

# A study to assess the effectiveness of planned teaching programme on knowledge regarding contraceptive methods among the nursing students of selected colleges of Udupi district Karnataka

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**Abstract—** Contraceptive methods prevent pregnancy by stopping ovulation or thickening cervical mucus to block sperm. There are many types of contraceptive methods including pills, implant, injection, patches, rings and intrauterine devices (IUDs) An evaluate approach with pre-experimental one group pretest posttest design was used to evaluate the effectiveness of planned teaching program on knowledge regarding contraceptive methods among the nursing students of selected colleges. The objectives of the study were to assess the knowledge of nursing students regarding contraceptive methods as measured by structured knowledge questionnaire, to assess the effectiveness of a planned teaching programme on knowledge regarding contraceptive methods among nursing students in selected nursing colleges and to find out the association between pre-test knowledge scores of nursing students regarding contraceptive methods and selected demographic variables. Total 60 nursing students were selected by purposive sampling technique. The data was collected by using structured knowledge questionnaire on contraceptive methods and was analyzed by using descriptive and inferential statistics. The result of the study reveals that during the pretest majority, 44 (73%) nursing students had poor knowledge levels and 16 (27%) had moderate knowledge of contraceptive methods. During the post-test majority of 48 (80%) gained excellent knowledge and 12 (20%) got good knowledge. Area-wise analysis of pretest and posttest knowledge of nursing students regarding contraceptive methods shows that the overall pretest knowledge mean was 10.5 with a mean percentage of 33% and the posttest knowledge mean was 30.5 with a mean percentage of 94%. The variables such as age, gender, religion, previous knowledge and source of information does not show any significant association.

**Index Terms-** Contraceptive Methods, Planned Teaching Programme

## I. INTRODUCTION

Worldwide nearly 210 million women become pregnant. Among them, about 75 million pregnancies are unplanned and/or unintended. Most of these unplanned/unintended pregnancies are not carried to full term but are aborted often in unhygienic conditions leading to serious consequences. Young and unmarried women constitute a high-risk group for unsafe abortions. It has been estimated that widespread use of emergency contraception may significantly reduce the number of abortion-related morbidity and mortality.<sup>1</sup>

In India, as elsewhere, adolescent pregnancy presents a serious social and public health problem. A young woman fails to complete her education due to early childbearing, thus limiting her future job prospects and her own and her child's economic well-being. Among adolescent females in India who gave birth before their fourth year of secondary school, less than one-third returned to school after the birth of their child. Emergency contraception (EC) is a method of contraception that can be used to prevent pregnancy after an unprotected act of sexual intercourse, also called "morning-after" or "post-coital" pills. Indian youth are aware of the emergency contraceptive pills and they are using them also but they don't have full detailed knowledge about them. According to an article named "Chilling Truth of the Emergency Contraceptive Pills" published in the Times of India, the use of emergency contraceptive pills is rising by the day, leading to a lot of medical issues in young girls. And girls are not aware of it.<sup>2</sup>

It is rightly said that “The greatest shortcoming of the human race is our inability to understand the exponential function.” For countries such as Spain, Canada, and Italy, where the population is decreasing, a population explosion might be considered a boon. However, for a developing country like India, population explosion is nothing but a curse which is damaging the development of the country. With 17.74% of the world’s population, India is the second most populated country in the world. Even though 2001–2011 decadal growth rate has reduced to 17.6 %, compared to 21.5% recorded during 1991–2001, suggesting slowing down of growth, there is an urgent need for the XII Five Year Plan to further accelerate the stabilization of India’s population by repositioning family planning within the broader framework of reproductive health and primary health care.<sup>3</sup>

Contraception is one of the proximate determinants of fertility and the most important predictor of fertility transition. The choice of the contraceptive method, however, is influenced by a host of interdependent demographic, cultural, economic, and social factors which means that a multidimensional approach needs to be adopted for analyzing the contraceptive use pattern. Any analysis based on a single indicator is unlikely to capture all the dimensions of contraceptive method choice.<sup>4</sup>

Contraceptive use can be characterized in terms of both the prevalence of different contraceptive methods and specific characteristics of acceptors which differentially influence the use of different contraceptive methods. The challenge is how to classify contraceptive use patterns based on a selected set of characteristics of acceptors. Identification of similarities and dissimilarities in the acceptors of different contraceptive methods is important in understanding contraceptive use dynamics.<sup>5</sup>

India was the first country in the world to adopt an official population policy and launch an official family planning program way back in 1952 which remains the mainstay of family planning efforts. During its early years, the program focussed on the health rationale of family planning. Family planning as a strategy for population stabilization received attention only after the 1971 population census. This strategy resulted in an increase in the proportion of couples effectively

protected from 12.4 percent during 1971-72 to 46.5 percent during 1995-96 but remained stagnant during 1995-96 through 2003-04 and decreased to 40.4 during 2010-11. After the launch of the National Rural Health Mission in 2005, the official family planning program has been subsumed in the reproductive and child health component of the Mission. However, universal adoption of small family norms remains a distant dream in India.<sup>6</sup>

Unintended pregnancy is a major challenge to the reproductive health of young adults especially in developing countries, recent reports even show it is increasing. Many young women with unintended pregnancies resort to abortions which are mainly performed in unsafe conditions. Those who carry their pregnancies are likely to have increased risks of morbidity and mortality more than those for adult women. In the developing world as a whole, an estimated five million women are admitted for treatment of complications from induced abortions each year, equating to an average rate of 5.7 per 1000 women per year in all developing regions. With the decreasing age of menarche and coitarche, recent findings suggest that young people engage early in unplanned and unprotected sexual intercourse, which in most cases leads to unwanted pregnancy. Despite the wide availability of several contraceptive methods, unplanned and unwanted pregnancies persist.<sup>7</sup>

In India, 21% of pregnancies and 6.5 million induced abortions are carried out every year. Situations such as unprotected sex, improper use of regular contraceptives, failure of barrier methods, sexual violence, and miscalculation of the fertile period often lead to an unwanted pregnancy. Worldwide, there are millions of unintended and unwanted pregnancies each year. Many of them end in unsafe abortions, while others are carried on to term and contribute to the ever-increasing population burden on the Earth. This is especially felt in developing countries like India.<sup>8</sup>

## II. CONCEPTUAL FRAMEWORK

A conceptual framework is a theoretical approach to the study of problems that are scientifically based, which emphasizes the selection, arrangement and classification of its concepts. The conceptual

framework states the functional relationship between events and is not limited to statistical relationship. This study aims to assess the effectiveness of the planned teaching programme on knowledge regarding contraceptive methods among the nursing students of selected colleges of Udupi district Karnataka. The concepts are taken from the general system model by Ludwig Von Bertalanffy (1969). According to General System Theory, “science of wholeness and its purpose is to unite scientific thinking across the discipline and which provide a framework for analyzing the whole of any system”. The General System Theory consists of a set of interacting components within a boundary that filters the type and rate of exchange within the environment.

In all the systems activity can be resolved into an aggregation of feedback circuits such as

- Input
- Throughput
- Output

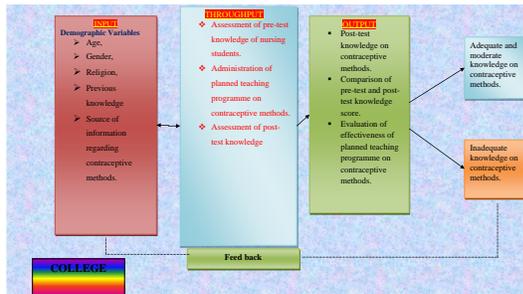


Figure: 1 Modified Conceptual Frame Work of General system theory modelled by Ludwig Von Bertalanffy (1969).....not included in the study

### III. MATERIALS AND METHODS

Pre-experimental one group pretest posttest design with evaluative approach was used in this study to assess the effectiveness of planned teaching program on knowledge regarding contraceptive methods among nursing students. In the view of nature of the problem and accomplish the objectives of the study, a structured knowledge questionnaire was prepared to assess the effectiveness of planned teaching program on knowledge regarding contraceptive methods and 60 nursing students were selected by purposive sampling technique. The tool for data knowledge questionnaire which consist of two parts. First part (A) consist of

consists of 6 questions related to selected demographic variables. And the second part (B) consists of structured knowledge questionnaire which was consisting 32 questions on management of contraceptive methods. The internal consistency found to be 0.85; which indicate the tool is stable and reliable, and feasible. The data was collected and tabulated in MS Excel and analysed with descriptive and inferential statistics using IBM SPSS Version 22.

### IV. RESULT AND DISCUSSION

Demographic variables of nursing students concerning age, gender, class of study, religion, previous information and source of information regarding contraceptive methods.

Figure 2 shows that the majority of subjects 28 (47%) belonged to the age group of 18-20 years, then 22 (37 %) belonged to the age group of 21-22 years and 10 (16 %) were above 22 years.

n=60

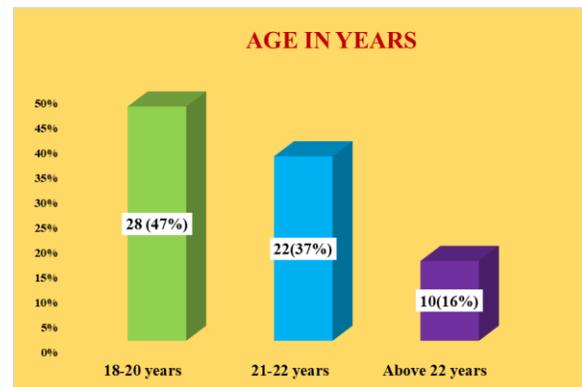


Figure 3 shows that among the sample 41 (68%) of the samples were female and the remaining 19 (32 %) were males.

n=60

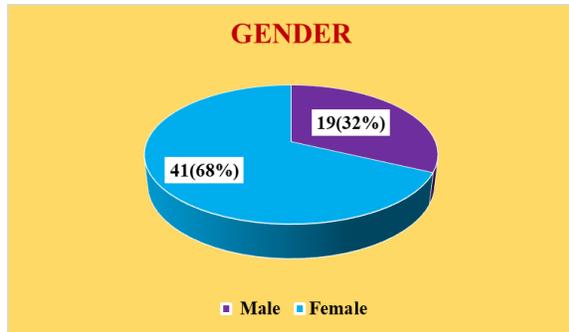


Figure 4 shows that the majority of the 47 (78%) were Hindu, 9 (15%) were Christian and 4 (7%) were Muslim.

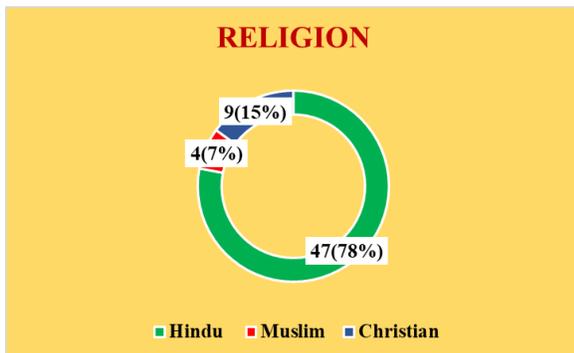


Figure 5 shows that the majority of the 44 (73%) had no previous knowledge about contraceptive methods and only 13 (27%) had previous knowledge about contraceptive methods.

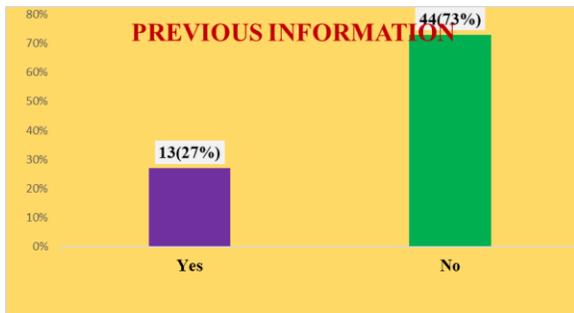


Figure 6 shows that the majority of the 44 (73%) did not have information, 6(21%) got information from teachers, 2 (4%) got information from magazines/newspapers/ internet and only 1 (2%) got information from friends/ family members.

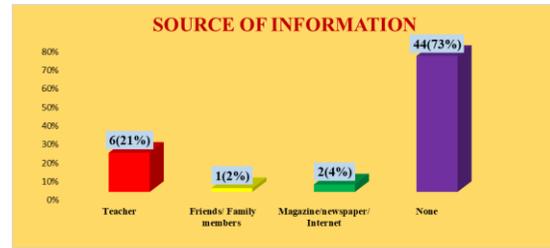


Table 1 shows that 12 (20%) adolescent girls had good knowledge and 48 (80%) had excellent knowledge on contraceptive.

SI. No	Overall knowledge	Frequency (f)		Percentage (%)	
		Pre Test	Post Test	Pre Test	Post Test
1	POOR	44	00	73 %	00 %
2	MODERATE	16	00	27 %	00%
3	GOOD	00	12	00%	20%
4	EXCELLENT	00	48	00%	80%
TOTAL		60	60	100%	100%

Table 2 shows area-wise analysis of pretest and posttest knowledge of adolescent girls regarding management of dysmenorrhoea

n=60

S l. No	Area	Max . score	Mean		Mean percentage		Standard deviation	
			Pre	Post	Pre	Post	Pre	Post
1	Definition	02	0.98	1.92	49	96	.913	.427
2	Types	03	0.78	2.44	26	82	.602	.415
3	Methods	08	3.62	7.25	45	95	.951	.486
4	Indication and contraindication	06	1.93	5.79	32	97	.982	.562

5	Side effects	07	1.56	6.23	22	89	.861	.437
6	Complications	06	1.77	6.83	28	100	.833	.198
	Total	32	10.55	30.3	33	94	5.142	2.525

Table 3 Association of pretest level of knowledge with selected demographic variables

S.I.N O	Demographic Value	Chi-Square Value	D f	P Value	Significance
1	AGE IN YEARS	0.027	1	0.869	NS
2	GENDER	0.303	1	0.582	NS
3	RELIGION	0.451	1	0.502	NS
4	PREVIOUS INFORMATION	0.075	1	0.512	NS
5	SOURCE OF INFORMATION	0.257	1	0.526	NS

The data gathered were summarized in the master sheet and both descriptive and inferential statistics were used for analysis and interpretation of the findings. The analysis and interpretation of the data focuses on the results of the study. The findings revealed that there was no significant association between existing practices and demographic variables.

#### V. LIMITATIONS OF THE STUDY

- The study is done only on 60, nursing students. Hence generalization is possible only for the selected participants.
- The study was confined to 2<sup>nd</sup> year B.Sc. nursing students from selected nursing colleges of Udupi.
- Only knowledge was considered in the present study.

- The study was conducted in one college, which restricts the generalization.

#### VI. RECOMMENDATIONS

- A similar study may be conducted on a larger sample spread over a community in different areas.
- A study can be conducted among nursing students in different aspects of health promotion.
- A study can be conducted among nursing students to explore the knowledge, attitudes, and practices regarding contraceptive methods.
- A comparative study can be conducted to compare the knowledge and practices of government and privately employed hospitals.
- A comparative study can be done in rural and urban settings.
- A similar study can be replicated on a large sample to generalize the findings.
- A similar study can be conducted in different settings.
- A study can be conducted to assess the effectiveness of innovative teaching methods

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