning services. It also plays an important role in promoting health of women under reproductive age group.

The present study was conducted to assess the effectiveness of video assisted teaching (VAT) on knowledge about injectable contraceptives under ANTARA scheme among women of reproductive age group in selected rural areas of Uttar Pradesh. The objective of the study were to assess the knowledge about injectable contraceptives under ANTARA scheme among women of reproductive age group, to develop a video assisted teaching (VAT) on injectable contraceptives under ANTARA scheme, to evaluate the effectiveness of video assisted teaching (VAT) developed on injectable contraceptives under ANTARA scheme and to determine significant association between knowledge of women and selected demographic variables.

Keywords- *Effectiveness, Injectable contraceptive, ANTARA scheme, women of reproductive age group*

Introduction

Family planning is a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitude and responsible decision by individuals and couples, in order to promote the health and welfare of family groups and thus contribute effectively to the social development of the country.⁽¹⁾ According to WHO “family planning allows individual and couples to anticipate and attain their desired number of children and the spacing and timing of their birth. It is achieved through the use of contraceptive method and the treatment of involuntary infertility”.⁽²⁾

India became the first country in the world to have launched a family programme for family planning in 1952, but injectables were approved for use in India much later in 1994.⁽³⁾

Injectables are highly effective, very safe for almost everyone, very easy to use and don't rely on partner corporation. They require only occasional visit to the clinic for re injection and no supplies are required to keep at home. While administering DMPA injection is very easy, quick and could be done by many types of providers.⁽⁴⁾ In present scenario MPA is 4th most prevalent contraceptive and is widely used as an effective, safe and acceptable method of contraception across the world. An estimated 42 million women worldwide use injectable contraceptive as a matter of choice.⁽⁵⁾

Problem statement

“A study to assess the effectiveness of video assisted teaching (VAT) on knowledge about injectable contraceptives under ANTARA scheme among married women of reproductive age group in selected rural areas of Uttar Pradesh”.

Objectives

- a. To assess the knowledge about injectable contraceptives under ANTARA scheme among married women of reproductive age group in both experimental and control group.
- b. To evaluate the effectiveness of video assisted teaching (VAT) developed on injectable contraceptives under ANTARA scheme on experimental group.
- c. To determine association between pre-test knowledge score of married women in experimental group with their selected demographic variables.

Research hypothesis

H₀₁ – there is no significant difference between pre-test and post- test knowledge score regarding injectable contraceptive under ANTARA scheme among married women of reproductive age group in experimental group.

H₁-there is a significant difference between pre-test and post test knowledge regarding injectable contraceptive under ANTARA scheme among women of reproductive age group in experimental group.

H₂ - there is a significant difference between the post knowledge score of experimental and control group regarding injectable contraceptive under ANTARA scheme among married women of reproductive age group.

H₃ - There is an association between the level of pre-test knowledge score of experimental group regarding injectable contraceptive under ANTARA scheme among married women of reproductive age group with their selected demographic variables.

Delimitation

The study is delimited to-

- Women living in the four selected rural areas of Uttar Pradesh
- Self-reporting method of data

Methodology

Research design

The research design adopted for this study is non randomised control group design.

Variables

Independent variable-

In this study the independent variable is, video assisted teaching on injectable contraceptive under ANTARA scheme among women of reproductive age group.

Dependant variable-

In present study dependent variable is knowledge of women of reproductive age group on injectable contraceptive under ANTARA scheme.

Demographic variable -demographic variable is a variable that is collected by researcher to describe the nature and distributed of a sample used with inferential statistics like age, income, type of family, number of children in family, education, religion, previous knowledge regarding injectable contraceptive under ANTARA scheme.

Source of data

Setting- The present study was conducted in four rural areas of Uttar Pradesh. Married women of two groups considered as control group and two as experimental group.

Population- For this study the population is married woman of reproductive age group living in for selected rural areas of Uttar Pradesh.

Target population –For this study target population is married women of reproductive age group.

Accessible population- For this study accessible population is married women of reproductive age group selected from four villages, two each in experimental and control group.

Sample- Sample is the representative unit of an entire population in research study.⁽⁵³⁾ In this study the samples were married women of reproductive age group living in rural area of Uttar Pradesh.

Sample size- For this study sample size is 100. In which 50 sample are taken as experimental group (intervention done) and 50 as control group (without intervention).

Data collection technique – non probability convenience sampling technique

Tool of data collection- Structured interview schedule

Result

The processed data was analysed organised and performed under the following headings.

Section 1- frequency and percentage distribution among married women of reproductive age group with their selected demographic variables in both experimental and control group.

Section 2- comparison of pre-test and post-test knowledge scores received by married women of reproductive age group

Section 3- analysis of effectiveness of video assisted teaching on married women of reproductive age group.

Section 4- analysis of association of pre- test knowledge score among married women in experimental group with their selected demographic variables.

SECTION- 1

Table – 1 : Frequency and percentage distribution according to Age

N = 100

Age	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
20 - 25 yr	13	26.0%	14	28.0%	27	27.0%
26 - 30 yr	20	40.0%	12	24.0%	32	32.0%
31 - 35 yr	10	20.0%	17	34.0%	27	27.0%
Above 35 yr	7	14.0%	7	14.0%	14	14.0%
Total	50	100.0%	50	100.0%	100	100.0%

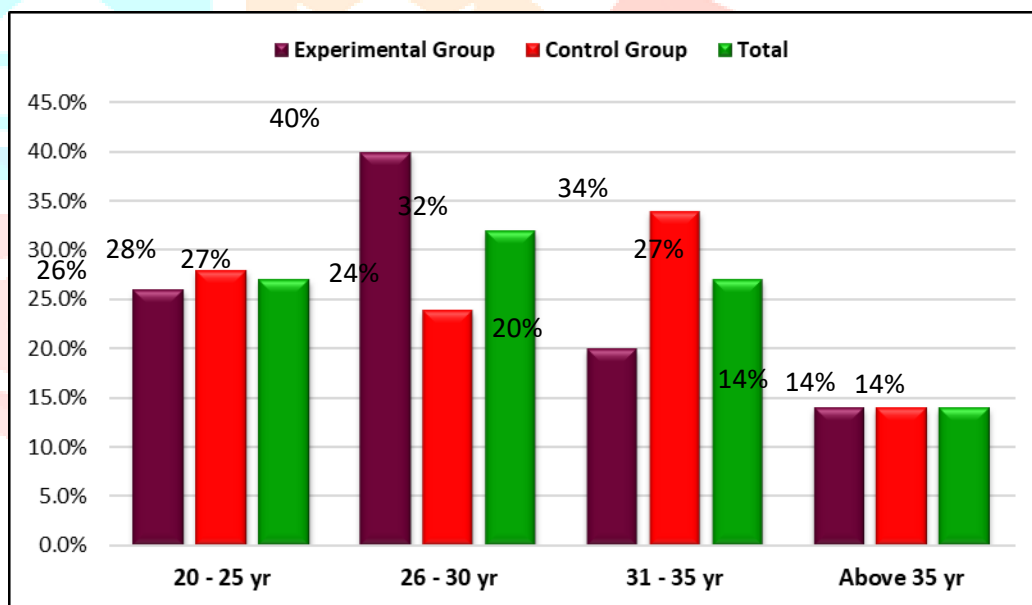


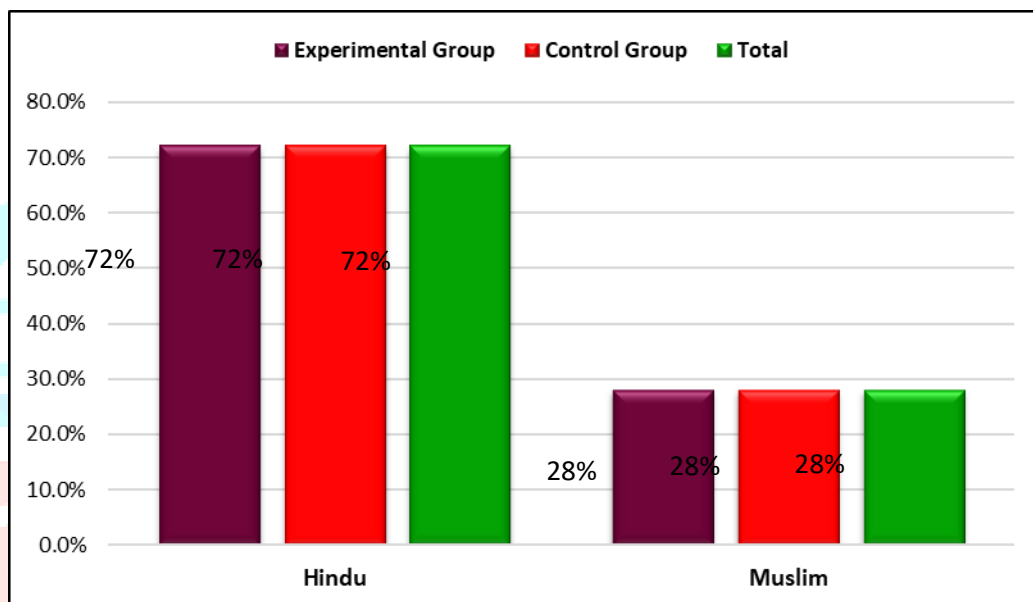
Fig. 3- Percentage distribution according to age

The frequency and percentage distribution according to age is shown in table – 1. In experimental group, majority of the subjects belong to the age group 26-30 yr (40.0%) followed by the age group 20-25 yr (26.0%) while in control group majority belong to the age group 31-35 yr (34%) followed by the age group 20-25 yr (28.0%). Significant difference was found in proportion of various age groups between the experimental and control group ($p=0.278$).

Table – 2 : Frequency and percentage distribution according to religion

N = 100

Religion	Experimental Group		Control Group		Total		chi sq	p-value
	No.	%	No.	%	No.	%		
	Hindu	36	72.0%	36	72.0%	72		
Muslim	14	28.0%	14	28.0%	28	28.0%		
Total	50	100.0%	50	100.0%	100	100.0%		

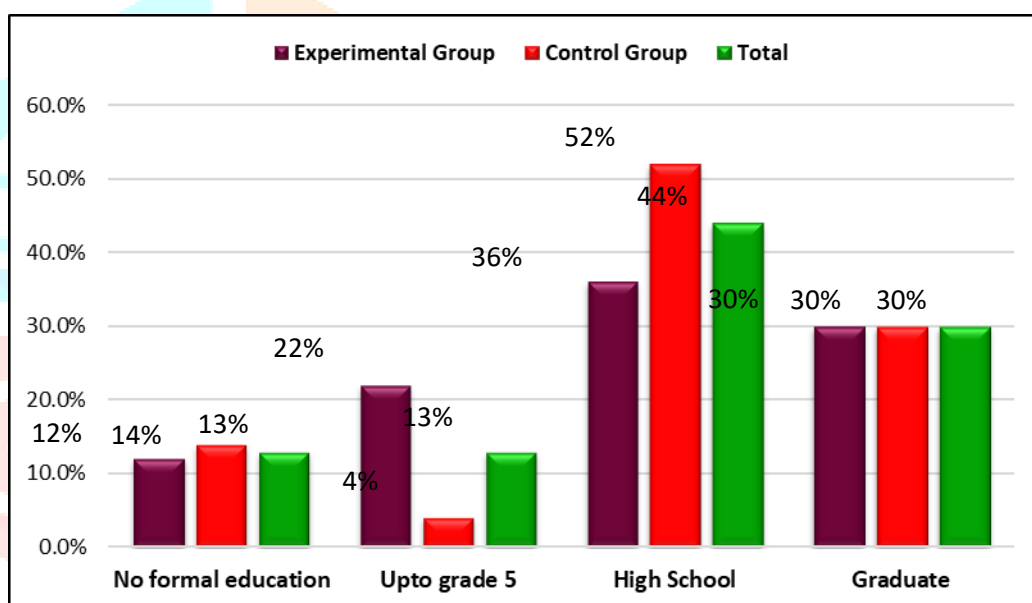
**Fig. 4- Percentage distribution according to religion**

The distribution of subjects according to religion is shown in table – 2. In experimental and control both groups, majority of the subjects were Hindus (72%) followed by the Muslim (28.0%). No significant difference was found in proportion of Hindus and Muslim between the experimental and control group ($p=1.000$).

Table – 3 : Frequency and percentage distribution according to Education

N= 100

Education	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
	No formal education	6	12.0%	7	14.0%	13
Upto grade 5	11	22.0%	2	4.0%	13	13.0%
High School	18	36.0%	26	52.0%	44	44.0%
Graduate	15	30.0%	15	30.0%	30	30.0%
Total	50	100.0%	50	100.0%	100	100.0%

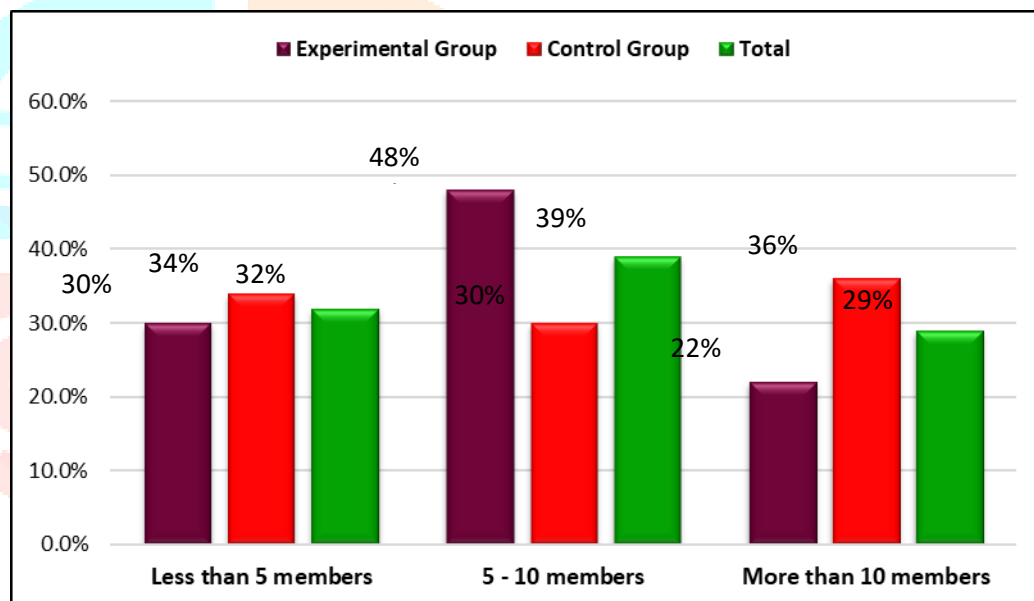
**Fig. 5- Percentage distribution according to education**

The distribution according to education is shown in table – 3. In experimental group, majority of the subjects had education of High School (36.0%) followed by the graduates (30.0%). In control group too majority had education up to high school (52%) followed by the graduates (30.0%). No significant difference was found in proportion of various education levels between the experimental and control group ($p=0.051$).

Table – 4 : Frequency and percentage distribution according to Family Size

N = 100

Family size	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
	Less than 5 members	15	30.0%	17	34.0%	32
5 - 10 members	24	48.0%	15	30.0%	39	39.0%
More than 10 members	11	22.0%	18	36.0%	29	29.0%
Total	50	100.0%	50	100.0%	100	100.0%

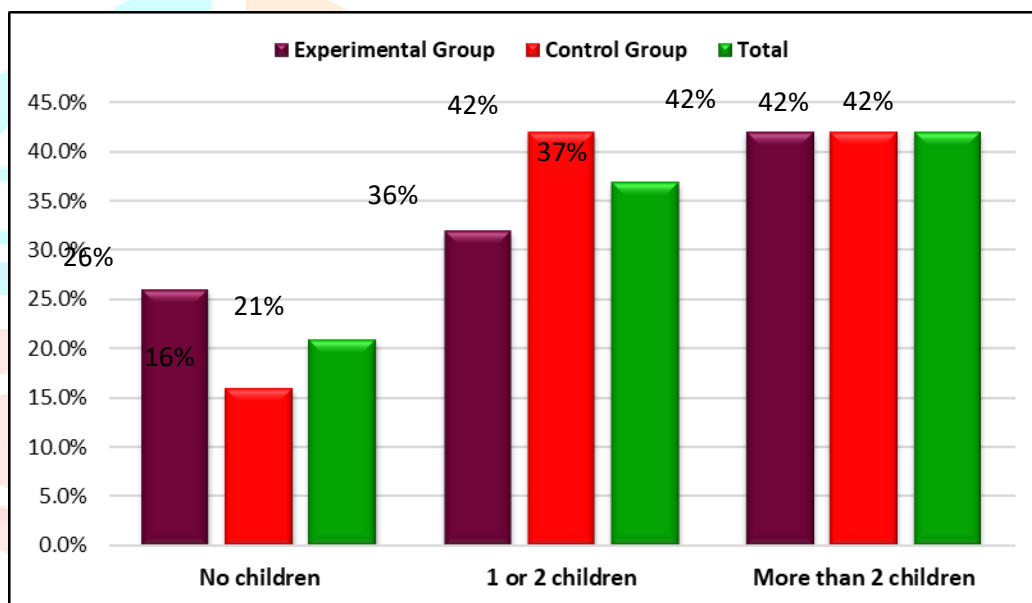
**Fig. 6- Percentage distribution according to family size**

The distribution according to family size is shown in table – 4. In experimental group, majority of the samples had family size of 5-10 members (48.0%) followed by the less than 5 members (30.0%), while in control group majority had family size of more than 10 members (36%) followed by the less than 5 members (34.0%). No significant difference was found in proportion of various family sizes between the experimental and control group ($p=0.143$).

Table – 5 : Frequency and percentage distribution according to Number of Children

N = 100

No of Children	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
No children	13	26.0%	8	16.0%	21	21.0%
1 or 2 children	16	32.0%	21	42.0%	37	37.0%
More than 2 children	21	42.0%	21	42.0%	42	42.0%
Total	50	100.0%	50	100.0%	100	100.0%

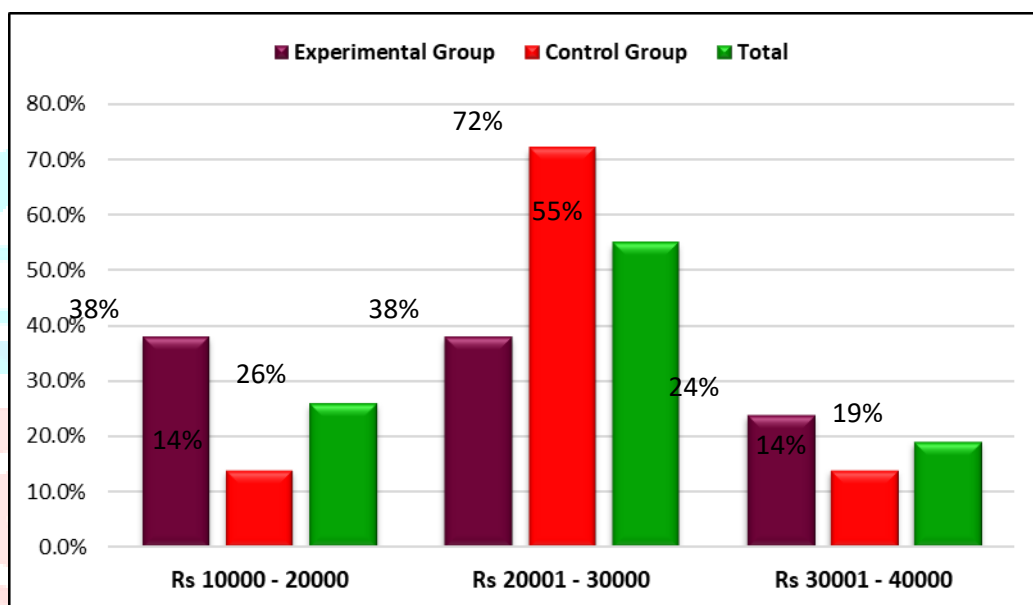
**Fig. 7- Percentage distribution according to no. of children**

The distribution according to no of children is shown in table – 5. In experimental group, majority of the samples had more than 2 children (42.0%) followed by 1-2 children (32.0%), while in control group majority had either 1-2 children or more than 2 children (42.0%). No significant difference was found in proportion of various no of children between the experimental and control group ($p=0.393$).

Table – 6 : Frequency and percentage distribution according to Family Income

N = 100

Family income	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
	Rs 10000 - 20000	19	38.0%	7	14.0%	26
Rs 20001 - 30000	19	38.0%	36	72.0%	55	55.0%
Rs 30001 - 40000	12	24.0%	7	14.0%	19	19.0%
Total	50	100.0%	50	100.0%	100	100.0%

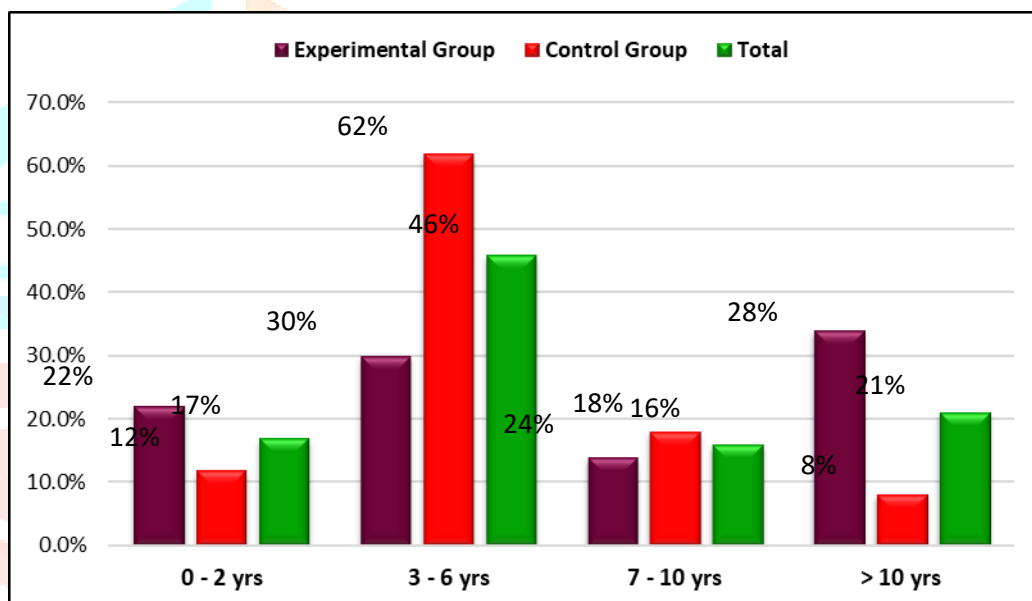
**Fig. 8- Percentage distribution according to family income**

The distribution of samples according to family income is shown in table – 6. In experimental group, majority of the subjects had income between Rs 10000-20000 or Rs 20001-30000 (38.0%), while in control group majority had income between Rs 20001-30000 (72.0%). The significant difference was found in proportion of various income groups between the experimental and control group ($p=0.002$).

Table – 7 : Frequency and percentage distribution according to Duration of Marriage

N = 100

Duration of marriage	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
0 - 2 yrs	11	22.0%	6	12.0%	17	17.0%
3 - 6 yrs	15	30.0%	31	62.0%	46	46.0%
7 - 10 yrs	7	14.0%	9	18.0%	16	16.0%
> 10 yrs	17	34.0%	4	8.0%	21	21.0%
Total	50	100.0%	50	100.0%	100	100.0%

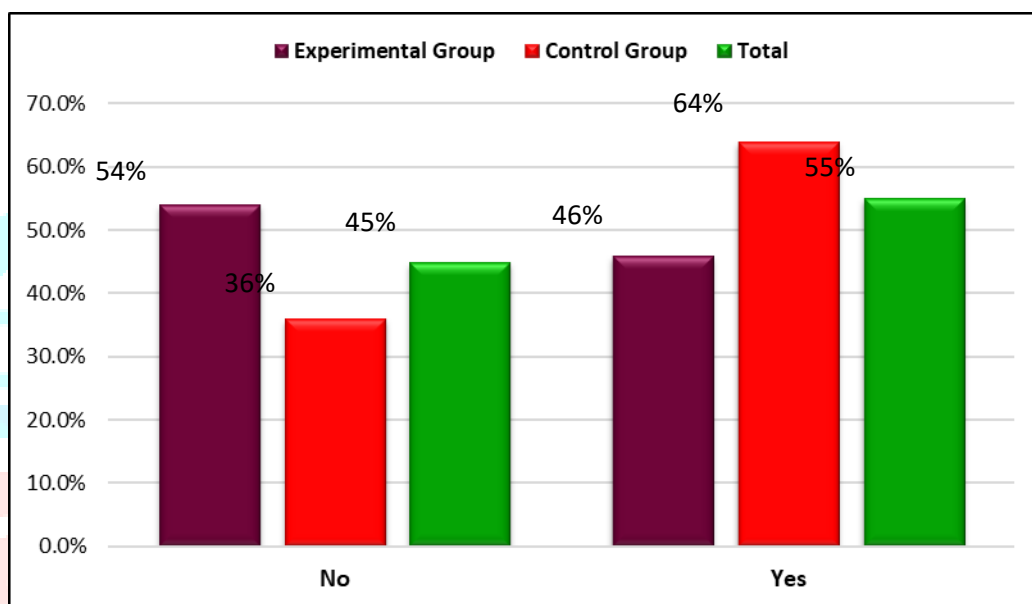
**Fig. 9- Percentage distribution according to duration of marriage**

The distribution according to duration of marriage is shown in table – 7. In experimental group, majority of the samples had duration of marriage more than 10 years (34%) followed by the duration 3-6 years (30%), while in control group majority had duration of marriage 3-6 years (62%) followed by the duration 7-10 years (18%). The significant difference was found in proportion of various durations of marriage between the experimental and control group ($p=0.002$).

Table – 8 : Frequency and percentage distribution according to Use of Contraceptive

N = 100

Use of Contraceptive	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
No	27	54.0%	18	36.0%	45	45.0%
Yes	23	46.0%	32	64.0%	55	55.0%
Total	50	100.0%	50	100.0%	100	100.0%

**Fig. 10- Percentage distribution according to use of contraceptives**

The distribution according to use of contraceptives is shown in table – 8. In experimental group, 46% were used contraceptives while in control group 64% were used contraceptives. No significant difference was found in proportion of contraceptive use between the experimental and control group ($p=0.070$).

Table – 9 : Frequency and percentage distribution according to Decision maker in the use of contraception

N = 100

Decision maker in the use of contraception	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
Husband	10	20.0%	5	10.0%	15	15.0%
Wife	0	0.0%	6	12.0%	6	6.0%
Mutual	37	74.0%	39	78.0%	76	76.0%
In laws	3	6.0%	0	0.0%	3	3.0%
Total	50	100.0%	50	100.0%	100	100.0%

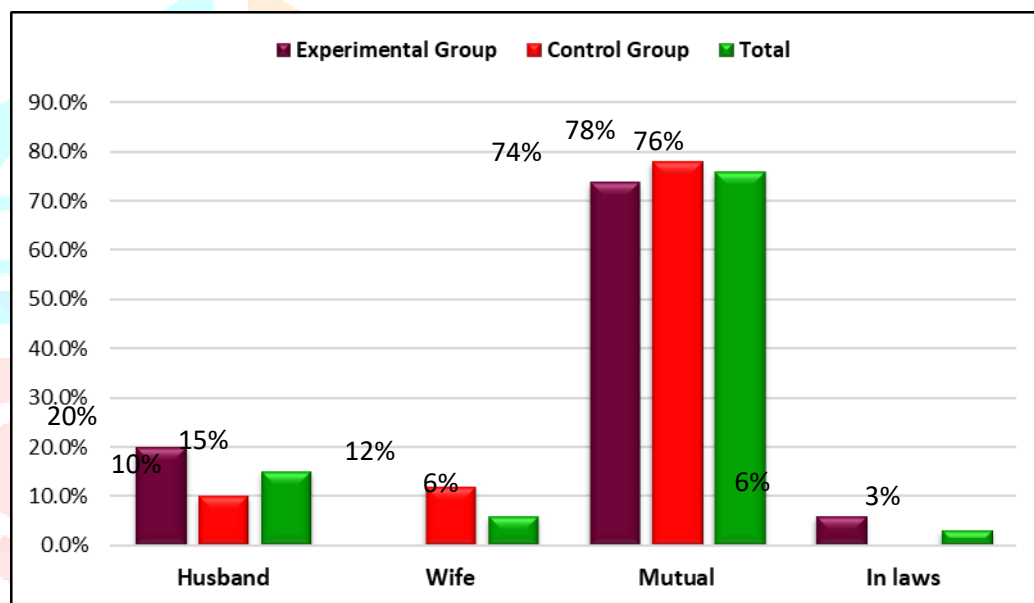


Fig. 11- Percentage distribution according to decision maker in the use of contraception

The distribution according to decision maker in the use of contraception is shown in table – 9. In experimental group, decision were taken by the mutual agreement (74%) in majority of the subjects followed by the Husband while in control group decision were taken by the mutual agreement (78%) followed by the wife (12%). The significant difference was found in proportion of various decision makers between the experimental and control group ($p=0.013$).

Table – 10 : Frequency and percentage distribution according to Information regarding injectable contraceptives under ANTARA scheme

N = 100

Information regarding injectable contraceptives under ANTARA scheme	Experimental Group		Control Group		Total	
	No.	%	No.	%	No.	%
No	35	70.0%	36	72.0%	71	71.0%
Yes	15	30.0%	14	28.0%	29	29.0%
Total	50	100.0%	50	100.0%	100	100.0%

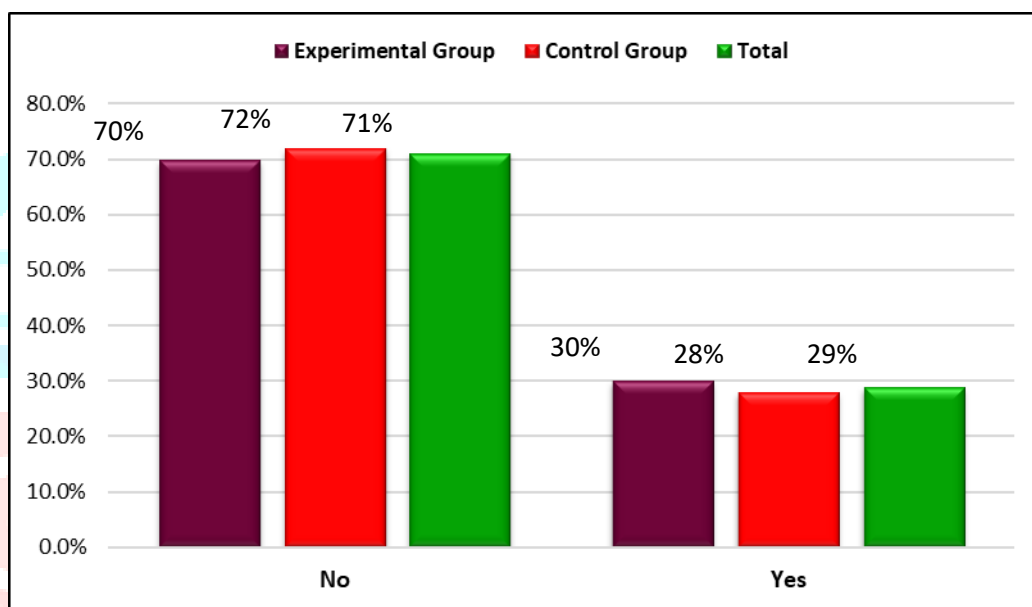


Fig. 12- Percentage distribution according to information regarding injectable contraceptive under ANTARA scheme

The distribution according to Information regarding injectable contraceptives under ANTARA scheme is shown in table – 10. In experimental group, 30% had Information regarding injectable contraceptives under ANTARA scheme while in control group 28% had information regarding injectable contraceptives under ANTARA scheme. No significant difference was found in proportion of contraceptive use between the experimental and control group ($p=0.826$).

SECTION- 2

Table – 11 : Experimental and control group Comparison of Overall Knowledge Level

N=100

Overall Knowledge Level	Knowledge	Experimental Group		Control Group		chi sq	p-value
		No.	%	No.	%		
Pre Test	Inadequate	50	100.0%	50	100.0%	NA	NA
Post Test	Inadequate	41	82.0%	50	100.0%	9.89	0.002
	Moderate	9	18.0%	0	0.0%		
Pre to Post Test		chi sq=9.89, p=0.002		NA			

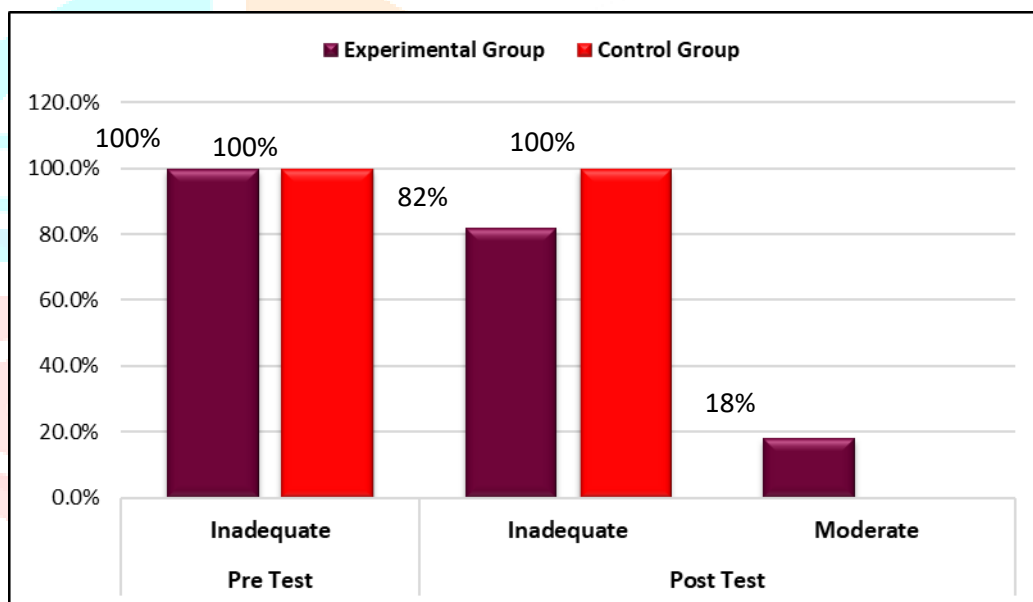


Fig. 13- Experimental and control group Comparison of Overall Knowledge Level

At pre test, inadequate knowledge was found in all the 100% cases of both experimental and control groups.

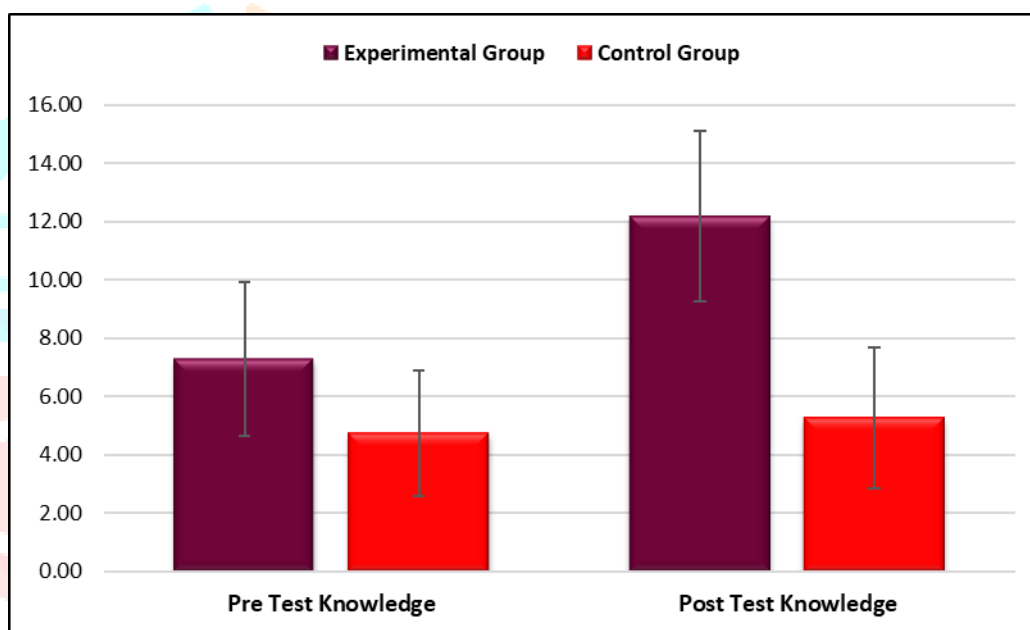
At post test, inadequate knowledge was found in 82% cases of experimental and 100% cases of control groups while 18% cases of experimental group showed moderate knowledge. The significant difference was found in proportion of various knowledge levels between the groups (p=0.002).

Further significant improvement in overall knowledge level was observed in experimental group (p=0.002) but not in control group.

Table – 12 : Experimental and control group Comparison of Overall Knowledge Score

N = 100

-Variable	Experimental Group		Control Group		Mann	Whitney
	Mean	SD	Mean	SD	Test	p-value
Pre Test Knowledge	7.28	2.65	4.74	2.15	4.68	<0.001
Post Test Knowledge	12.18	2.92	5.26	2.42	8.03	<0.001
Pre to Post Test	z=5.653, p<0.001		z=1.02, p=0.308			

**Fig. 14- Experimental and control group Comparison of Overall Knowledge Score**

At pre test, the mean knowledge score of experimental group was 7.28 ± 2.65 while the mean knowledge score of control group was 4.74 ± 2.15 . The significant difference was found in mean knowledge score between the groups ($p < 0.001$)

At post test, the mean knowledge score of experimental group was 12.18 ± 2.92 while the mean knowledge score of control group was 5.26 ± 2.42 . The significant difference was found in mean knowledge score between the groups ($p < 0.001$)

Further significant improvement was observed in mean knowledge score in experimental group ($p < 0.001$) but not in control group ($p = 0.308$).

SECTION-3

Table – 13 : Effectiveness of video assisted teaching

N = 100

Variable	Experimental Group		Control Group		Mann	Whitney
	Mean	SD	Mean	SD	Test	
					z-value	p-value
Pre Test Knowledge	7.28	2.65	4.74	2.15	4.68	<0.001
Post Test Knowledge	12.18	2.92	5.26	2.42	8.03	<0.001
Pre to Post Test	z=5.653, p<0.001		z=1.02, p=0.308			

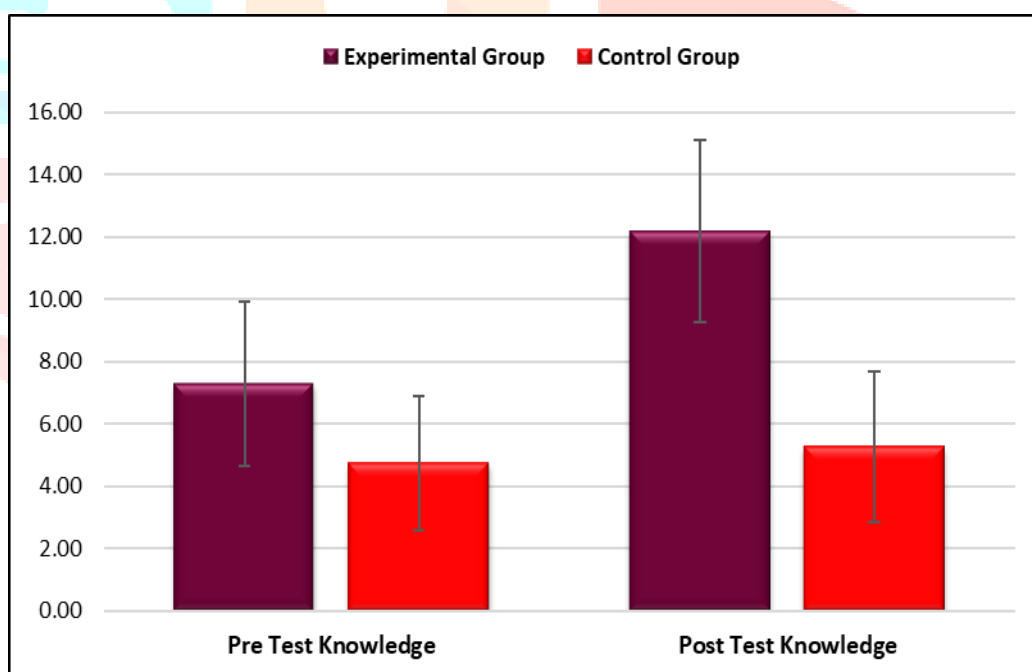


Fig. 15:- Effectiveness of video assisted teaching

At pre-test, inadequate knowledge was found in all the 100% cases of both experimental and control groups. The significant difference was found in proportion of various knowledge levels between the groups ($p=0.002$). Further significant improvement in overall knowledge level was observed in experimental group ($p=0.002$) but not in control group. So, video assisted teaching is significantly effective.

SECTION-4

Table – 14 : Association of Demographic Variables with Pre-test Knowledge in Experimental Group

N = 100

Variable	Pre-Test Knowledge Score		z-value*	p-value
	Mean	SD		
Age	20 - 25 yr	7.23	3.69	0.298
	26 - 30 yr	6.60		
	31 - 35 yr	7.70		
	Above 35 yr	8.71		
Religion	Hindu	6.97	0.97	0.333
	Muslim	8.07		
Education	No formal education	7.00	0.36	0.949
	Upto grade 5	7.45		
	High School	7.56		
	Graduate	6.93		
Family size	Less than 5 members	6.60	2.60	0.273
	5 - 10 members	7.25		
	More than 10 members	8.27		
	No children	7.23		
No of children	1 or 2 children	7.69	0.57	0.752
	More than 2 children	7.00		
	Rs 10000 – 20000	7.11		
Family income	Rs 20001 – 30000	7.63	0.49	0.785
	Rs 30001 – 40000	7.00		
	Duration of marriage	0 - 2 yrs		
	3 - 6 yrs	6.53		

	7 - 10 yrs	9.57	2.23		
	> 10 yrs	7.12	2.42		
Use of No contraception		7.00	2.84	0.74	0.462
	Yes	7.61	2.43		
Who is the decision maker in the use of contraception	Husband	6.90	3.25		
	Wife	-	-	0.83	0.660
	Mutual	7.41	2.52		
Aware of information regarding injectable contraceptives under ANTARA scheme	In laws	7.00	3.00		
	No	7.60	2.77		
	Yes	6.53	2.26	1.32	0.186

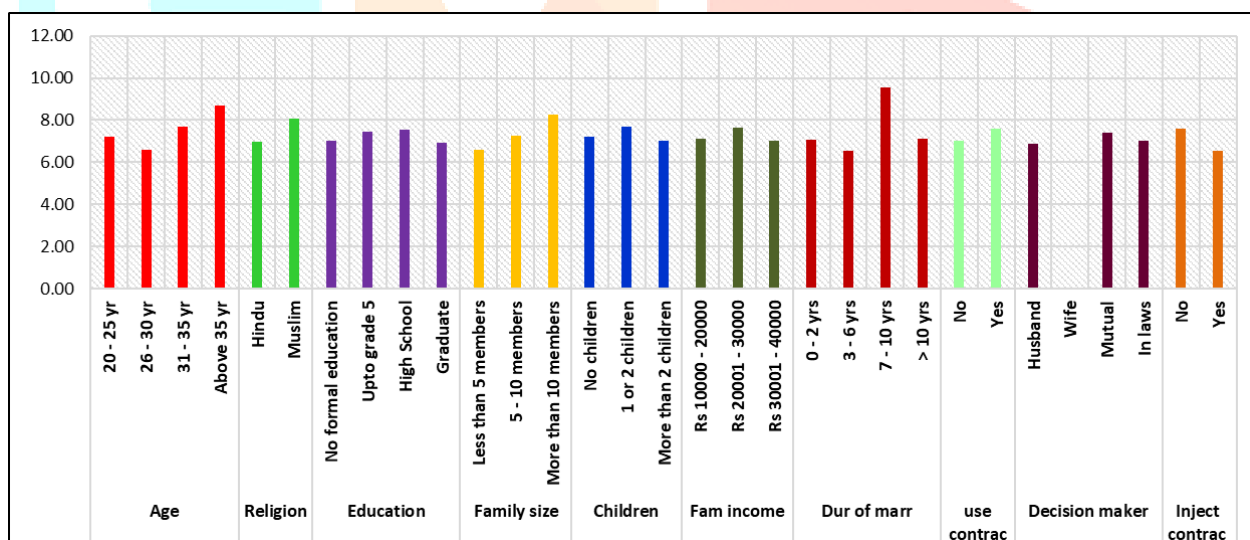


Fig. 16-Association of Demographic Variables with Pre test Knowledge in Experimental Group

The association of Demographic Variables with Pre test Knowledge in Experimental Group is shown in table – 13. It was found that the pre test knowledge was not found to be significantly associated with age (p=0.298), religion (p=0.333), education (p=0.949), family size (p=0.273), no of children (p=0.752), family income (p=0.785), duration of marriage (p=0.090), use of contraceptive (p=0.462), decision maker (p=0.660) and awareness of information regarding injectable contraceptives under ANTARA scheme (p=0.186).

Conclusion

Through this study it is proved that women of reproductive age group are having inadequate knowledge about contraception. There was no significant association found between knowledge score of mothers with their demographic variables

The pre-test knowledge score was less than post- test knowledge score evidence by in the present study. The subjects are divided into two groups experimental and control group. So intervention is done on experimental group by using video assisted teaching. Significant improvement was observed in mean knowledge score in experimental group ($p < 0.001$) but not in control group ($p = 0.308$). So, video assisted teaching is effective.

the importance of contraception.

Recommendation

- A similar study can be conduct among large sample size and also on urban women.
- The study can be done to evaluate the knowledge, attitude and practice regarding injectable contraceptive under ANTARA scheme.
- Descriptive study can be conducted to assess the knowledge about injectable contraceptive under ANTARA scheme among women of reproductive age group.

SUMMARY

Worldwide injectable contraceptive came as a new set of contraceptive. There is no such birth control method which is 100% effective and safe. The side effects of most methods are not a threat to life, rather inconvenience. Injectable contraceptives are used to prevent conception along with convenience, privacy, safe and efficient protection to women. Depo medroxy progesterone acetate (DMPA) is currently used by reproductive women of 130 countries.⁽⁶⁾

The study conducted among married women of reproductive age group in selected rural are of Uttar Pradesh regarding injectable contraceptive under ANTARA scheme.

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