



**A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING NO-SCALPEL VASECTOMY(NSV) AMONG MARRIED MEN AND WOMEN IN A SELECTED RURAL AREA, BANGALORE**

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**ABSTRACT**

*The present study is aimed to assess the knowledge of married men and women regarding No-Scalpel Vasectomy in a selected rural area, Bangalore. The objectives of the study is to assess the knowledge among married men and women about No Scalpel Vasectomy by using a structured questionnaire, to assess the effectiveness of planned teaching programme, and to find the association between the findings and selected demographic variables such as age, gender, religion, educational status, occupation, monthly income, type of family, age at marriage, duration of married life, number of children, history of infertility medication if any, adoption of temporary family planning method, relatives with permanent family planning methods, awareness about No-Scalpel Vasectomy. The conceptual frame work for this study was based on Modified Open System Model by J.W. Kenny. Pre-experimental one group pre test post test was used for this study. The study was conducted among 60 married men and women who have not undergone permanent sterilization residing in Mallasandra village, Hoskote taluk. The village is 12 kilometre away from Vydehi Institute Of Nursing Science And Research Centre. Purposive sampling technique was used in this study. Data collection was done from 19 September 2013 to 30 October 2013. Formal written permission was obtained from the medical officer in Mallasandra Primary Health Centre. Data was collected by administering the structured questionnaire before and after the planned teaching programme. The post- test was conducted after the sixth day of planned teaching programme. Data was analysed by using descriptive and inferential statistics. Paired 't' test was used to find the effectiveness of planned teaching programme and 'Chi-Square' and Yates correction formula was used to find the association. The result of the study reveals that married men and women have lack of knowledge about No-Scalpel Vasectomy. The mean knowledge of married men and women in the pre-test was in the pre-test with the standard deviation of 1.7. There was a marked gain in the mean knowledge score of married men and women after the administration of planned teaching programme (24.32 ) with the standard deviation of 1.8. The study concluded that the Planned Teaching Programme is effective in increasing the knowledge regarding No-Scalpel Vasectomy.*

**KEY WORDS:** Effectiveness; No scalpel vasectomy. Married men and women, Planned teaching programme.

## INTRODUCTION

Family is a primary unit in all societies. It is a group of biologically related individuals living together and eating from a common kitchen<sup>1</sup>. The family size plays a very important role in the health and welfare of not only the individual, family and community, but also of the nation as a whole<sup>2</sup>. Family planning is the planning about when to have children, and the use of birth control and other techniques to implement such plans. Family planning is not synonymous with birth control. It includes proper spacing and limitation of birth and advice on sterility<sup>3</sup>.

The nation-wide family planning programme was started in India in 1952 making it the first country in the world. In spite of this, about 56 percent of the couples in India are still unprotected from pregnancy<sup>4</sup>. Population growth affects the size and age composition of population. A growing population is usually the young population. For example, in India, children under 15 years of age constitute nearly 34.33 percent of the total population. A young population is a dependent population. The dependency burden is very high in India in terms of providing social and welfare services like education and health care facilities. Population growth adversely affects our per capita income. Poverty leads to sickness and sickness leads to poverty, this is a cycle prevalent in all developing countries. Population explosion leads to creation of many problems like inadequate schooling, fewer job opportunities, and overcrowding. It also leads to the development of health consequences like high infant mortality rate, maternal mortality rate.<sup>1</sup>

Population explosion is the most serious problem facing our country today. With 16 per cent of the world's population, India is the second largest populated country in the world. To check ill-effects of population growth on the socio-economic front, the Indian government had launched the Family Planning Programme in 1951. This was later rechristened as the Family Welfare Programme. This programme promotes (on a voluntary basis,) responsible planned parenthood, through independent choice of family planning methods, best suited to the people<sup>5</sup>.

The knowledge and attitudes of people regarding family planning methods is essential to the adoption of family planning measures. It is an essential that both partners have equal responsibility regarding the selection of family planning methods.<sup>4</sup> In India there are many reasons for the need for family planning. Firstly, the economic aspect. If we have more children, we will not able to nourish them and educate them well, as the poor standard of living cannot be raised. Therefore, the main objective of the economy is to plan a family. Secondly, it is also a hindrance in the country's progress. Lastly, mother's health is also one of the factors. If she bears more children, her health will deteriorate.

Increase in population leads to various problems, that is, shortage of food, unemployment, lack of civic conditions, housing problem, and inadequate availability of health services. Government is doing its level best to achieve the target of family planning. Family planning devices are distributed to the people without any charges. Mass media and electronic media is used for wide publicity.

Vasectomy is considered as a most reliable permanent family planning methods in males.

Pregnancy rate associated with vasectomy is less than 1 percent only. However, vasectomy is considered highly effective and safe<sup>6</sup>. There is a need for motivation of married couples regarding the selection of family planning measures. This is possible only by the constant efforts of health personnel in the community. Health education is the best method regarding this awareness programme.

## MATERIAL AND METHODS

### NEED FOR THE STUDY

The acceptance of male permanent family planning method is very poor when compared to female methods. Motivating men to accept permanent family planning technique helps in improving the health of women (Panigrahi 2010). Sterilization offers many advantages over other contraceptive methods. It is a one-time method; it does not require sustained motivation of the user for its effectiveness; provides most effective protection for pregnancy, the risk of complication is small if the procedure is performed according to accepted medical standards; and it is most cost effective<sup>1</sup>.

Existing health infrastructure and mass media including radio can be effectively utilized for dissemination of information through health education campaigns regarding its safety, efficacy, convenience, and availability. To improve accessibility and availability of NSV medical officers at all levels up to the primary health level should be trained in this new technique<sup>7</sup>.

Voluntary sterilization is a well established contraceptive procedure for couples desiring no-more children. In 2013-2014 only 2.2 percent of man out of 42,14,950 Indians underwent this procedure, in spite of the fact that male sterilization is simpler, safer, and cheaper than female sterilization.<sup>8</sup>

Male sterilization or vasectomy being a comparatively simple operation can be performed even in primary health centres by trained doctors under local anaesthesia. When carried out under strict aseptic technique, it should have no risk of mortality. In vasectomy it is customary to remove at least 1cm of VAS after clamping. The ends are ligated and then folded back on themselves and sutured into position, so that the cut ends face away from each other. This reduces the risk of recanalization at a later date. It is important to stress that the acceptor is not immediately sterile after the operation. During this intermediate period, another method of contraception must be used. If properly performed, vasectomies are almost 100% effective. Following vasectomy, sperm production and hormone output are not affected. The sperm produced are destroyed intraluminally by phagocytosis. This is a normal process in the male genital tract, but the rate of destruction is greatly increased after vasectomy. Vasectomy is a simpler, faster, and less expensive operation than tubectomy in terms of instruments, hospitalization, and doctor's training. Cost wise, the ratio is about five vasectomies to one tubal ligation.<sup>1</sup>

Suggested community- based strategies to improve male involvement include creation of awareness on media, during festivals, sports events, at workplaces and during agric- co operatives in the rural areas, using men as outreach workers to reach and educate other men. Clinic-based strategies include establishment of stand-alone clinics for men, creating separate hours/entrances for men, giving prompt attention to men, use of men as counsellors arranging clinical sessions at convenient time like evenings or weekends, and encouraging male friendly services during FP clinic counselling sessions. Study concludes that if the acceptance of family planning and contraceptive prevalence rate must improve, men should also be targeted by family planning programme/care providers.<sup>9</sup>

Women have been shown to accept surgical intervention methods of contraception more than men. Despite the fact that vasectomy is safer, simpler, and effective, it is underutilized and relatively unknown in Nigeria. A study was conducted during June 2009 to November 2009, to investigate the knowledge and acceptance of 'vasectomy as a male contraceptive method in Ekpoma, Edo State, Nigeria. The study population comprised of 250 respondents targeting literate married men who were randomly selected. A suitably constructed questionnaire, which was pre-tested was the tool for data collection. Overall, 23.2 percent had adequate knowledge of vasectomy. On acceptance of vasectomy as a male method of contraception, 1.6 percent agree and another 5.2 percent agree conditionally. Furthermore, no

respondent with Islamic beliefs agreed to any degree. Result showed poor knowledge of vasectomy among the selected population and this could have been the cause of low acceptance. Conclusively, this low acceptance will persist due to misconceptions, and incomplete and incorrect information about vasectomy.<sup>10</sup>

According to the National Family Health Surveys (NFHS), the proportion of male sterilization in India has come down from 3.5 percent to 1percent, during the period 1992-93 to 2005-06. In Kerala, the setting of current study, the figures dropped from 6.5 percent to just 1percent during the same period. The only state which marked an increase in the rate of male sterilization in India was Sikkim, where the rates improved from 2.4 percent (1998-99) to 4.5 percent (2005-06). The low acceptance of NSV in the community may be due to a combined effect of lack of committed programmes at the administrators' level, lack of involvement of health professionals including doctors, and the wrong perceptions of the community<sup>11</sup>. Research has proven, as well as, many health care personnel agree that vasectomy is simple and safer than tubectomy. So it is essential to increase the knowledge of married men and women on vasectomy and change their attitude and opinion towards family planning regulatory methods.

Hence, the researcher felt that there is a need to improve the knowledge of married men and women towards No-Scalpel Vasectomy. The investigator also felt that if men participated more in the currently available family planning methods, it may help them to have a better partnership with women, in the control of fertility.

## RESULT AND DISCUSSION

### SUMMARY

This chapter dealt with the background of the study which included statistics related to population, the need for No-Scalpel Vasectomy, and the need for the study.

### STATEMENT OF THE PROBLEM

“Effectiveness of planned teaching programme on knowledge regarding No-Scalpel Vasectomy (NSV) among married men and women in a selected rural area, Bangalore.”

### OBJECTIVES

To assess the level of knowledge among married men and women regarding No-Scalpel Vasectomy.

To assess the effectiveness of planned teaching programme among married men and women regarding No-Scalpel Vasectomy.

To find the association between knowledge scores and selected demographic variables.

### OPERATIONAL DEFINITIONS

- a) **Effectiveness:** In this study, effectiveness refers to the difference between the pre test and post test knowledge scores of married men and women, on the knowledge of No-Scalpel Vasectomy as assessed by a structured questionnaire.
- b) **Planned teaching programme:** In this study, planned teaching programme means, a systematically developed instructional and teaching material for educating married men and women on No-Scalpel Vasectomy. It includes lecture cum discussion, supported by video about the meaning of family planning, types of family planning, definition of No-Scalpel Vasectomy, pre preparation, procedure, post -care, follow up, advantages and disadvantages

of No-Scalpel Vasectomy.

- c) **No- Scalpel Vasectomy** : It is a permanent surgical method of family planning where in vas deferens is punctured with one blade of sharp pointed dissecting scissors (instead of using a scalpel). The hole is widened and the vas is dissected out by using the tips of the scissors.
- d) **Married men and women** : In this study, it means married men and women who are in the reproductive age, and who have not adopted any permanent family planning methods.

## CONCEPTUAL FRAMEWORK

Conceptualization refers to the process of developing and refining abstract. Theoretical and conceptual framework provides an important contact for a scientific investigation. Theoretical and conceptual frameworks play several interrelated roles in the progress of a science. Their overall purpose is to make research findings meaningful and generalizable. Theoretical and conceptual models help to stimulate research and the extension of knowledge, by providing both direction and impetus<sup>12</sup>. Conceptual frame work provides a broad prospective for nursing administration, practice, research, and education. The conceptual frame work for this study is based on Modified Open System Model by J W Kenny [1995].<sup>13</sup>

“Open system model is a set of related definitions, assumptions, and propositions which deals with reality as an integrated hierarchy.” The system model focuses each system as a whole, but pays particular attention to the interaction of its parts or subsystems. A system is a group of elements that interact with one another in order to achieve a goal<sup>13</sup>.

The following are the major concepts of the theory:

### 1) Input

Input means matter, energy, and information received from the environment. For a sub- system to work well, the input should contribute to achieve the purpose of the system. The factors mentioned below, in the input system, were taken in to consideration for evaluating the effectiveness for bringing about a change in the knowledge of the respondents.

In the present study input refers to:

### 1) **Development of the tool:**

Development of the knowledge questionnaire

**Section A:** Demographic proforma of the respondents who had attended the planned teaching programme on No-Scalpel Vasectomy.

Included: age, gender, educational status, occupation, income, religion, type of family, age at marriage, duration of married life, number of children, previous history of infertility, history of uses of temporary family planning methods, history of relatives undergone permanent family planning methods, and previous awareness about No-Scalpel Vasectomy.

**Section B:** Knowledge questionnaire.

- 2) Development of planned teaching programme materials for married men and women, on knowledge, regarding No-Scalpel Vasectomy.
- 3) Conduct pre-test.

## 2) Throughput

Throughput means matter, energy and information that is modified or transformed within the system. Throughput is the action needed to accomplish the desired task. The system transforms, creates and organizes the input system in the process known as throughput which results in recognition of the input.

In the present study, Throughput refers to:

- a) Conducting planned teaching programme for married men and women regarding No-Scalpel Vasectomy.
- b) Conduct post test

## 3) Output

Output means matter, energy, and information that is released from the system in to the environment in an altered state which is the end product of the system.

In this study, the Output refers to the expected outcomes, that is, the effectiveness of health teaching which was assessed by:

- Significant gain in knowledge, among married men and women on No-Scalpel Vasectomy.
  - No significant gain in knowledge, among married men and women regarding No- Scalpel Vasectomy.
- 4) Feed back :

Feedback is the process, whereby the output of the system is redirected to input of the same system. Feedback can be measured by the output, that is, whether there is significant gain or no significant gain, in knowledge among married men and women, regarding No-Scalpel Vasectomy.

In the present study, feedback was reassessment of planned teaching programme that is, if there was no significant gain in knowledge, then it had to be redirected to reassessment of the input and throughput systems, which was not included in the study.

## ASSUMPTIONS

- Married men and women may not be aware of No-Scalpel Vasectomy.
- Planned teaching programme may improve the knowledge of married men and women regarding No-Scalpel Vasectomy.

## DELIMITATION OF THE STUDY

- The study was limited to 60 samples.
- The study was limited to married men and women who have not undergone permanent family planning methods.
- The study was limited to a selected village.

## HYPOTHESIS

H1---There will be significant difference between the pre and post test knowledge scores following administration of Planned Teaching Programme among married men and women regarding No-

Scalpel Vasectomy.

H2---There will be significant associations between pre test knowledge scores and selected demographic variables like age, gender, educational status, occupation, monthly income, religion, type of family, age at marriage, duration of married life, number of children, previous history of infertility, history of the uses of temporary family planning methods, history of relatives undergone permanent family planning methods, previous awareness about No-Scalpel Vasectomy.

## **SUMMARY**

This chapter has dealt with the statement of the problem, objectives, operational definitions, conceptual framework ,assumptions, delimitations, and hypothesis

## **RESEARCH VARIABLES**

### **Dependent Variable**

Dependent variable is that which is hypothesized to depend on or be caused by another variable.

In this study, dependent variable refers to the knowledge level regarding No-Scalpel Vasectomy among married men and women.

### **Independent variable**

In this study independent variable refers to the planned teaching programme on No- Scalpel Vasectomy among married men and women.

### **Demographic variable**

The characteristics and attributes of the study subjects are considered as demographic variables. In this study, demographic variable refers to age, gender, educational status, occupation, monthly income, religion, types of family, age at marriage, duration of married life, number of children, previous history of infertility, history of the uses of temporary family planning methods, history of relatives undergone permanent family planning methods, previous awareness about No -Scalpel Vasectomy.

## **RESEARCH SETTING**

The physical location and conditions in which data collection takes place is the setting of the study. The research setting in this study was Mallasandra village, Bangalore.

## **POPULATION**

The target population is the all married men and women in which the researcher is interested and to which he or she would generalize the result of the study. In this study, target population includes the married men and women residing in the selected rural area Bangalore

## **SAMPLING PROCESS**

Sampling refers to the process of selecting a portion of the population to represent the entire population.<sup>29</sup>

### **Sample**

In the present study the sample consists of 60 married men and women in a selected rural area, Bangalore .

## Sampling Technique

To Kerlinger (1983), choice of sampling technique depends on the nature of the problem, the kind of variable included in the study, the type of research and number of sampling unit. In the present study the sampling technique was selected by using purposive sampling method. 60 samples were selected from the target population based on the sampling criteria.

## Criteria for Sample selection

Sampling criteria is that which specifies the characteristics that the sample in the population must possess.

### 1) Inclusion criteria

- Married men and women residing in a selected community area, Bangalore.
- Married men and women willing to participate in this study.
- Married men and women who are able to communicate understand Kannada or English.

### 2) Exclusion criteria

- Married men and women who have undergone any permanent method of family planning.

## CONCLUSION

In the present study, the main aim was to evaluate the effectiveness of planned teaching programme on knowledge regarding No- Scalpel Vasectomy among married men and women in a selected rural area, Bangalore.

The findings of the study revealed that the mean post test knowledge scores of married men and women who attained the planned teaching programme was significantly higher than the mean pre test knowledge scores.

The analysis of the study findings concluded that planned teaching programme is an effective method to enhance the knowledge of married men and women regarding No-Scalpel Vasectomy, as computed 't' = 28.86. It was assessed at 5% level of significance.

Health education attempts to bring about changes in health behaviour of every individual so as to maintain good health. The study concluded that the planned teaching programme was found to be an effective teaching strategy, whereby the married men and women could be encouraged and motivated to enhance their knowledge regarding No -Scalpel Vasectomy.

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