

# An Epidemiological Study on the Prevalence of use of Temporary Methods of Contraception among Married Women

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**Abstract:** Introduction Unwanted pregnancies are a major cause of unwanted child births and of maternal and infant deaths. Aims and Objectives: This epidemiological survey was conducted among 200 married women to assess the prevalence of use of temporary methods of contraception and the association of selected socio demographic factors with its usage. Methodology: A house to house survey was conducted and data was recorded on a pre-designed and pre-tested questionnaire following an interview technique. Results: The study revealed that 81.5 % (163) women were using either of the temporary contraceptive method. There were 17% (34) women who were not using any of the method though they wanted to regulate their fertility. A highly significant association ( $p < 0.001$ ) was observed between age, socioeconomic status, duration of married life and number of living children with usage. Conclusion: Lack of knowledge, fear of side effects, spouse and mother in law's disapproval were the reasons related to non-usage of contraceptive methods.

**Keyword:** Prevalence, use, temporary methods of contraception, socio-demographic factors, married women

## 1. Introduction

Worldwide, some 80 million (38 percent) unintended pregnancies occur each year. Unintended pregnancies include unwanted pregnancies as well as those that are mistimed. Unwanted pregnancies are a major cause of unwanted child births and of maternal and infant deaths. (1) Providing family planning services and modern contraceptives to those who do not have access to them would prevent a large proportion of unintended pregnancies and abortions, as well as many maternal and infant deaths. (1) To understand the scenario there was a need identified to assess the prevalence of use of temporary methods of contraception among married women (age 15yrs-45yrs) and the variables associated with its usage. Temporary contraceptives refers to use of those methods which helps women to delay first pregnancy to avoid unwanted pregnancy or to keep spacing among the birth of the children.(2) The survey also elicited the forefront reasons for non usage of temporary contraceptives among women who were not using these methods.

## 2. Literature Reviewed

As per the WHO 2011 world contraceptive use statistics world-wide 62.7 percent reproductive age group women were practicing some type of contraceptives. The use was as high as 84 percent in United Kingdom in comparison to only 1.2 percent of Somalia. The contraceptive prevalence rate for currently married women in India was found to be 56.3 percent as per the WHO 2011 data. (3) Female sterilization, with a prevalence of 38 percent, accounts for 66 percent of all contraceptive use.

The data projected that only 5.2 percent of the currently married women were using condoms, 3.1 percent were using pill, 1.7 percent were using intrauterine contraceptive

devices, 0.1 percent were using injections, 1.7 percent using intrauterine device and 7.8 percent were using traditional method. (4)

The contraceptive prevalence rate among currently married women of 15-49 years of age was found to be 67 percent as per NFHS-3 survey of Maharashtra. Out of this 67 percent, female sterilization contributes to 76 percent of all contraceptive usage.(5) The findings of District Level Health Survey-3 data exhibited that in Pune, 72.2 percent of currently married women of 15-49 years of age were using some method of contraceptives. It was found that 70.4 percent were practicing some modern method out of which female sterilization method was used by 59.2 percent and male sterilization was used by 0.8 percent. The use of temporary methods of contraception was comparatively low.(6)

The NFHS-3 of India had revealed in its findings that 13 percent of the currently married reproductive age group women were not using any contraceptive, although they do not want any more children. Such unmet need was relatively high (27 percent) in 15-19 years age group to 21 percent in 20-24 years among currently married adolescent.(7) The aggregate need as per the WHO 2011 data was found to be 12.8 percent for reproductive age group women.(3)

## 3. Research Methodology

This was a cross sectional study, conducted in urban community of Pune. The sample size was calculated using the formula  $4Pq/d^2$  taking estimated prevalence as 12% (ref) (6) and margin of error at 5%. The calculated sample size was 200. The study was limited to those women who were married and were not using permanent methods of contraception. Multistage sampling technique was used and proportionate stratified sampling was done. Data was

collected on a pre-designed pre-tested semi structured tool through personal interview technique. Analysis was done using SPSS Version 17. Relevant prevalence and class intervals were determined and tabulated. Cross tabulations were carried out to assess the factors associated with prevalence of use of temporary methods of contraception. Unmet need for contraception determines the percentage of fecund women in reproductive age group who want to delay or avoid childbirth but are not using any contraceptive method.(2)

Total scoring of the responses for each item was done on percentage basis in 04 categories Total response for one item was converted into percentage and put into the category of high majority, majority, moderate proportion, low proportion if scores were  $\geq 90\%$ , between 70-89%, between 50-69% and  $< 50\%$  respectively.

## 4. Results

Total 200 samples were taken for this study. The mean age of women in the study was 19.9 years and SD standard (SD) 2.8 years and mean age of their husbands were 27.8 years and SD 4.6 years.

**Table 1:** Knowledge of married women regarding contraceptive methods, n =200

Category		Frequency	%
Knowledge	Permanent	07	03.5
	Temporary	31	15.5
	Both	152	76.0
	Total	190	95.0
No knowledge		10	05.0

Table 1 indicates that a high majority i.e. 95 percent of the women had knowledge about contraceptive methods in general and 5percent had no knowledge of such methods.

Table 2 reveals the knowledge about various temporary contraceptive methods among respondents. Majority of the respondent had knowledge about male condoms, COC pills and IUCDs and low proportion had knowledge related to other methods.

Table 3 describes that out of 200 women 31% couple were using condoms, 15% were using COC's and 7% were using IUCD. It was significant to know that 2 % of the women were using emergency pill as a regular temporary contraceptive.

**Table 2:** Knowledge of temporary contraceptive methods among married women, n=190

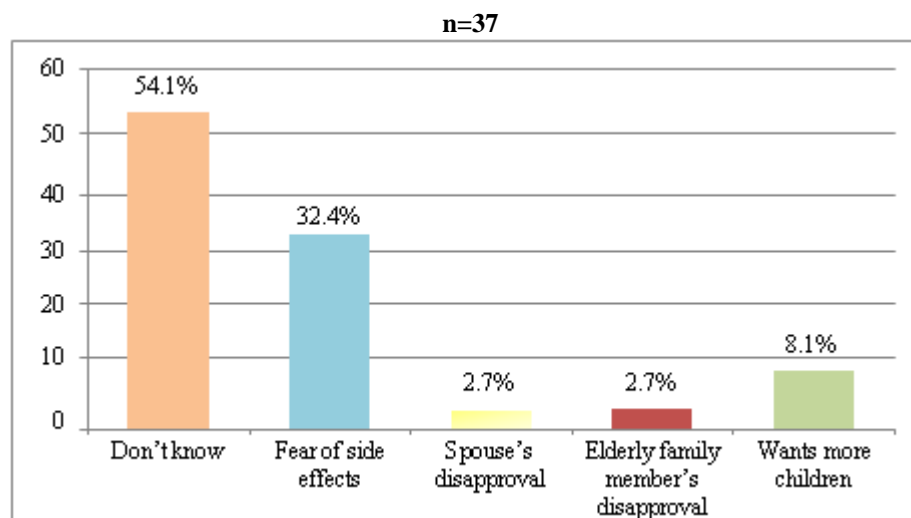
Temporary contraceptive methods	Frequency	Percentage
Male condoms	165	86.9
Female condom	16	08.4
Combined Oral Pill	179	94.2
Emergency pill	124	65.3
Injections	34	17.9
IUCDs	173	91.0
Coitus interruptus	86	43.7
Safe period	37	19.5
Breast feeding	05	02.6
Indigenous Method	01	00.5
Total	190*	100**

\* Numbers add to more than 190 because of multiple responses

\*\* Percentage adds to more than 100 because of multiple responses.

**Table 3:** Description of prevalence of use of specific temporary contraceptive methods among married women, n=200

Use of temporary contraceptives	Temporary contraceptive methods	Types	Frequency	Percentage
Users	Intrauterine device	Copper T, Mirena	14	07.0
	Hormonal methods	Combined Oral Pills, I-Pills	30	15.0
	Barrier methods	Condom	62	31.0
	Traditional methods	Safe period Coitus interruptus	14 32	07.0 16.0
	Mixed methods	Condom+ traditional method	07	03.5
Non – Users			37	18.5



**Figure 1:** Reasons for non-acceptance of temporary contraceptive methods

Figure 1 reveals the reason for non-usage of temporary methods of contraception. Out of 37 non user it was found that moderate proportion i.e. 20(54 percent) were not using contraceptives because they lacks knowledge about.

**Table 4:** Description of unmet need of contraception, n =200

Category	Frequency	Percentage
No unmet need	163	81.5
Desire for child	03	01.5
Unmet need		
Unmet need for spacing child birth <sup>+</sup>	28	14.0
Unmet need for limiting child birth <sup>++</sup>	06	03.0
Total unmet need	34	17.0
Total	200	100

+ Women who want to use contraceptive methods for spacing among children , but are not using any method, are defined as having an unmet need for spacing methods.

++ Women who do not want any more children, but are not using any method, are defined as having an unmet need for limiting the family size.

Table 4 describes that out of 37 non users, unmet need of contraception was found among 17) percent married women. The unmet need for spacing was found to be 14 percent whereas unmet need for limiting child birth was 3 percent. There were 1.5 percent women who desires for more children, hence no there was no unmet need of contraception for them.

**Table 5:** Perceived problems related to use of temporary contraceptive methods n=163

Perceived problems	Frequency	Percentage
Problems	37	22.7
No problems	126	77.3
Total	163	100

Table 5 depicts that out of total 163 users only majority (77.3percent) didnot have any complaints whereas low proportion 22.7 percent had minor complaints related to temporary contraceptive use.

**Table 6:** Association of selected demographic variable of married women with the use of temporary contraceptive method, n=200

Demographic variables	Category	Users	Non-users	Frequency	$\chi^2$	p value
Age	≤25 years	75(71.4)	30(28.6)	105(52.5)	13.5	<0.001
	>25 years	88(92.6)	07(7.4)	95(47.5)		
Socio Economic Status	Upper class	105(90.5)	11(9.5)	116(58.0)	13.5	<0.001
	Upper lower	58(69)	26(31)	84(42.0)		
No of year married for	≤5years	79(71.1)	32(29)	111(55.5)	17.65	0.001
	6-10 years	53(94.6)	03(5.4)	56 (28.0)		
	>10years	31(93.9)	02(6.1)	33(16.5)		
No of living children	01	71(69.6)	31(30.4)	102(51.0)	17.9	<0.001
	≥2	92(93.9)	06(6.1)	98(49.0)		
History of abortions	Yes	75(90.4)	8(09.6)	83(41.5)	6.42	0.01
	No	88(75.2)	29(24.8)	117(58.5)		
Families with	Son among children	118(72.3)	20(54.1)	138(69.0)	3.92	0.047
	only daughters	45 (27.7)	17(45.9)	62(31.0)		

(The figures in parenthesis denotes percentage)

Table 5 depicts that the use of temporary contraceptive increases with respondent's age. The relationship was proved statistically highly significant with  $p < 0.001$ . Table represents that out of 105 women of ≤ 25 years of age majority 75 (71.4 percent) women were using temporary contraceptive methods.

The data suggest strong association between socioeconomic status and use of temporary method of contraception. Out of 84 lower socioeconomic status women 69 % were users whereas 31 % were non users. Out of 116 higher socioeconomic status women 90.5 % were users whereas 9.5% were non-users of temporary methods of contraception. The women from the lower socioeconomic status had less usage of temporary contraceptive whereas women from higher socio economic status had more usage of temporary contraceptives.

No of years of marriage was directly associated with the use of temporary contraceptive and families where number of living children were more the use of temporary contraceptive was found to be more. Statistical significant relation was found with the history of abortion and use of

temporary contraceptive. It was also seen that if the son among children were more the contraceptive use was more.

## 5. Discussion

It was observed in the present study that 36.5 percent of women got married before the legal minimum age of 18 years. The findings were consistent with the findings of NFHS-3, Maharashtra where 39 percent of women got married before the legal minimum age of marriage(5)The present study also said that 68 (34 percent)of the women gave birth to their first child before the age of 19 years whereas 64.5 percentgave birth after 19 year of age.

The findings were almost similar with the findings of NFHS-3 data of India where 44 percent of the married women of 15-19 years of age were found to be mother.(3)

It was found that there was a highly significant association between temporary contraceptive usage and age of married women. The similar findings were also projected in NFHS-3 data of Maharashtra where it was found that contraceptive

use increase sharply with age but found to higher for women age 30-39 years than women age 40-49 years. .(5)

In the present study a highly significant association was found between the socioeconomic status of the family and use of temporary method of contraception. The similar findings were established in a study conducted by Sharma AK where the contraceptive acceptance was directly associated with the socio economic status of the respondent. The acceptance rate was 58.9 percent among higher income group in comparison to the 22 percent among low income group.(8)

There was a significant association found between the gender of living children and use of temporary methods of contraception. It was found that the women who were having son were practicing temporary contraceptives more in comparison to women those who were having only daughters. The findings were found to be congruent with the findings of a study conducted by Kansal A where that acceptance of family planning methods in the mothers of at least one male child were significantly higher (53.25 percent) than those with no male child(6.18 percent).(9)

The present study also revealed the knowledge of respondents regarding different methods of temporary contraception.

The findings of the present study exhibited that more than 80 percent of the respondent had knowledge of COCs, IUCDs and male condom whereas the knowledge regarding natural methods of contraception was relatively low. The results of the present study was fairly similar with the findings of a study conducted by Ray KP et al in June 2010 in Kolkata, where the awareness regarding oral contraceptive pill was 96 percent, followed by condom 79 percent, IUCDs 29 percent and injectable contraceptives 10 percent. (10)The total unmet need for contraception in the present study was found to be 17 percent which was significantly higher than the 09 percent unmet need of NFHS- 3 data of Maharashtra. The unmet need for spacing was 14 percent and limiting was 3 percent. (5)

The disparity between the awareness and practice of contraceptives was observed significantly where 95 percent had knowledge about contraceptive methods; the usage is only 81.5 percent. The findings were consistent with the findings of a cross-sectional study conducted by Renjhen P et al where 94.2 percent study population had knowledge about contraceptive methods but use was only among 55.2 percent.(11) There was an intense need of identifying the reasons for non usage of temporary contraceptives among the study population. On analysis it was identified that the main reason of non usage of temporary methods of contraception was lack of knowledge (54 percent) among selected study population. On analyzing further it was found that 32.1 percent had fear of side-effects, 2.7 percent was not using because of spouse disapproval and of mother-in-law's disapproval. The findings were fairly similar with the findings of a study conducted by Patil SS et al. (12) It was inferred from the data that lack of information about contraceptive method and its sources (57.6 percent) were the commonest reasons for non-acceptance of contraceptives.

Opposition from husband, families and communities accounts for 18.6 percent and health concerns and side effects were the other contributory factors among 10.2 percent of married women for non usage of temporary contraceptives.

The study revealed that 77.3 percent did not have any complain whereas i.e. 22.7 percent developed minor side effect with temporary contraceptive usage. The findings were congruent with the findings of a study conducted by Das NP et al in the slum of Baroda which revealed that the 80 percent of women did not have any side effects with the use of contraceptive method.(13)

## 6. Future Scope

Longitudinal interventional studies can be conducted to assess the effect of health education programmes on acceptance of contraceptives and unmet need. Studies can also be conducted on role of spouse related to practice of temporary methods of contraception.

## 7. Conclusion

The study showed that there is a knowledge/practice gap in the use of family planning methods. There were noticeable percent of women in the present community who got married before the legal age of marriage and became mother during teen age. There was a significant history of abortions due to unplanned pregnancies among the married women. Well-timed adoption of contraceptives can only be the solution of all such problems. Electronic media, health personnel and government organization involvement can play a positive role to provide knowledge and overcome the knowledge/practice gap. Along with that easily accessible, convenient and good quality family planning methods to be made available to women in need.

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