CHAPTER - V

DISCUSSION

This chapter deals with the detailed discussion on the findings of the study, interpreted from the statistical analysis. The findings were discussed in relation to the objectives, need for the study, relevant literature of the study and conceptual framework. It is presented in a line with the objectives of the study. The collected data tabulated, organized, analyzed and interpreted using descriptive and inferential statistics and presented in the form of Tables and Diagrams in chapter IV.

The findings were discussed under the following headings as per objectives:

5.1 Description of demographic characteristics of the couples of the control and intervention group.

5.2 Comparison of knowledge, attitude and practice in between the control and intervention group couples before the VATM.
   - Level of knowledge in the control and intervention groups
   - Area-wise comparison of Mean, SD and Mean % of KS of control and intervention group couples
   - Area-wise comparison of level of attitude of control and intervention group couples
   - Comparison of level of practice of control and intervention group couples.

5.3 Comparison of knowledge, attitude and practice scores in between the control and intervention group after VATM (Video Assisted Teaching Module)
   - Level of knowledge in the control and intervention groups.
• Area-wise comparison of pre and post-test Mean, SD and Mean% of KS of couples in the control and intervention groups regarding contraceptive methods

• Item-wise comparison of pre and post-test KS of control and intervention group couples

• O-give curve showing cummulative % of post-test KS of the control and intervention group couples

• O-give curve showing cummulative % of pre and post-test KS of intervention group couples

• Line-graph showing the post-test KS of control group and intervention group.

• Line-graph showing the pre and post-test KS of intervention group.

• Area-wise comparison of pre and post-test levels of attitude of couples in control and intervention group regarding contraceptive methods.

• Comparison of pre and post-test levels of practice of contraceptive methods of the couples in the intervention group.

5.4 Testing the hypotheses

5.5 Assessment of the effectiveness of video assisted teaching module with their demographic variables of couples, regarding contraceptive methods

5.6 Correlation of KS, AS and level of practice

5.1 Description of demographic characteristics of the couples of Control and Intervention groups

Descriptive statistics of the demographic variables (Table 4.1.1-4.1.13) indicated that maximum wives (40.6% in control and 41.4% in Intervention group) were from age group of 23-27years and 36.6% in the control group and 36.2% in the
intervention group were in the age group of 18-22 years. Husbands’ age group showed that the majority of them (60% in control and 59.6% in intervention group) were in the age group of 33-37 years and only 1.8% in the control group and 2% in the intervention group were in the age group of 38-42 years; which indicates that the most of the couples were in the early reproductive age groups.

In the present study, the wives’ age group of 18-27 years, were higher in comparison to the study conducted by Alis (2004) and Srivastava Reena (2005), which revealed that 45% and 49.1% of mothers were in the age group of 25-34 years and 20-29 years in the control and the intervention group respectively and it was similar to the findings of the study conducted by John Mao (2007) and Pujari (2009), who had reported that 68% and 76.7% of the mothers were in the age group of 20-30 years.

69% in the control group and 70% in the intervention group couples were Hindus. However it was lower when compared to the Indian Religion Statistics, (2001) which shows that 84.9% population were Hindus in India. Srivastava Reena et al (2005) conducted a study and reported that 86.9% of participants were Hindus, which was higher to the findings of the present Study. The findings given by Pujari (2009) that 50% of samples were Hindus which was lower than the present study findings.

Educational status of control and intervention group couples’ depicts that around 50% of female partners (52.6% and 53% respectively) were illiterate and 19% and 19.2% couples had primary level of education in the control and intervention group respectively. It seemed that the education status of wives’ was very low. It was
more or less similar to the findings of Alis et al (2004), who had suggested that 62% of the women were illiterate.

56.4% in the control group and 60% in the intervention group couples had monthly income of Rs 2500-Rs5000, which indicated that couples were from low socio-economic status. Study findings supported by Prema (2009) at Tamilnadu had reported that 46% were in low socio-economic status Rs-2001-Rs5000/ month. Mittal et al (2007) conducted a study and had shown that 80% of the participants were in the middle class which contradicted to the findings of the present study.

Regarding the type of family, 78.6% in the control group and 79.6% in the intervention group were from the nuclear family. Reddy et al (2003) reported that nuclear family was accounted for 70% of the study population in Pondicherry, as well as the study conducted by Prema (2009) reported 80.85% of samples were from nuclear family, which was more or less similar to the present findings of the study. Study conducted by Pujari (2009) showed that 45% were from the nuclear family which contradicted to the present findings.

As far as the number of children is consent, 56.8% in the control group and 56.6% in the intervention group had two children, which was an indication of urgent need for permanent method of family planning among the couples. Study findings of Dutt Esther (2010) reported that maximum number of couples (42%) had 2 children which was more or less similar to the present study findings.

Husbands (82.6% in control and 83.4% in intervention group) were the decision makers for family planning which was similar to the report of Wasileh Petro-Nustas et al (2002), in which he had reported that the decisions were supposed
to be taken only by male or husband in a family regarding the family planning methods.

According to the couples’ awareness towards different contraceptive methods, it was clear that all the couples (100% in each group) were aware of female sterilization and condoms, 73.4% and 51.2% were aware of Cu-T and only 14% and 30.2% were aware of oral-pills in the control and intervention group respectively. It was indicated that the couples were mainly depending on female sterilization and the awareness towards the long-acting reversible as well as the spacing methods was poor among the couples. However the awareness of Injectables and Emergency Contraception in control and intervention group was nil, because these methods were not available in the Govt. Hospitals. Study of Sridevi (2009) reported that most of the respondents had knowledge on method of sterilization. A study conducted by Srivastava et al (2005) also pointed out that 82.2% of the women were aware of female sterilization, which was more or less similar to the present findings.

In relation to the source of information, 69.2% in the control group and 70.4% in the intervention group couples reported that they were informed the contraception through the health workers. A study conducted by Pujari (2009) had reported that the source of information was the health workers in 46.6% of subjects. The findings were not consistent with the findings of National Family Health Survey (NFHS 1998) in which it was reported that exposure to the electronic media had a large and positive effect on the current contraceptives.

Test of homogeneity of demographic variables in between the control and intervention group showed that age, religion, education, family income, occupation,
type of family, decision maker, number of children, source of information and awareness of contraceptive methods were homogenous in both the groups.

The initial sample size was 1000 and 500 in each group. But later, due to the drop-outs of 12 in control and 11 in the intervention group, the sample size for the post-test analysis was 488 for the control group and 489 for the intervention group.

5.2 The first objective was to assess the knowledge, attitude and adopted practice of couples regarding contraceptive methods.

Comparison of the pre-test knowledge, attitude and practice of control and intervention group couples

The data used for the study was observed (Table 4.4) for the level of knowledge during pre-test exhibited a status of inadequate overall knowledge (<50%) among all the couples in the control and intervention group. 18.2% in the control group and 18% in the intervention group had adequate knowledge (>50%) in relation to objectives, purposes of contraceptive methods.

The study findings supported by Prema A (2009), the pre-test knowledge level was poor. It was also supported by Dutt Esther (2010) and had reported that the knowledge level of the women was inadequate on contraceptive methods.

Regarding the pre-test Mean, SD and Mean percentage (Table 4.5) of control and intervention group of couples on KS indicated that the overall mean score was 5.72± 1.7 for the control group and 5.58± 1.31 for the intervention group couples and the Mean percentage was 11.67 and 11.38 in the control group and in the intervention group respectively. It was found that the couple had no knowledge about Injectables and EC as a result there was no significant difference observed in all the aspects of
knowledge on contraceptive methods; both the groups had more or less similar knowledge before implementation of the VATM.

Findings were consistent in the report of Suneeta et al (2007), who stated that there was lack of awareness amongst many women about the availability of regular contraception and emergency contraception. It was also supported by the findings of Chopra et al (2005), in which it was reported that only 10.7% had heard about emergency contraceptive pills. Prema (2009) reported that the mean knowledge score before the intervention was 5.56±5.13, which was 12.08% of the total scores and detected inadequacy of knowledge and lower when compared to Pujari (2009) the mean knowledge score was 15.3±1.38, which was 43.7% before teaching. It might be due to the settings and sample characteristics.

Level of attitude of the couples during pre-test shows (Table 4.6) that all the couples had negative attitudes towards the contraceptive methods including emergency contraception in both the control and intervention groups. Findings of the study contradicted by Dutt Esther (2010) who had reported that that 45% of the women had negative attitude towards contraceptive methods.

Comparison of level of practice (Table 4.7, Fig 4.2.1 & 4.2.2 ) of couples’ on contraceptive methods before the VATM shows that 5.5% in the control group and 6.5% in intervention group, couples used contraceptive methods and statistically there was no such significant difference (p>0.05). Among the couples, 51.9% and 75% used condoms, 29.62% and 15.62% used oral-pills and 18.51% and 9.3% used Cu -T in the control and intervention groups respectively.
5.3 The second objective was to evaluate the effectiveness of video assisted teaching module on contraceptive methods among the couples of control and intervention group

The post-test level of the knowledge (Table 4.8) shows that 96.5% couples in the intervention group had adequate knowledge (>50%) compared to control group (28.7%). The knowledge level improved in all the aspects and statistically found significant (p<0.000). Findings of the study supported by Prema (2009) and Dutt Esther (2010), reported that the post-test knowledge level increased and significant at 0.05 level.

Area-wise comparison of pre and post-test Mean, SD and Mean% (Table 4.9 & Table 4.10) KS of control and intervention group couples’ depicted that overall pre and post-test mean scores were 5.72±1.7 in the pre-test and it was 23.09±4.97 in post-test for control group, whereas the overall mean score was 5.58±1.31 in pre-test and 30.24±4.73 in post-test for intervention group. There was a significant difference in the pre-test and post-test in both the groups, but the mean scores were higher in the intervention group than the control group.

Further the post-test mean% of KS between the control and intervention group showed a highly significant difference (p<0.000). Hence it can be interpreted that the VATM was effective on various methods of contraception including Emergency Contraception in the intervention group.

The null hypothesis: Ho1 (Table 4.23)

According to first null hypothesis, “there is no such significant difference between the post-tests of control and intervention group knowledge scores (KS) of couples’, regarding contraceptive methods including Emergency contraception”. But
the outcomes of the study resulted that there was a significant improvement in the knowledge level in the intervention group than the control group during post-test. Hence the study did not support the null hypothesis and hence $H_{01}$ is rejected.

**The null hypothesis: $H_{02}$ (Table 4.24)**

Like the first null hypothesis, the $H_{02}$ states that “there is no significant difference between the pre-test and post-test knowledge scores of the intervention group couples regarding contraceptive methods including Emergency contraception”. But the outcomes resulted that there was a significant improvement in the knowledge level in the post-test than the pre-test of the intervention group. Hence the study did not support the null hypothesis, and it was rejected.

*Solimon et al.,* (1999), reported that the knowledge about contraceptive effectiveness was poor and there was a significant change in knowledge after education. It was also supported by *Prema (2009)* and highlighted the post-test mean score to 29.1± 3.89 from 63.26%. The study findings of *Gould et al (2002)* and *Servet et al.,* stated that before the intervention, few participants had known about family planning methods and emergency contraception: whereas knowledge in all the aspects of family planning and emergency contraception was increased after the intervention.

Findings of the study was consistent with the study conducted by *Mason et al., (2003)*, who had reported that the test group had better knowledge scores in the intervention group than the control group (p<0.001)

A similar study conducted by *Laura et al., (2003)* concluded that counselling had made a significant impact on the knowledge of the mothers (p<0.001). Study
findings of Prema (2009), reported that there was a highly significant difference found between the pre and post-test KS (p<0.001).

Comparison between the pre and post-tests (I, II, III) Mean %, KS in the control and intervention group

The mean % KS (Table 4.11 & Fig 4.3.1) during the pre-test was 11.67 % and it was 11.38% in the control and intervention group respectively whereas during post-test I , II & III the KS was 50.16% , 47.85% and 47.12% in the control group and 62.32% , 62.12% and 61.97% in the intervention group respectively. The mean% difference between the pre and post-test III of the control and intervention group was 33.76% and 50.59% respectively. Further the mean% difference in the post-test III between the control and intervention group resulted as 14.85%, hence it can be inferred that this difference in the intervention group might be due to the effect of video teaching programme.

It could be interpreted that over the passage of time, there was an improvement in the knowledge in both the groups but it was highly significant in the intervention group than in the control group. The sudden improvement in knowledge was at glance and it had happened immediately after the intervention (during post-test I) but in follow-up it remained unchanged throughout study.

Item-wise comparison of pre -test and post-test KS of control and Intervention group:

As far as item-wise contraceptive methods were considered, it was observed that the couples were aware of the methods of condom and female sterilization (Table 4.3) in comparison to other methods like Cu-T, oral-pills and vasectomy. They had no knowledge about Injectables and Emergency contraception. Findings of the
study was coincided with the findings of Prema (2009), who stated that samples had nil knowledge about injectables and EC. But it was improved better during the post-test.

Though the couples were aware of the above methods, but the overall knowledge score (Table 4.4) was inadequate (<50%) in the control and intervention group during pre-test but it had increased in both the groups during the post-test to 28.7% in the control group and 96.5% in the intervention group respectively which had indicated a better knowledge (>50%) during the post-test. A study conducted by H.Gould et al., (2002), stated that in general, participants demonstrated moderate knowledge on family planning.

Item-wise knowledge score indicated that regarding the objectives and purposes of contraceptive methods (Table 4.12), couples (80.7%) were aware of the permanent methods to prevent pregnancy for ever and condom was the temporary method used by males (72.2%) during the pre-test. The post-test knowledge was improved in all the aspects related to this item. It was consistent with the findings of Dutt (2010) that knowledge of the women in sterilization was 80.8%. Regarding the use of condom (Table 4.13) though 72.2% had known that it was a temporary method and 100% had heard of condom but they did not have specific knowledge about its proper use; especially how to check its expiry date, its patency etc. But it was improved during post-test. A study supported by Oriji O et al., (1999) who stated that 100% samples were aware of this method but the pre-test knowledge score was very low (<28%) whereas the post-test responses were increased to 57%.

As far as oral-pills are concerned (Table 4.14), almost 80% couples were aware of it. But they did not have sufficient knowledge about the proper use and
function of coloured pills, complications after use of the pills, knowledge about the mini pills, follow-up visits to the doctor etc. during pre-test. The knowledge improved during post-test significantly in the intervention group. The study findings were consistent with **Dutt (2010)** who stated that knowledge of samples on oral-pills was 87%. Similar study conducted by **Prema (2009)**, who projected that the pretest knowledge on pills was below 27% which was improved to 77% during the post-test. Study conducted by **Laura M (2003)**, reported that the knowledge was improved among the women regarding pills after counseling.

In relation to Cu-T (Table 4.15) it was observed that couples were aware of the availability of this method but they had no proper knowledge about the time of insertion, how long they have to use, complications after use etc. during the pre-test.

But it was improved in the post-test after VATM in the intervention group. The study findings of **Prema (2009)**, revealed that the pre-test score was below 22% which improved to 53% during post-test. Study conducted by **Nancy & Chopra (2005)**, stated that 50% samples had heard of this method and only 22.5% of them had knowledge on insertion of Cu-T.

Knowledge on injectables and Emergency contraception (Table 4.16 & 4.17) among the couples was nil, during pretest which was improved in the post-test. Findings of the study were consistent with the findings of **Prema (2009)**, who reported that the pre-test knowledge was very low (<3%) whereas it was improved to 50% in the post-test. But this contradicted to the findings of **Srivastava (2005)**, who stated that 23.8% samples had knowledge on injectable contraceptives. This might be due to the sample characteristics and setting of the study. Study conducted by **Reeti (2006)**, reported that only 1(2%) of sample was aware of Emergency Contraception,
Tripathy R (2003), stated that none of the samples were aware of Emergency Contraception.

All the couples were aware of female sterilization (Table 4.18) but they had lack of knowledge regarding how tubectomy prevents pregnancy. They had no knowledge about vasectomy, NSV and how to manage themselves after vasectomy.

Hence it may be concluded that the overall knowledge of the availability of the Methods was existed among the couples whereas specific knowledge about the methods was inadequate during pre-test, but knowledge improved in all the aspects during the post-test and it was statistically more significant (p<0.000*** in the intervention group than in the control group.

O-give curve showing the comparison between post-test KS of control and intervention group regarding contraceptive methods

O-give curve drawn (fig 4.3.2) to show the comparison of quartile KS among couples in the post-test of control and experimental group shows that on post-test scores of intervention group lie right of the post-test scores of control group. Over the entire range the post-test intervention group scores are higher than the post-test scores of control group. It is also observed that difference in the lines drawn for post-test of control and intervention group shows the gap between the two lines were higher at 50th and 75th quartile scores. It reveals that there is effectiveness of the VATM.
O-give Curve showing cumulative % of pre and post KS of intervention group

O-give curve drawn (fig 4.3.3) to show the comparison of quartile KS among couples of pre and post-test of intervention group shows that on post-test scores lie right of the pre-test scores. Over the entire range the post-test scores were higher than the pre-test scores. In the pre-test the 25th quartile, 50th quartile and 75th quartile scores were between 0-5 whereas it was between 25-30 during the post-test.

It is also observed that difference in the lines drawn for pre and post-test of intervention group shows the gap between the two lines were higher at 50th and 75th quartile scores. It reveals that there is effectiveness of the VATM.

Line graph showing the comparison between post-test KS of control and intervention group regarding contraceptive methods

Observation towards post-test KS (fig 4.3.4) of control and intervention groups reveals that the lowest scores of post-test control group were between 0-15, the highest scores were between 30-40, whereas for the post-test intervention group the lowest scores were between 0-25 and the highest scores were between 40-45. The median plotted on the graph shows that the post-test control group mean and median scores were 23.09 and 23.86 respectively. However, during the post-test mean and median the score were 30.37 and 31.35 respectively. It can be interpreted that the VATM was effective.

Line graph showing the difference in KS between pre and post-test of intervention group

Pre and post-test KS (fig 4.3.5) reveals that the lowest scores of pre-test were between 0-5 scores and the highest scores were between 15-20, whereas for the post-test the lowest scores were between 20-25 and the highest scores were between 40-45.
The median plotted on the graph shows that the pre-test means and median scores were 5.58 and 7.38 respectively. However, during the post-test mean and median score were 30.37 and 31.35 respectively. It can be interpreted that the VATM was effective.

**Comparison of the control and intervention group attitude of the couples before and after implementation of VATM**

Comparison of the level of attitude (Table no 4.19) of the control and intervention group during pre-test shows that none of the couples in the control and intervention group had positive attitude towards the contraceptive methods like condom, Cu-T, Injectables, EC, and permanent method; Whereas 1.8% couples had positive attitude towards oral-pills in the control group. However, during post-test in the control group couples had the highest percentage (10.4%) of positive attitude towards permanent method followed by condom, Cu-T, oral-pills and none of the couples showed positive attitude towards Injectables and EC. In the intervention group the highest percentage (77.3%) of couples had positive attitude towards EC and lowest percentage (32.7%) of couples had positive attitude towards the purpose of contraceptive methods.

However, the overall level of attitude showed that in the control group no couple had positive attitude but their negative attitude was reduced to 50% from 100% and 48% showed neutral attitude, so it was indicated that if those couples were motivated, they will change their attitude in future. 71% of couples in the intervention group showed positive attitude towards contraceptive methods.

Study findings supported by *Lason et al., (2004)*, stated that the group of women who had received contraceptive counselling were more positive attitude about
future use than the women who had not (p<0.001). Further he reported that favourable attitude had increased motivation to the use of the method. Positive attitude considered as an important influencing factor for practice. Study findings of *Dutt Esther (2010)*, revealed that the overall attitude score was 79.6% among eligible couples which was similar to the present study findings.

The overall mean attitude level (Table 4.20) during pre-test was 47.12±6.86 in the control group and 46.71±7.93 in the intervention group, which shown that there was no statistical significance. The post-test attitude mean scores were 65.5±15.5 in the control group and 108.62±28.28 in the intervention group had shown statistically significant (p<0.000). Study findings of *Dutt (2010)*, depicted that attitude among couples on family planning methods were 41% having good attitudes.

The null hypothesis $H_{03}$ (Table 4.25) was; “there is no significant difference between the post-test of control group and intervention group attitude scores of couples regarding contraceptive methods including Emergency Contraception.” The study outcome projected that there was a significant difference in the attitude improvement of intervention group than the control group during post-test. Thus the formulated hypothesis was rejected for the study and proved the differences were the true differences.

The null hypothesis $H_{04}$ (table 4.26) for this study was, “there is no significant difference between the pre and post-tests’ attitude scores of intervention group of couples regarding contraceptive methods including Emergency contraception”. The above discussed study result revealed that there was a significant difference in the attitude improvement between the pre and post-test of intervention group. Hence the formulated hypothesis (Ho4), had not accepted for the study.
The findings supported by M. Larson et al., (2004), stated that most of the participants had negative attitude towards emergency contraception, which was changed and shown positive attitude (p<0.05).

Regarding the mean% of attitude scores in the post-test I-III (Table 4.21 & Fig 4.3.6) showed that the improvement in the attitude noticed only in the post-test II and III whereas there was improvement in the post-test I but it was not statistically significant.

Study conducted by Rao and Babu (2005), reported that mass media communication techniques had been found to be an effective way to diffuse information about family planning and to effect changes in attitude and practice of contraceptives in multi linguistic population.

**Comparison of pre and post-test practice of contraception among couples in control and intervention group**

The pre and post-test of practice of contraception (Table 4.22 & fig 4.3.7) showed that during pre-test 5.5% and 6.5% of couples in the control and intervention group respectively were using contraceptive methods whereas during post-test findings revealed 7.9% and 20.24% of the couples were currently using contraception in the control and intervention group respectively.

Further the difference in contraceptive use between pre and post-test had indicated that in control group, it was 2.4% whereas in the intervention group it was 13.74%.

The post-test practice (Fig 4.3.8) in the control group shows that among users (7.9%) the most common method (35.89%) used was condom, followed by (20.2%)
Cu-T and (10.25%) OCP, whereas in the intervention group it was found that among the users (19.8%) the most common method used was CuT (30.3%), condom (54.5%), oral pill (11%), 0.3% of the couples used emergency contraception and 2.2% had undergone permanent sterilization.

These findings were consistent with Kore (2009), who had reported that attitude studies had influenced towards the awareness of family planning was widely spread and over 60% people had favorable attitudes towards restricting or spacing birth. Yet the rate of contraception use by the couples in India is 43.5% as opposed to 80% in Japan & China.

Study conducted by Reena (2005), showed that 82.2% of women were aware of contraceptive methods but only 44.2% were used the contraceptive methods.

The null hypothesis $H_{05}$ (Table 4.27) states that, “there is no significant difference between the post-test practice level of control and intervention groups of couples regarding contraceptive methods including Emergency Contraception”. The outcome of the study result showed that there was a significant difference in the practice level of couples between control and intervention groups during post-test. Hence the study does not accept the hypothesis for the study.

The null hypothesis $H_{06}$ (Table 4.27) formulated for this study was, “there is no significant difference between the pre and post-test practice level of intervention group of couples regarding contraceptive methods including Emergency Contraception”. The study outcome revealed that there was a significant difference in the practice level of couples between the pre and post-test of intervention group. Hence the hypothesis does not support the study and rejected.
It is also supported by *Reddy et al., (2003)*, conducted a study in Pondicherry, previously who had reported that the most common method used by couples was condom and the couples were not familiar with Cu-T, Oral-pills. The reason might be that the couples were motivated to use the long acting and highly effective method of contraception; which was found in the present study. Study conducted by *Baveja et al., (2000)*, stated that among the users of spacing method, Cu-T was preferred by 60% of clients followed by condom (9%) and-oral pills (6%) which contradict to the present findings. Study findings of *Chopra (2010)*, reported that subjects were aware of contraceptive methods but 31.7% used the barrier method, 10.3% CuT, 3.3% oral-pills and EC was known to 13.8% couples, but none of them were using it. She concluded that majority of women had favourable attitudes towards family planning methods, still use of long-acting new methods are low in India, which needs to be promoted. Study findings of *Rao and Babu (2005)*, reported that 5.8% used Cu-T and 13.5% used oral-pills though the overall knowledge was 81% on contraceptive methods. Findings also supported by *Mittal (2008), Srivastava(2005) and Mao(2007)*, who had reported though there was awareness towards family planning methods but the users’ rate was very low in India.

The paired ‘t’ value comparison (Table 4. 23& 4.24) of knowledge of both control and intervention groups shows highly significant improvement mean score value in all the aspects during post-test (t=23.41, p<0.000***, t=112.46, p<0.00***).

The post-test I, II,III mean score value also shows improvent in the KS of couples in both the groups but in the intervention group the mean score value was higher when compared to control group and it was statistically significant.
Comparison of the attitude level (Table 4.25 & 4.26) highlights that there was an improvement in the attitudes of both the group couples during post-tests but the values were significantly higher in the intervention group than control group ($t=31.37, p<0.000***$ & $t=41.82, p<0.000***$).

Comparison to the practice level (Table 4.27 & 4.28) of control and intervention group showed that there was only marginal improvement in the practice of control group; whereas it was significantly improved in the intervention group ($t=5.58, p<0.000***$).

**Additional Information towards practice of contraceptive methods**

During the study, the researcher observed that in the control and intervention group 2% and 1.4% couples respectively were previously used contraceptive methods and discontinued due to some reasons. Out of the users 30% and 57% used Cu-T, 60% and 43% used Condom in the control and intervention group respectively. Only 10% in the control group used Oral-pills, who had also discontinued later.

The reason for discontinuation was due to the side effects of contraceptive methods (0.08% and 0.04% respectively), wanted to conceive (0.04%, 0.04% respectively), and planned for permanent method (0.02% and 0.06% respectively) in the control and intervention group. Further 0.06% in the control group discontinued the method of contraception due to the husbands’ objection. Study conducted by *Melissa (2004)*, had suggested that side effects were main reasons for not initiating contraceptive methods and also for discontinuing the method. Findings were also consisted with *Nagase T (2002)*, who had reported that the husbands’ unwillingness, poor communication between couples, health concern, fear of side effects and
dissatisfaction with sexual sensation were the main obstacles to use the contraceptives.

According to *IIPS, 2000*, it was reported that in India, there was one in every ten women had used contraceptives and moreover a women was discontinuing the used method during the time of survey. So contraceptive continuation rate is more important than the rate of acceptance and prevalence. Studies also highlighted that the rate of discontinuation was high due to side effects (21%), desire for male child (32%), disapproval of husbands’ (18%) and pressure from mothers-in-law (2.34%) (*Kazi, 2006 and Hassan, 2004*).

5.4 The third objective of the study is to associate with the post-test KS, AS and practice level of intervention group with selected demographic variables

Knowledge score was associated with demographic variables (Table 4.29) showed a significant association with type of families (p<0.05* level). No significant association found between the knowledge score of the couples with age, religion, education, occupation, income, no. of children, decision maker, source of information (P>0.05). Hence the difference observed in the mean score value was only by chance and not by the true difference.

Thus, the null hypothesis $H_0$ there was no association between the KS with the demographic variables was accepted and interpreted that video assisted teaching module was effective for couples irrespective of their demographic variables. The above discussed result revealed that video assisted teaching module was more or less similarly effective for all the couples in the intervention group. Study findings of *Prema (2009)*, revealed that there was no significant association found to the knowledge score of the samples with their demographic variables (p>0.05). Study
findings of Dutt (2010), reported that there was association of age and type of family towards knowledge of couples which is similar to the present findings.

Chi-square calculation was conducted to analyze the association of demographic variables with attitude scores (Table 4.30) of the couples revealed that there was no significant association between the attitude of the couples with the age, education, occupation, income, decision maker, source of information (P>0.05). Hence the differences observed in the mean attitude score values were the true difference.

The null hypothesis $H_{08}$, there was no significant association between the attitudes of the couples with their demographic variables (age of husband, education, occupation of wife and husband, income, decision maker and source of information), was accepted. Attitude of the couples found a significant association with the age of wife, religion, type of family, and number of children, interpreted that changes in the attitude depend upon variables like age of wife, religion, type of family and number of children etc.

Study findings of Dutt (2010), reported that there was an association between education and occupation of couples with attitude, which contradicted to the present findings of the study.

No significant association found between the practice (Table 4.31) and the age, education, type of family, source of information, number of children etc (P>0.05).

The null hypothesis $H_{09}$ formulated for the study, “there was no association between the practice scores and the demographic variables was accepted and interpreted that VATM was effective for all couples regarding the demographic variables”.
5.5 The forth objective of the study was to correlate the KS, AS and practice level of the couples in control and intervention groups

Kerl Pearson’s co-efficient of Correlation analysis (Table 4.32, fig 4.6.1) deals with knowledge, attitude and practice scores of the couples’ between the control and intervention group. During post-test in control group, it shows a non significant correlation. But in the intervention group, it shows a significant and moderate correlation between knowledge and attitude ($r= +0.331, p<0.01$) of the couples’ and moreover it shows a negative correlation ($r= -0.089, p<0.05$) between the attitude and practice of the couples.

The null hypothesis $H_{010}$ “there was no significant correlation in the KS, AS and the level of practice among the couples”. The outcome of the study results showed a significant correlation between the knowledge to attitude and attitude to practice in the intervention group. Hence the study does not support and rejects the hypothesis $H_{010}$.

The findings were consistent with the findings of Dutt (2010). Study on family planning, she reported that there was significant, moderate and positive correlation among the eligible couples on knowledge to attitude. But the findings were inconsistent with the findings of Kumar (2005). In his study on family planning he reported, “Very significant relationship between total fertility rate and the current contraceptive use”.

Regression analysis of the KS, AS and practice level (Table 4.33 & Fig 4.11) highlights a significant positive relationship between knowledge and attitude ($t=11.56, p<0.000***$) and there was a significant negative relationship between
attitude and practice (t=4.408, p<0.000***) among the couples in the intervention group.

**Regression analysis** (Table 4.34-4.39) of KS, AS and level of practice showed a significant relationship (p<0.000) between the KS with the no.of children, attitude scores with income (p<0.000), occupation of wife, sources of information (p<0.01), type of family (p<0.05), level of practice with the decision maker (p<0.01) in the intervention group. In the control group it had been showed that there was a significant relationship between KS with type of family (p<0.01), AS with occupation of wife, no.of children (p<0.000), type of family, source of information (p<0.05), there was no significant relationship found in the level of practice with any one of the variables.

**Regression analysis** (Table 4.40-4.42) for the KS, AS and practice level of couples between the control and intervention group during post-test, revealed that the intervention group had highly significant (p<0.000*** ) difference than the control group. Similarly the regression analysis (Table 4.43-4.45) for the KS, AS and level of practice between the pre and post-test of intervention group highlighted, highly significant difference (p<0.000***).

**One–way Anova** (Table 4.46) between the mean KS of the post-tests (I-III) of intervention group, showed that there was a significant difference between the post-test mean KS ( F=1.005 ,p<0.000***).

Hence the null hypothesis $H_0$, states that “there is no difference between the mean KS of the post-tests of intervention group” is rejected and interpreted that the differences observed, were the true differences not by chance and it is concluded that
the mean KS were significantly different within the three post-tests in intervention group and VATM was effective.

One-way Anova (Table 4.47) calculated to find out the difference between the mean AS of the post-tests (I-III) for intervention group and showed that there was significant difference (F=3.221 & p<0.000*** in the post-tests mean AS. Hence the null hypothesis $H_{012}$ “there is no difference between the mean AS of the post-tests of intervention group” is rejected and interpreted that the observed differences were the true differences and concluded that the mean AS are significantly different within the three post-tests in intervention group and VATM was effective.

The study indicated that VATM for the couples had a positive effect and hence can be implemented in the out-patient units of various hospitals or community centres without any changes or addition to the staffing pattern, as education is important factor for modifying the attitude and also for practice. Hence all could be motivated for the educative program.