

Effectiveness of Structured Teaching Programme Regarding Emergency Contraception on Knowledge among Married Women

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Abstract

Background: Emergency contraception is a method of contraception that can be used to prevent unprotected act of sexual intercourse. There are both hormonal and non hormonal methods of emergency contraception are available. These methods also been called “morning after pill” or post coital contraception. *Aim:* The present study aims to assess the effectiveness of structured teaching programme regarding emergency contraception on knowledge among married women. *Methods:* The community based study was conducted in selected villages at Mamandur such as Meiyur and Vadapathi. The setting was chosen on the basis of feasibility in terms of availability of adequate samples . There are around 1337 married women residing in the selected villages. The research design chosen for the study was Quasi experimental- pre test and post test design. 110 married women those who fulfilled the inclusion criteria were selected by using simple random sampling technique (lottery method). The inclusion criteria for the study includes 1) Women those who were married, 2) Women those who were between the age group of 18-40 years and 3) Women who can read and write Tamil. The exclusion criteria includes women who had any psychiatric problems and women who have any gynecological problems. Structured questionnaire was to assess the knowledge regarding emergency contraception among married women. *Results:* With regard to pre test and post test level of knowledge regarding emergency contraception among married women, majority 63(57.3%) of married women had moderately adequate knowledge and only 1(0.9%) of them had adequate knowledge in the pretest where as in the post test, all mothers had adequate knowledge (100.0%) on emergency contraception. There was a highly significant difference found between the pretest and post test level of knowledge regarding emergency contraception among married women at $p = 0.000$ level. *Conclusion:* The present study concludes that, structured teaching programme was effective in improving the knowledge of married women on emergency contraception. Emergency contraception is safe and effective if it use within 72 hours of unprotected sexual intercourse for preventing an unplanned pregnancy, although it is not widely used. Widespread and appropriate use of emergency contraception should be encouraged as it is a promising means to arrest the increasing abortion rate and to educate women of reproductive age about emergency contraception.

Keywords: Structured Teaching Programme; Emergency Contraception; Knowledge.

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Introduction

The population problem is one of biggest problem in the country, with its inevitable consequences on all aspects of development. The country's population has already reached one billion by the turn of the century. The government has set a goal of 1% population growth rate by the year 2000. Currently, the country's growth rate is 1.93% [1]. The Birth rate is significantly increases, so it would be necessary to provide effective contraceptive coverage to about 75% of couples. Over all 56% of eligible couples are currently using any one method of contraception [2].

Emergency contraception is a method of contraception that can be used to prevent unprotected act of sexual intercourse. There are both hormonal and non hormonal methods of emergency contraception are available. These methods also been called "morning after pill" or post coital contraception. But the term emergency is most suitable as these methods are used by women with a few hours to few days of unprotected intercourse and not just the next morning [3].

The term emergency contraception includes all measures designed to prevent pregnancy due to the unplanned coital act. Unprotected intercourse, condom rupture, missed pill, sexual assault or rape and first time intercourse are known to be always unplanned. Risk of pregnancy following a single act of unprotected coitus around the time of ovulation is 8% [4]. Emergency Contraception acts as interceptive agents i.e ovulation, fertilization or implantation is prevented depending on the phase of menstrual cycle. If used before ovulation, follicular maturation as well as ovulation is disrupted, following ovulation implantation of blastocyst is interfered maturation. Function of Corpus luteum is also affected and progesterone surge does not takes place. There is a fall in the level of endometrial carbonic anhydrase which is important for stickiness of blastocyst. Progesterone also acts by increasing intra uterine PH. Copper IUD prevents implantation by a direct embryo toxic effect. Danazol acts as a luteolysis as well as prevents nidation and hampers decidualization. The GnRH analogues acts by inhibiting LH secretions [4].

India is uniquely well suited to benefit from the potential of emergency contraception. There is a high level of unmet contraceptive need among women most at risk of unintended pregnancies. The desired family size in India as fallen as a result of urgent concern about population growth, yet contraceptive remains low. Half of married

women have ever used contraceptives. Low contraceptive use has contributed to high rates of unintended pregnancy which have contributed to heavy reliance on induced abortions. The annual number of legal abortion's performed in India is 0.5 million with annual estimated 6 million abortions, but safe procedure remains inaccessible [6].

During 2004-2005, the total number of family planning acceptors by different methods as follows: sterilization 4.92 million, vasectomy 0.13 million, tubectomy 4.79 million, IUD insertion 6.26 million, condom users 18.28 million and oral pill users 7.60 million [7]. Recent data from 2004 California Women's Health Study showed that, 51% of women knew that there was something a woman could do after intercourse to prevent pregnancy. Even when women have heard of contraceptives, almost all studies show that they do not have sufficient knowledge, to be able to use contraceptives effectively [8].

Adlakha A reported that the traditional methods are the next most commonly used type of family planning (1% of all services used), with oral pills (3%), Intrauterine devices (5%) and condoms (6%) accounting for small percentage of total use [9]. Mahmued. M reported that only 15% are currently using contraceptive methods, 10.7% were using a modern method primarily the pills, compared to 25.7% of adult women [10].

In India, every 1.25 seconds women are delivering a baby. So couple protection rate is still only 41%. About 78% of pregnancies in India are unplanned and at least 25% are unwanted. Every year 11 million abortion takes place and at least half of these are unsafe and associated with a high morbidity and mortality. At least 20,000 women are dying annually due to abortion related complications. Emergency contraception promises to be useful in such cases by preventing unwanted pregnancies following unprotected sex [11].

Meng CX, et. Al conducted on emergency contraceptive use among 5677 women seeking abortion in Shanghai, China. A cohort study was conducted via face-to-face questionnaire interview the response rate was 99.3%. Among all 5677 respondents aged 15-48 years, 48.8% were emergency contraceptive pill ever-users. Emergency contraceptive pill never-users were less likely to realize risk of pregnancy and had less contraceptive knowledge ($P < 0.001$). Conclusion of the study shows that non-use of emergency contraceptive pill was correlated to less knowledge on fertility. Women of reproductive age should have access to emergency

contraceptive pill and receive sufficient information on their use [12].

Despite the wide availability of a number of contraceptive methods, unplanned and unwanted pregnancies persist. In India, 21% pregnancies and 6.5 million induced abortions are carried out every year. Situations such as unprotected sex, improper use of regular contraceptives, and failure of barrier methods, sexual violence and miscalculation of fertile period often lead to an unwanted pregnancy [13].

Banerjee N, Sinha A conducted a study on factors determining the occurrence of unwanted pregnancies. The results showed that, all the women in the sample were married and multi-parous. The husband's unwillingness for contraception and the improper use of condom was responsible for 1/3rd of all unwanted pregnancies. Lactation was believed a protection against pregnancy by 11.3% of women, while 6.3% were not aware of any contraceptive method [14].

The present study aims to assess the effectiveness of structured teaching programme regarding emergency contraception on knowledge among married women in selected villages, Mamandur, Kancheepuram District.

Methodology

The community based study was conducted in selected villages at Mamandur such as Meiyur and Vadapathi. The setting was chosen on the basis of feasibility in terms of availability of adequate samples. There are around 1337 married women residing in the selected villages. The research design chosen for the study was Quasi experimental- pre test and post test design. 110 married women those who fulfilled the inclusion criteria were selected by using simple random sampling technique (lottery method). The inclusion criteria for the study includes 1) Women those who were married, 2) Women those who were between the age group of 18-40 years and 3) Women who can read and write Tamil. The exclusion criteria includes women who had any psychiatric problems and women who have any gynecological problems.

Development and Description of the Tool

The tool for data collection consisted of two sections.

Section A : It dealt with demographic variables

such as age, religion, education, occupation, family income, place of residence and type of family and source of information about emergency contraception.

Section B - It dealt with structured questionnaire to assess the knowledge regarding emergency contraception among married women. It has 25 questions totally with 3 options. For every right answer, score 1 is given. For every wrong answer score 0 is given. The scores were interpreted as Inadequate knowledge, moderately adequate knowledge and adequate knowledge

Reliability of the tool was established by split half method. The r value $r = 0.82$. The correlation coefficient was very high, hence the tool was considered reliable and feasible for proceeding with the main study.

Ethical Consideration

The research proposal was approved by research committee of SRM college of nursing, SRM university, Kattankulathur, Kancheepuram district. Permission was obtained from the Dean In charge, SRM college of nursing. Informed consent was obtained from the study participants, after explaining the nature and duration of the study. Assurance was given to the individual that, report will be kept confidential.

Results

The descriptive and inferential statistics were used for analyzing the data. Frequency and percentage distribution were used to assess the demographic variables and knowledge of married women. Unpaired 't' test was used for comparison of pre test & post test knowledge on emergency contraception among married women. Chi-square was used to associate the mean difference level of knowledge regarding emergency contraception among married women with their demographic variables.

Regarding the demographic variables of married women, most of them 44(40%) belonged to the age group of 26-29 years and 7(6.4%) were in the age group of 18-21 years. Considering of the religion, most of them 99(90%) belonged to Hindu religion and only 2(1.8%) were Muslim. Regarding educational status, 46(41.8%) had high school certificate, and only 2(1.8%) were illiterate. Considering the occupation majority 39(35.5%) were unemployed and only 6(5.5%) had semi-profession. Regarding family income per month, most of them 41(37.3%) were earning between Rs .4727-Rs7877

and only 1 (0.9%) were earning more than >Rs.31,506. Regarding the place of residence, majority of 109(99.1%) were in urban and 1(0.9%) were in semi urban. Regarding type of family, most of them 79(71.8%) were in nuclear family and only 1(0.9%) were in extended family. Considering the source of information about emergency contraception, most of them 53(48.2%) said health professionals and only 2(1.8%) said that they were don't know (Table 1).

With regard to pre test and post test level of knowledge regarding emergency contraception among married women, majority 63(57.3%) of married women had moderately adequate knowledge and only 1(0.9%) of them had adequate knowledge in the pretest where as in the post test, all mothers had adequate knowledge (100.0%) on emergency contraception (Table 2).

Table 1: Frequency of percentage distribution of demographic variables of married women

N=110

S. No.	Demographic Variables	Classifications	No. of respondents (n)	Percentage Distribution (%)
1	Age	18-21 yrs	7	6.4
		22-25 yrs	40	36.4
		26-29 yrs	44	40.0
		> 30 yrs	19	17.3
2	Religion	Hindu	99	90.0
		Muslim	2	1.8
		Christian	9	8.2
3	Education	Illiterate	2	1.8
		Primary school certificate	16	14.5
		Middle school certificate	27	24.5
		High school certificate	46	41.8
		Intermediate (or) post High school diploma	19	17.3
4	Occupation	Unemployed	39	35.5
		Skilled worker	22	20.0
		Clerical, shop -owner ,farmer	28	25.5
		Semi-profession	6	5.5
		Profession	15	13.6
5	Family income per month in Rs.	Rs. 1590 - Rs. 4726	20	18.2
		Rs.4727 - Rs.7877	41	37.3
		Rs.7878 - Rs.11,876	30	27.3
		Rs.11,817 - Rs.15,753	13	11.8
		Rs.15,754 - Rs.31,506	5	4.5
	>Rs. 31,507	1	0.9	
6	Place of residence	Urban	109	99.1
		Semi urban	1	0.9
7	Type of family	Nuclear	79	71.8
		Joint	30	27.3
		Extended	1	0.9
8	The Source of information about emergency contraception	Mass media	33	30.0
		Friends	22	20.0
		Health professional	53	48.2
		I don't know	2	1.8

Table 2: Frequency and percentage distribution of pre test and post test level of knowledge regarding emergency contraception among married women

N=110

S. No	Level of knowledge	Pre test		Post test	
		n	%	n	%
1	Inadequate knowledge	46	41.80	0	0.0
2	Moderately adequate knowledge	63	57.3	0	0.0
3	Adequate knowledge	1	0.9	110	100.0

Table 3: Comparison of pre test and post test level of knowledge regarding emergency contraception among married women N =110

Married women	Pre test		Post test		t- value
	Mean	SD	Mean	SD	
	16.87	3.63	23.96	1.12	-19.80 DF = 109 p = 0.000

Table 4: Association of mean difference level of knowledge on emergency contraception among married women with their demographic variables N= 110

S. No.	Demographic Variables	Classifications	Difference between Post and Pre test		Chi-square value	Degrees of freedom	P-Value
			Less than average	Average and More			
1	Age	18-21 yrs	4	3	0.8	3	0.84
		22-25 yrs	16	24			
		26-29 yrs	20	24			
		> 30 yrs	8	11			
2	Religion	Hindu	43	56	2.0	2	0.35
		Muslim	0	2			
		Christian	5	4			
3	Education	Illiterate	1	1	5.2	4	0.26
		Primary school certificate	5	11			
		Middle school certificate	9	18			
		High school certificate	21	25			
		Intermediate (or) Post High School Diploma	12	7			
4	Occupation	Unemployed	15	24	7.8	4	0.09
		Skilled worker	9	13			
		Clerical, shop -owner ,farmer	15	13			
		Semi-profession	0	6			
		Profession	9	6			
5	Family income per month in Rs.	Rs. 1590 - Rs. 4726	11	9	7.8	5	0.16
		Rs.4727 - Rs.7877	18	23			
		Rs.7878 - Rs.11,876	11	19			
		Rs.11,817 - Rs.15,753	3	10			
		Rs.15,754 - Rs.31,506	4	1			
		>Rs. 31,507	1	0			
6	Place of residence	Urban	47	62	1.3	1	0.25
		Semi urban	1	0			
7	Type of family	Nuclear	35	44	1.4	2	0.48
		Joint	12	18			
		Extended	1	0			
8	The Source of information about emergency contraception	Mass media	14	19	4.1	3	0.24
		Friends	7	15			
		Health professional	25	28			
		I don't know	2	0			

The comparison of pre test and post test level of knowledge regarding emergency contraception among married women showed that, the mean value of pre test 16.87 with SD 3.63 compared with the mean value of post test 23.96 with SD 1.12. revealed that 't' value as -19.80 which was highly significant at p=0.000 level (Table 3).

The results depicted that, there was no association found between the mean difference level of knowledge among married women with the demographic variables such as age, religion, education, occupation, family income, place of residence, type of family and source of information regarding emergency contraception (Table 4).

Discussion

Emergency contraception is safe and effective if it use within 72 hours of unprotected sexual intercourse for preventing an unplanned pregnancy, although it is not widely used. Widespread and appropriate use of emergency contraception should be encouraged as it is a promising means to arrest the increasing abortion rate and to educate women of reproductive age about emergency contraception [15].

Contraceptives provide a safe and effective method and more than 50% of married women of the reproductive age world wide use it. Contraceptives are at a low cost and low maintenance method is rendered in its use. While many studies have tried to investigate women's knowledge, attitude and practice regarding contraceptives these issues have proven difficult to measure. Estimates of how much women know about contraceptives vary greatly [16].

The current study results showed that, all mothers gained adequate knowledge (100.0%) after structured teaching programme on emergency contraception. There was highly significant difference found between pre test and post test level of knowledge regarding emergency contraception among married women at $p=0.000$ level.

The study findings are consistent with the study done by MehraReeti, GoelPoonam, DuaDeepti, HuriaAnju (2006) on knowledge of emergency contraception among women coming for induced abortion, Government medical college and hospital, Chandigarh, India. A survey was conducted over a period of 6 months with the help of redesigned questionnaire, in 100 consecutive women attending our voluntary abortion (MTP) clinic for an induced abortion. The result shows only 27% of women were using regular contraception. Condoms were the most popular choice in 75% of all users. Only one woman out of 100 was aware of emergency contraception. The study concluded that, emergency contraception is widely published and used as a back up to prevent unwanted pregnancies [11].

The study findings are consistent with the study done by Takkar.N, Goel.P, Saha PK, Dua D(2005) on contraceptive practices and awareness of emergency contraception in educated working women in Chandigarh, India. The women were asked questions concerning knowledge and use of contraceptive methods and awareness of emergency contraception. The results of the 284 employees 258 women consented for the interview. All the subjects were literate and majority (97.2%) had an urban background. Of the 190 married women, 154 (81.1%)

practiced contraception, among them (73.3%) were regular users. 80 respondents underwent abortions of which 46 had spontaneous and 34 had induced abortions The use of hormonal contraception was very low 2.6%. Twenty-nine women (11.2%) were aware and only three women used emergency contraception the conclusion of the study was awareness of emergency contraception was low [17].

The reproductive health care in India requires a wide demand net. Besides 'supply' of contraceptives, and increasing contraceptive prevalence, is recommended through education about the variety of safe contraceptives. Expansion of education is partly responsible for the recent decline in fertility rate in India. The community can become a key force in knowledge sharing for greater contraceptive prevalence and also to support its service sector. The guidelines of the World Health Organization for quality care in family planning should be implemented in rural and urban sectors, efforts should also be made to translate recent advances in contraceptive for women's reproductive health [18].

Conclusion

The present study concludes that, structured teaching programme was effective in improving the knowledge of married women on emergency contraception. Emergency contraception is safe and effective if it use within 72 hours of unprotected sexual intercourse for preventing an unplanned pregnancy, although it is not widely used. Widespread and appropriate use of emergency contraception should be encouraged as it is a promising means to arrest the increasing abortion rate and to educate women of reproductive age about emergency contraception.

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