A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Family Planning Methods among Eligible Couple in Selected Urban Area of Gwalior City (M.P.)

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Abstract: Family planning is critical for limiting population increase and promoting family well-being. However, there is a dearth of awareness and information about various family planning options among eligible couples in many urban areas. The purpose of this study is to determine the efficacy of a planned training programme on understanding of family planning methods among eligible couples in a designated urban region of Gwalior City, Madhya Pradesh.
Purpose of The Study-The purpose of this study is to assess the efficacy of a planned education programme in improving eligible couples' awareness of family planning methods.
Methodology- For this investigation, a pre-experimental one-group pretest-posttest design will be used. A handy sample of eligible couples dwelling in Gwalior City's specified urban region will be included. The planned teaching programme, which will include structured sessions on various family planning methods, their benefits, risks, and proper use, will be executed. A systematic questionnaire will be used to collect data before and after the instructional programme. The data will be analysed statistically using relevant methodologies.
Results: This study's findings will shed light on how well the proposed teaching programme will go in educating eligible couples about family planning options. The degree of knowledge increase will be shown by comparing the pretest and posttest results.
Conclusion-The study's findings will help comprehend how a planned training programme would affect how well-informed eligible couples in an urban area are about family planning options. The findings can be used to guide the creation of focused educational initiatives and regulations that support family planning and reproductive health in contexts like these.

Keywords: Family planning, knowledge, eligible couples, planned teaching program, urban area, Gwalior City, effectiveness

1. INTRODUCTION

In 1975, a WHO expert committee established five criteria for measuring the effectiveness of the family planning programme. Evaluation of people's knowledge, attitudes, motivations, and behaviours is one of them. People's attitudes and knowledge about family planning methods play a significant role in determining whether or not they choose to use them in 2039.[1]

Almost all societies around the world have a desire to produce children. However, the ideal size and make-up of a family might occasionally differ between and even within the same ethnic group.1 According to the WHO, family

planning is "a way of thinking and living that is adopted voluntarily, on the basis of knowledge, attitudes, and responsible decisions by individuals and couples, in order to promote the health and welfare of family groups and effectively contribute to the social development of the country."?[2]

The current form of family planning offers a variety of options from which the eligible couple can select in accordance with their preferences and needs.

People should be encouraged to plan their families because it positively affects the family's health, development, and well-being. The government of India's national population policy reflects the growing political will to restrain population increase in order to preserve the stability and well-being of the family.[3]

The widespread marriage, low literacy, low usage of contraceptives, and traditional way of life are all blamed for India's higher fertility rate. The goal of the family planning programme for India is to encourage people to have fewer children in order to stabilise the population at 1533 million by 2050.[4]

Two classes of contraceptive techniques are recognised. 1) Spacing strategy 2) Post conception and barrier methods are included in the spacing approach. The current method of contraception is the combined oral contraceptive pill of type 2, sometimes referred to as "the pill and the progesterone only pills." Only the combination pill, commonly known as a "mini pill" is currently offered in India.[3].

The advantage of condoms is that they are the only method of contraception that offers simultaneous protection from pregnancy and STD/HIV. They also take effect quickly. The failure rate in the first tear of use is 3% when used correctly each time.[6]

Intrauterine contraceptive devices, or IUDs, have been around for a while. As long as they remain inside the uterus, these implants will prevent fertilisation. Lippies loop, copper T, and copper 7 are often used devices.[7]

Standard Day's Method: Using this straightforward method, which is based on fertility awareness, a woman learns to identify the beginning and conclusion of her menstrual cycle's fertile period. Based on the woman who typically have a cycle length of 26–32 days and are fertile from days 8–19. The woman can use SDM to determine which days of each cycle are most likely to result in pregnancy.[2]

After unprotected sex, rape, or a contraceptive failure, a woman may become pregnant using a female condom as an emergency contraception. In these research, emergency contraception is a method of preventing pregnancy. The progestin alone pill (15mg) can prevent pregnancy within 72 hours of unprotected sexual activity. There are two types of emergency contraceptives. The negative effects of this kind of emergency contraceptive include nausea, vomiting, and irregular periods.[4]

Within five days following unprotected sexual activity, an IUD must be placed. Very few pregnancies using terminal treatments, such as the tubectomy and vasectomy, have been documented to fail.[5]

Vasectomy, or male sterilization, refers to the severing of the vas. A vasectomy is a pretty straightforward surgery that doesn't require hospitalization. It is comparatively quick, easy to use, and perfect for men. There is no negative impact.[6]

Female sterilization's main principle is restricting each fallopian tube that delivers eggs from the ovaries to the womb. There are several ways to access the fallopian tube, including colpotomy, laparoscopy, micro laparotomy, and hysteroscopy[1].

The contribution of men to the adoption of family planning techniques is little understood. Both family planning efforts and the surveys used to develop and assess such programmes frequently overlook the needs of men. However, the Indian government's reproductive and child health policy recognised the necessity of including males in family planning programmes. It is wise to learn about men's knowledge, perception, attitude, and contraceptive practises in order to increase their involvement in the family's reproductive health requirements since men make the majority of decisions in India.[7]

In order to adopt temporary methods of contraception and also to reduce family size, men's attitudes are considerably more crucial. Therefore, it was determined to research married men's knowledge, attitudes, and practises related to

the adoption of family planning techniques. We decided to include men in our study within the first five years of marriage because that is when most couples finish having children. This knowledge can serve as the foundation for men's family health education that is based on need. As is well known, India's family planning initiative began with a "clinic based, woman oriented" strategy. Where such a strategy has shown to be consistent with, among other measures, their social goal of birth control & where this goal was gradually attained.[4]

2. PURPOSE OF THE STUDY

• To evaluate eligible couples' prior understanding of family planning techniques.

• To evaluate eligible couples' post-test understanding of family planning techniques.

• To assess the efficacy of the proposed family planning education programme.

• To identify associations Knowledge of a pre-test demographic factor for potential couples

3. THE STUDY'S HYPOTHESIS

H1: Among eligible couples, there will be a significant difference between their pre-test and post-test knowledge of family planning techniques.

H2: There will be a substantial correlation between eligible couples' pre-test awareness of family planning options and their chosen demographic factors.

4. METHOD AND MATERIAL

The research methodology outlines the overall structure of the process together with accurate and reliable data for the issue being studied. This chapter discusses the methodology used to determine the level of family planning knowledge among eligible couples in Gwalior city's urban districts. It comprised the methodology, the research design, the sample size, the sampling technique, the creation of the tool, the data collection process for the pilot project, and the strategy for data analysis to ascertain the efficacy of the intervention.

Research is a study done to investigate a phenomenon's dimension, including how it manifests and other factors that may be involved. (1999) Polit and Hungler.[8]

An evaluative research approach was judged to be the most suitable, taking into account the nature of the problem and the study's purpose.

A variable is an attribute that changes, or takes on various values. (For instance, body temperature and heart rate. Variables are characteristics of the topic under study.

In this study, there will be two categories of variables:

THE INDEPENDENT VARIABLE: The research's manipulation of a condition or characteristic. The intended instructional programme is the independent variable in the current study.

THE DEPENDENT VARIABLE: The condition or traits that develop or vanish as a result of an independent variable are known as the dependent variable. Knowledge of eligible couples is the dependent variable in the current investigation.

A population is a group whose members share certain characteristics. Because the researcher is interested in researching this population, they have chosen a defined group of suitable couples aged 21 to 35 who will make up the target population.

All eligible couples between the ages of 21 and 35 who reside in the chosen urban region of Gwalior make up the study population. convenient non-probability sampling technique.

There are 60 Eligible Couples in the sample.

The equipment that researchers used to collect data is known as a data collecting instrument. To acquire high-quality data, a valid and trustworthy data collection tool is deemed essential. To evaluate the efficacy of the intended training course, a structured knowledge questionnaire was developed.

The tool and the criteria checklist were presented to specialists, including nursing staff from the community health nursing profession. The seven experts were asked to review the significance of the order in which the demographic variables for adjusting the class interval of age and occupation and language of the tool were established were done in accordance with their opinions and suggestions. The tool's linguistic validity was tested by translating it into Hindi and back into English.

The degree to which the research instrument consistently produces the same result after repeated measurements is referred to as its dependability. Six qualified couples served as the tool's dependability test subjects. The split half approach was used to determine their reliability (r = 0.9). Investigator validated the reliability.

From July 2 through July 10, 2022, six eligible couples who resided in Birla nagar Gwalior's urban ,study regions were tested using the developed instrument. The purpose of the pilot study was to evaluate the tool's and question's precision, applicability, and viability. It was determined that the tool could be used to get the desired data.

Analysis is the systematic collection, organisation, and synthesis of research data as well as the use of such data to test research hypotheses. In 1999, "Polit and Hungler,"[8]

The following plan would be used for data analysis:

- Tables and diagrams will be used to present the data.

- The investigator created a master data sheet to compile the data.

- The pre-test and post-test knowledge scores' means and standard deviations.

- Pre-test mean to compare the major variation across qualified couples.

- Periodicity and Percentage distributions were used for the analysis of demographic data including specific sample characteristics.

- Paired "t" test to assess the significance of the difference between the mean pre- and post-test results for the efficiency of family planning methods used by eligible couples.

The significant correlation between efficacy and eligible couples in the urban region of Gwalior City will be determined using the Chi-square test for association.

5. RESULTS

60 Eligible Couples were included in the sample, which was created via convenience sampling with no probability. Eligible couples in a particular Gwalior city urban region were the selection criteria's emphasised requirements.

Tables show the information gathered regarding the sample's characteristics. sample distribution by age, education, employment, and monthly income

Table 1. Periodicity and Percentage age is a demographic variable that is distributed.

Demographic Variable Age	Frequency (N)	percentage (%)
21-23	15	25.0
24-28	17	28.3
29-33	15	25.0
33-35	13	21-7
Total	60	100.0

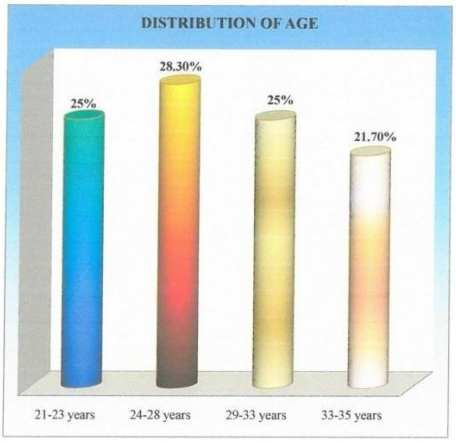

Figure-3. Bar Diagram showing the distribution of the age of the couples.

According to Table 1's data, the majority of eligible couples—28.3%—were between the ages of 24 and 28; 25% were between the ages of 18 and 23; and 25% were between the ages of 29 and 33. There were a few eligible couples in the 33–35 age range. The majority of eligible couples were between the ages of 24 and 28.

Table 2. Periodicity and Percentage Distribution of the Demographic Factor Education

Demographic Variable Education	**Frequency (N)**	**percentage (%)**
Illiterate	4	6.6
Primary	22	36.7
High School	13	21.7
Higher Secondary	21	35.0
Total	**60**	**100.0**

Table 2's data reveals that of eligible couples, 6.6% were illiterate, 36.7% were in elementary school, 21.7% had completed high school, and 35.0% had completed upper secondary. Overall, just 6.6% of the eligible couples were illiterate, whereas the majority (36.7%) had education levels up to the primary level.

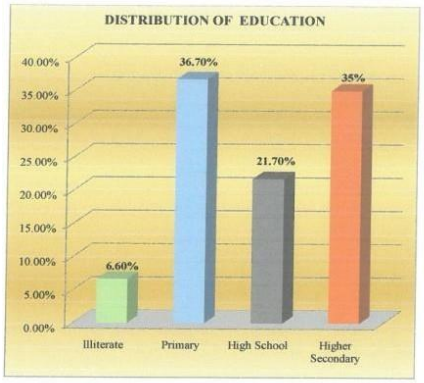

Figure-4 Bar Diagram showing the distribution of the education.

Table 3. Periodicity and Percentage Distribution of the Demographic Variable Occupation

Table 3's data reveals that just 6.6% of eligible couples were employed by the government, while 21.7% of eligible couples had self-employed businesses and 21.7% of eligible couples held private jobs. Of eligible couples, 50% were labourers.

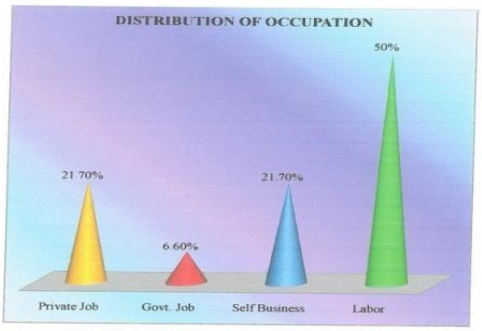

Figure-5 Cone Diagram showing the distribution of the occupation.

Table 4. Periodicity and Percentage Distribution of Demographic Variable Income of Family

Demographic Variable Income	Frequency (N)	Percentage %
1000/month	12	20.7
2000/-month	13	21.7
3000/-month	24	40.0
3001/- of above	11	18.3
Total	**60**	**100.0**

Table 4's data reveals that just 18.3% of eligible couples have monthly incomes of three thousand rupees or more, compared to 40.0% of eligible couples who make three thousand rupees, 21.7% who make two thousand rupees, 20.7% who make one thousand rupees, and so forth. Furthermore, 40% of people made less than 3000Rs per month.

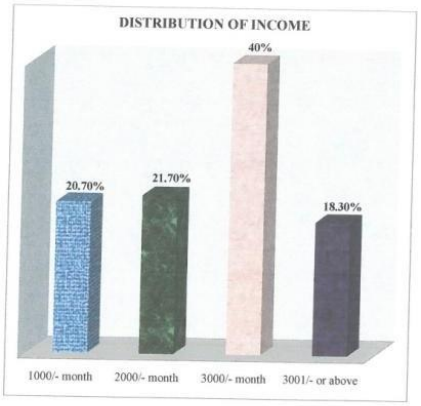

Figure-6 Bar Diagram showing the distribution of the income.

Table 5. Periodicity and Percentage distribution of Demographic Variable Types of Family

Demographic Variable Family Types	Frequency (N)	Percentage %
Nuclear	20	33.3
Joint	38	63.3
Extended	2	3.4
Total	**60**	**100.0**

According to Table 5, 63.3% of eligible couples were in the joint family group, 33.3% were in the nuclear family, and 3.4% were in the extended family category. Overall, 63.3% of eligible couples fell into the joint family category, while just 3.4% of eligible couples fell into the extended family group.

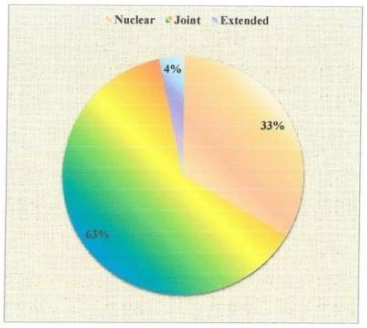

Figure-7 Pie Diagram showing the distribution of the types of family.

Table 6. Periodicity and Percentage Distribution of Demographic Variable Number of Children

Demographic Variable No. of Children	Frequency (N)	Percentage %
1	17	28.3
2	27	45.0
3	13	21.7
4 and more	3	5.0
Total	**60**	**100.0**

According to Table 6, 45.0% of eligible couples have two children, 28.3% of employees have one child, 21.7% have three children, and 5.0% of eligible couples have four or more children.

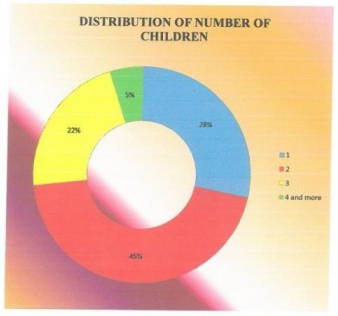

Figure-8 Doughnut Diagram showing the distribution of the no. of children.

Section II: Pre-Test Knowledge of eligible couples regarding family planning methods

The analysis and interpretation of the data relevant to the efficacy of the planned teaching programme on family planning methods are covered in this part.

Table-7. Periodicity and Percentage Distribution of Pre-test Knowledge Score

Level of knowledge	Range of score	Frequency (N)	Percentage %
Poor	0-10	22	36.7
Average	11-19	35	58.3
Good	20-25	3	5.0
Total		60	100

Table- 8. Periodicity and Percentage Distribution of Post-test Knowledge Score

Level of knowledge	Range of score	Frequency (N)	Percentage %
Poor	0-10	0	0.00
Average	11-19	4	6.7
Good	20-25	56	93.3
Total		**60**	**100**

Range of score:-

1. Poor : 0-10

2. Average : 11-19

3. Good : 20-25

According to the data table, the majority (35%) of the sample had Average pre-test knowledge scores about family planning strategies.

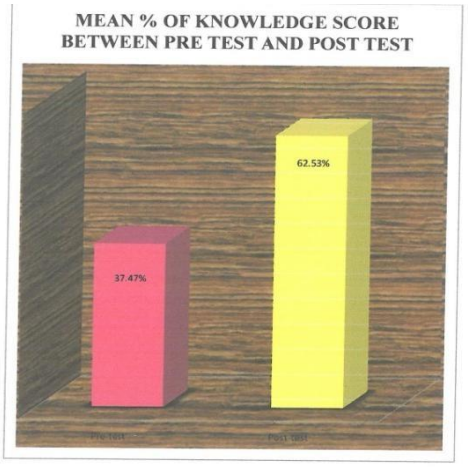

Figure-10 Bar Diagram showing the distribution of the Mean % of knowledge score between pre test and post test.

The knowledge of the sample significantly improved after the post-test, with the majority (93.3%) gaining Good Knowledge on family planning strategies.

Table- 9. Mean and S.D. of Pre-test and Post- test Score

Knowledge Score	**Mean** ($\boldsymbol{X}$)	**Mean%** ($\boldsymbol{X}$)	**S.D. (**$\boldsymbol{s}$**)**
Pre- test	13.53	37.47	3.42
Post- test	22.58	62.53	2.01
Total	**36.11**	**100.00**	**5.43**

Data in Table 9 represents higher mean (22.58) in the post-test knowledge scores and in the pre-test with a mean of 13.53

4.2 Section III: Effectiveness of planned teaching programme regarding family planning methods.

In order to find out the significance of the difference between the mean pre- test and post-test knowledge scores on disciplining, paired 't' test was computed and data was presented in

Table-10. There is a significant increase in the level of knowledge

Knowledge Score	**Mean** ($\boldsymbol{X}$)	**S.D.(**$\boldsymbol{s}$**)**	**Std. Errors of Mean**	**D.F.**	**t**	**Significance**
Pre- test	13.53	3.42	0.4886	59	-18.525	P>0.001(x)
Post -Test	22.58	2.01	0.4886	59		

To determine the significance of the difference between the pre-test and post-test knowledge scores of eligible couples in the chosen areas of discipline, a paired 't' test was used. The significant 't' value is displayed in the data in Table. These results demonstrate once more how well-designed educational programmes can improve respondents' knowledge of many aspects of discipline.

4.3 Section IV: Association between the pre-test knowledge score and selected demographic variables.

Table -11. Association of demographic variables Age in years with pre- test knowledge score

Demographic Variable Occupation	Pre test score			Total	D.F.	X^2 Value	Significance
	Poor	Average	Good				
21-23	8	7	0	15	6	13.65	p>0.05
25-28	5	3	5	13			
29-32	12	5	0	17			
33-35	7	8	0	15			
	32	23	5	60			

The value of chi- square is 13.65 which shows a significant value (p<0.05, two-tailed) Hence there is an association between age in years (grouped) and pre- test score.

Table -12. Association of demographic Variables education with Pre-test knowledge score

Demographic Variable Education	Pre test score			Total	D.F.	X^2 Value	Significance
	Poor	Average	Good				
Primary School	14	8	0	22	6	18.01	P<0.05
High School	10	3	0	13			
Higher Secondary	9	4	8	21			
Total	36	16	8	60			

The Value of Chi- Square is is 18.01 which shows a highly significant value (p<0.01, two- tailed.) Hence there is no doubt that there is an association between education and pre-test score.

Table -13. Association of demographic Variables occupation with Pre-test knowledge score

Demographic Variable Occupation	Pre test score			Total	D.F.	X^2 Value	Significance
	Poor	Average	Good				
Private Job	8	3	2	13	6	21.92	p<0.05
Govt. Job	4	1	5	10			
Self Business	11	1	1	13			
Labour	13	11	0	24			
Total	36	16	8	60			

The value of Chi- Square is 21-92 which shows a highly significant value (p<0.001, two-tailed). Hence there is no doubt and it is concluded that there is an association between Occupation and Pre-test score.

Table -14. Association of demographic variables income of family with pre-test knowledge score

Demographic Variable Income of Family	Pre test score			Total	D.F.	X^2 Value	Significance
	Poor	Average	Good				
1000/-month	8	2	2	12	6	13.83	p<0.05
2000/-month	6	6	1	13			
3000/-month	14	0	1	15			
3001/-or above	8	8	4	20			
Total	36	16	8	60			

The Value of Chi-Square is 13.83 which shows a significant value (p<0.05 ,two-tailed). Hence there is an association Income of Family and Pre-test score.

Table -15. Association of demographic variables type of family with pre-test knowledge score

Demographic Variable Types of Family	Pre test score			Total	D.F.	X^2 Value	Significance
	Poor	Average	Good				
Nuclear	9	10	1	20	4	9.84	p<0.05
Joint	25	6	7	38			
Extended	2	0	0	2			
Total	36	16	8	60			

The Value of Chi-Square is 9.84 which shows a significant value (p<0.05, two-tailed). Hence there is an association between Types of Family and pre-test score.

Table -16. Association of demographic variables number of children with pre-test knowledge score

Demographic Variable Number of Children	Pre test score			Total	D.F.	X^2 Value	Significance
	Poor	Average	Good				
One	9	7	1	17	6	24.61	p<0.05
Two	18	5	4	27			
Three	9	4	0	13			
Four and more	0	0	3	3			

The Value of Chi-Square is 24.61 which shows a highly significant value (p<0.001, two-tailed). Hence there is no doubt and it is concluded there is an association between number of children and pre-test score.

6. DISCUSSION

The findings indicate that the majority of eligible couples—28.3 percent—were between the ages of 24 and 28; 25% were between the ages of 21 and 23; and 25% were between the ages of 29 and 33. There were a small number of eligible couples in the 33+ age range. The majority of eligible couples overall were between the ages of 24 and 28.

According to the data, female couples made up 60.0% of eligible couples while male couples made up 40.0%.

6.6 percent of eligible couples had no formal education, 36.7% were in elementary school, 21.7% had completed high school, and 35.0% had completed upper secondary. Overall, just 6.6% of the eligible couples were illiterate, whereas the majority (36.7%) had education levels up to the primary level.

Only 6.6% of eligible couples were employed by the government, 21.7% of eligible couples had private jobs, 21.7% had self-employed businesses, and 50.0% of eligible couples were labourers.

According to the data, just 18.3% of eligible couples have a monthly income of $3,000 or more, compared to 40.0% of couples with incomes of $3,000 or more who earn between $2,000 and $10,000. Additionally, 40% had a monthly salary of 3000Rs.

According to the data, 63.3% of eligible couples were in the joint family group, 33.3% were in the nuclear family category, and 3.4% were in the extended family category. Only 3.4% of eligible couples fell under the category of extended family, making up the majority of eligible couples (63.3%).

According to the data, 45.0% of eligible couples have two children, 28.3% of workers have one child, 21.7% have three children, and 5.0% of eligible couples have just four children or more.

7. CONCLUSION

The in-depth investigation in this study results in the following finding:

Table 7's data reveals that whereas 58.3% of eligible couples were determined to have average knowledge, 36.7% of eligible couples had poor knowledge of family planning methods. According to a t-test calculation with a result of -18.52 (Table 10), there has been a considerable improvement in eligible couples' understanding of family planning

methods following the implementation of the planned teaching programme. Knowledge of family planning techniques significantly correlated with the chosen demographic factor.

Future nurses are prepared in large part by the nursing curriculum. People should be encouraged to plan their families because it positively affects the family's health, development, and well-being. The government of India's national population policy reflects the growing political will to restrain population increase in order to preserve the stability and well-being of the family. The curriculum should also include exercises like writing handouts, brochures, pamphlets, and self-study guides to instruct parents and carers in the home, hospital, and nursery settings. The nurse's involvement in educating the eligible couples is crucial. The enlarged and broader responsibilities of professional nurses place an emphasis on the fundamental and preventative components of health.

In the community or in hospitals, nurses play a part in educating eligible couples about family planning options. Charts, video aids, and other tools can be utilised to clarify, reinforce, or go over the lesson's subject. Giving eligible couples anticipatory advice on discipline in addition to other subjects would encourage healthcare organisations to provide advice more strongly.

The results of this study demonstrated the value of scheduled lesson plans as a teaching strategy. As a nurse, the investigator recognised the importance of nurses serving as facilitators in educating eligible couples about family planning options. They can assist the parents in gaining control over their actions as well as a healthy pattern of behaviour. This might enable them to learn more and impart that knowledge to the parents who visit these clinics.

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