



## **Prevalence of Contraceptive Methods among Eligible Couples in an Urban Area of Chennai - A Cross Sectional Study**

**K. R. Deepak Avinash <sup>a\*</sup>, S. Suganthi <sup>a</sup> and E. Venmathi <sup>a</sup>**

<sup>a</sup> *Department of Community Medicine, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Kelambakkam-603103, Tamil Nadu, India.*

### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## **ABSTRACT**

**Introduction:** Rapid population expansion is putting a strain on many developing countries' resources, especially in India. Optimal fertility management enables women and men to avoid and achieve conception and parenthood when desired. India launched officially Family Planning Programme way back in 1952 to address these issues, yet its goals were far from achieving facing stern obstacles in many forms. Surveys and studies by individual authors to find out the prevalence of contraceptive use and their determinants have been conducted in various parts of India. However, the contraceptive prevalence is not uniform across India. The aim of the study is to estimating the prevalence of contraception usage among eligible couples and to assess the factors associated with contraception usage.

**Methods:** This was a cross sectional study conducted among married eligible couples living in the urban area named Semencheri in Chennai. It was carried out for a period of 4 months from 2<sup>nd</sup> April to 5<sup>th</sup> of July 2019. The study population consisted of eligible married couples with female partner of age between 15 to 49yrs of age married for at least 2 year, and having minimum one child, Based on the results of a pilot study the sample size was calculated and estimated to be 120, structured questionnaire was used to collect data.

**Results:** The prevalence of contraception was only 63.3% though 92.5% of couples studied were aware of the contraceptive methods, the factors like education of either of the couple and mode of delivery of the previous child were significantly associated with contraception usage.

**Conclusion:** Even though the use of contraception has increased among couples, still there is an unmet need for contraception, in spite of increased education qualification and knowledge about contraceptive methods.

*Keywords: Contraceptives; fertility management; overpopulation; urban population.*

## 1. INTRODUCTION

A rapid population growth is a burden on the resources of many developing countries including India [1]. Optimal fertility management enables women and men to avoid and achieve conception and parenthood when desired [2]. One of the most important cause of morbidity and mortality among women of child bearing age is reproductive health problem. Nearly 1.5 billion adolescent girls are entering into child bearing age groups without sufficient knowledge regarding family planning practices which are essential to maintain their reproductive health [1]. India launched officially Family Planning Programme way back in 1952 to address these issues [3]. Yet its goals were far from achieving facing stern obstacles in many forms. This was attributed mainly by the lack of knowledge about sexual, reproductive and fertility matters impeding a person's ability to manage their fertility effectively [2]. Unmet need to family planning means when a married women who are able to give birth and want to stop or delay childbearing but are not using any method of contraception to prevent pregnancy [4]. Though in 2017 met need of family planning among married or in-union women of reproductive age was 78% Worldwide yet India lagged behind its targets [2]. One in ten married women face unmet need for family planning worldwide [4]. Unmet need for family planning is a valuable concept that is widely used for advocacy, the development of family planning policies, and the implementation and monitoring of family planning programs worldwide [4]. Currently, India being the second most populous country in the world, contributing about 20% of births worldwide, the National Family Health Surveys and studies by individual authors to find out the prevalence of contraceptive use and their determinants have been conducted in various parts of India. However the contraceptive prevalence is not uniform across India [1]. The odds of unintended pregnancy were about 16 fold among women who reported facing unmet need for contraception compared to those who did not [4]. In each country, understanding the size of unmet need and the characteristics of women with unmet need can help planners strengthen

programs. Survey data on unmet need can provide overall direction by helping to pinpoint the obstacles in society and weaknesses in services that need to be overcome [4]. Contraceptive utilization rate is a good indicator of the extent to which couples have access to reproductive health services. The gap between women's reproductive intentions and their contraceptive behaviour can be revealed by unmet need for family planning. The indicator is useful for tracking progress towards the target of achieving universal access to reproductive health. Information on contraceptive prevalence complements the indicator of unmet need for family planning [4].

Evidence from a number of individual studies in various parts of the country indicates that inadequate knowledge of contraceptive methods is a reason for not accepting family planning. These studies have brought out the timely and effective knowledge regarding family planning norms and practices among the young women during their initial married days are vital [1]. The use of modern methods increased from 42.8 to 48.5% between NFHS-2 to NFHS-3. Contraceptive prevalence rate of India was 56.3% as per the NFHS-3 data [1]. Under the National Rural Health Mission (2007–2012) programme goal set for TFR was 2.1 [5]. Thus the present study was done with the objectives of estimating the prevalence of contraception usage among eligible couples and to assess their perceived barriers in using the various contraceptive methods available.

## 2. MATERIALS AND METHODS

This was a cross sectional study conducted among married eligible couples living in the urban area of semencheri. It was carried out for a period of 4 months from 2<sup>nd</sup> April to 5<sup>th</sup> of July 2019. The study population consisted of eligible married couples with female partner of age between 15 to 49yrs of age married for at least 2 year, and having minimum one child. The study excluded all the pregnant women and non-consenting couples. Prior permission was obtained from the institute and informed written consent was also obtained from each participant

after explaining the details of the study. Based on the results of a pilot study the sample size was calculated and estimated to be 140, The sampling method used was convenient sampling included all the consenting eligible couples in urban area of semencheri, prior consent was obtained from all the participants. Study tool consists of structured questionnaire consisting of 3 sections, the first section consists of socio-demographic questions, questions about marital history and obstetrics history. The second section consists of personal choices, duration of marriage and spacing, the third section consists of closed type questions on the barriers they perceived in the usage of contraception. The participants were interviewed face to face without probing and their responses were recorded, finally the data collected were entered in ms excel and analysed using SPSS version 21, the mean and standard deviation with the p value (< 0.05) significance of the knowledge about contraceptive prevalence methods among the participants are noted.

### 3. RESULTS

In the present study out of 120 people interviewed 85% were female and 15% were male, out of which a majority of 57(56%) females were in the age group of 21-30 and majority of 9(50%) males belong to the age group of 31-40. Out of 102 females 84% were unemployed while 16% were employed and out of 18 males 39% were unemployed and 61% were employed. A majority of 59% females had secondary level education while a majority of 55% males had secondary level education. In terms of knowledge 92.5% were aware of at least one of the contraceptive methods and 7.5% were not aware of any contraceptive methods. Though 92.5% of the people were aware of contraceptive methods, only 63.3% adapted contraception while 36.7% did not adapt any form of contraception. Out of all the contraceptive methods used permanent sterilization was used by majority of the couples at 43.3%, followed by the users of condom at 36.6%, Copper –T users were at 9.1%, while OCP users was 4.1% and

the rest 6.6% adapted other methods of contraception. In terms of spacing between children only 20% had the adequate spacing of 3 years between pregnancies while 80% has a spacing of less than 3 years between pregnancies.

### 4. DISCUSSION

The present study highlights the gap between the awareness and practice of contraceptive methods among eligible couples in an urban area, out of 120 couples interviewed 111 had awareness of the various contraceptive methods yet only 76(63%) couples reported usage of contraception. Thus 36.7% of the studied couples had not adapted any contraception despite their knowledge and awareness. This indicates the unmet need of family planning for the couples included in the study, which was statistically significant with p-value less than 0.001. this is similar to the study done by Hiremath RN et al, which reports 34.8% of non-adaptation [1].

**Table 1. Distribution of Study participants based the Socio-demographical factors**

Socio-demographical factors	Frequency (percentage)	
	Male (18)	Female(102)
<b>Age</b>		
21-30	4	57
31-40	9	33
41-49	5	12
<b>Education</b>		
Illiterate	5	23
Primary	0	2
Secondary	10	61
Graduate	3	13
Post graduate	2	1
<b>Occupation</b>		
unemployed	7	86
employed	11	16
<b>Religion</b>		
Hindu	13	90
Christian	4	0
Muslim	1	12

**Table 2. Association between knowledge and adaption of contraception by eligible couples**

Adaption of contraceptive	Knowledge		p value
	Not aware	Aware	
Not Adapted	9	35	<0.001
Adapted	0	76	
Total	9	111	

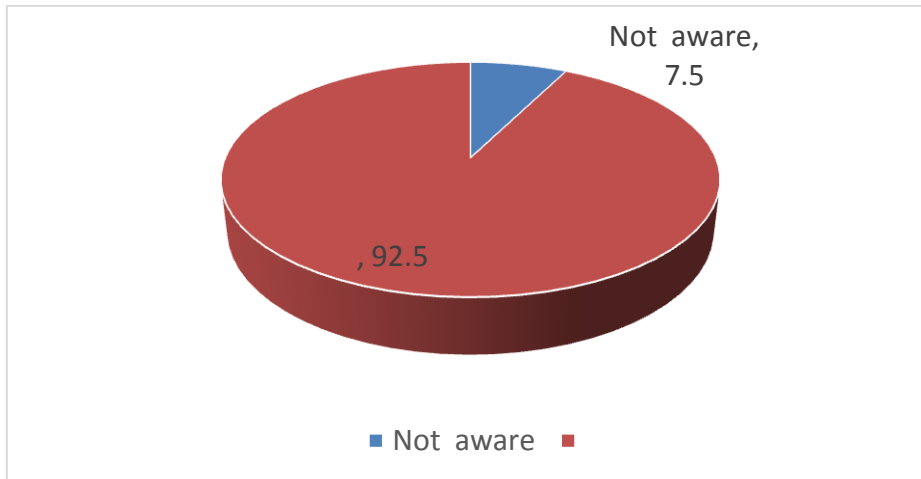


Fig. 1. Knowledge of contraception among the couples

Table 3. Association of factors with knowledge in contraception usage among eligible couples

Factors associated	Knowledge of contraception	P value
<b>Education of spouse</b>	28	
Illiterate	0	
Primary	64	<0.001*
Secondary	17	
Graduates Postgraduates	2	
<b>Age at marriage</b>		>0.05
<20yrs	58	
20-30yrs	51	
>30yrs	2	
<b>Spacing</b>		>0.05
<3yrs	91	
>3yrs	20	
<b>Mode of delivery</b>		>0.05
Normal	69	
Caesarean	42	
<b>No of children</b>		<0.05*
<2	89	
>2	22	

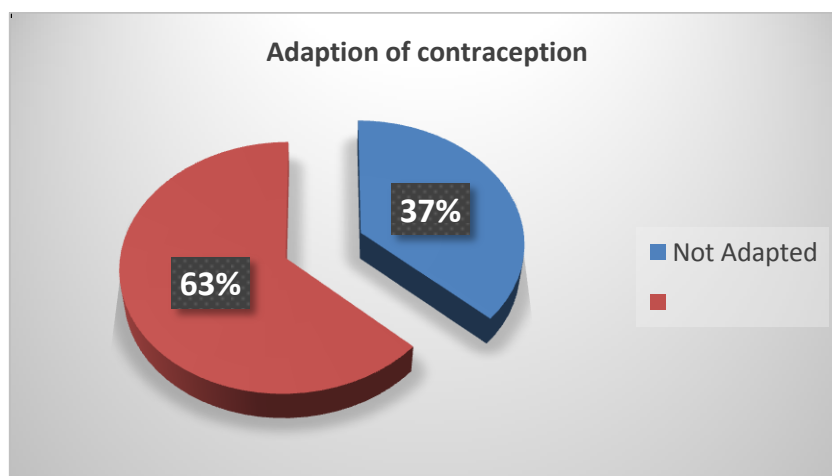
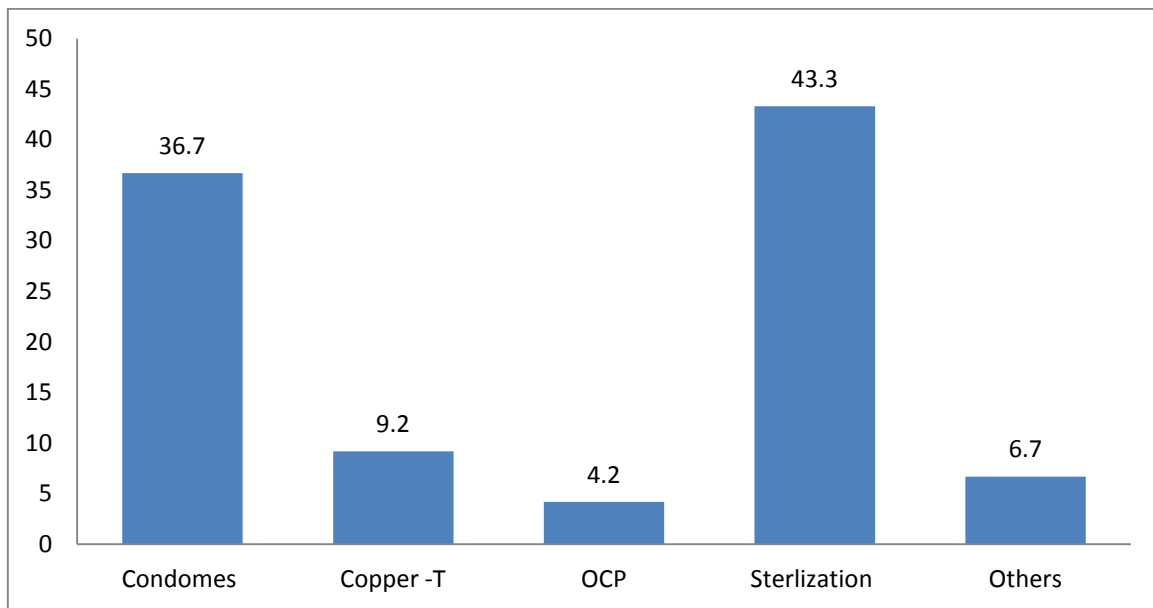


Fig. 2. Adaption of contraception by couples



**Fig. 3. Most commonly used contraception among couples**

A study by Bajwa et al. [6] among north Indian population reported contraception prevalence of 78.1% , which is almost similar to the present study [1]. Although the contraceptive prevalence rate has increased sevenfold across four decades, it is offset by discontinuation, switching, and incorrect use. Among the couples interviewed, significantly higher numbers(59%) were educated upto secondary schooling and had fair knowledge of contraceptive methods , this is similar to the study done by Gupta A et al. [2], other factors like age, occupation, religion and income, though had influence on the contraceptive practice yet not statistically significant.

Many studies have reported the age at marriage of the spouse, duration of marriage, gender of the first child along with spacing between children has been found to be determinants of contraceptive knowledge and practices among couples. In the present study age of marriage had no significant effect on the knowledge yet it affected the method of contraception adapted by the couple. For instance women getting married at less than 20yrs adapted for modern methods of contraception such as condoms, whereas the women married at the age of more than 30yrs adapted for other methods like copper T and permanent sterilization.

In this study the mode of delivery was significantly associated with adaptation of contraceptive methods. about 64.8% of normal

deliveries adapted either one of the contraception methods, whereas those who underwent caesarean were reluctant to adapt contraceptive practices. The most common methods of contraception used was permanent sterilization which was 43.3% followed by condom which was 36.7% and the other methods were not commonly used, this was due to poor knowledge and fear of side effects from Oral contraceptive pills and copper T. Limitations of study: the present study had a female predominance which can be attributed to the time of data collection ie daytime when male were away at work.

## 5. CONCLUSION

Even though the use of contraception has increased among couples, still there is an unmet need for contraception, in spite of increased education qualification and knowledge about contraceptive methods, couples are still reluctant about usage of contraception due to the social stigma and fear of side effects associated with it, In order to increase the use of contraception among couples apart from propagandas, an effective education and counselling regarding the use of contraceptive methods among couples is required.

## DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely

no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

### ETHICAL APPROVAL

It is not applicable.

### COMPETING INTERESTS

Authors have declared that no competing interests exist.

### REFERENCES

1. Sullivan L. Knowledge Gap. The SAGE Glossary of the Social and Behavioral Sciences; 2012.
2. Avisek Gupta, Tapas Kumar Roy, Gautam Sarker, Bratati Banerjee, Somenath Ghosh, Ranabir Pal. Determinants of contraceptive practices among eligible couples of urban slum in Bankura District, West Bengal.
3. Hiremath RN, Lt. Col. Yadav, Jyoti Yadav. Contraception use and its determinants amongst among armed forces personnels. Medical Journal Armed Forces India. 2018; 74(2):103-107.
4. Tadele A, Abebaw D, Ali R. Predictors of unmet need for family planning among all women of reproductive age in Ethiopia. Contracept Reprod Med. 2019;4:6. Available:<https://doi.org/10.1186/s40834-019-0087-z>
5. Determinants of contraceptive practices among eligible couples of urban slum.
6. Bajwa SK, Bajwa SJS, Ghai GK, Singh K, Singh N. Knowledge, attitudes, beliefs, and perception of the North Indian population toward adoption of contraceptive practices. Vol. 24, Asia-Pacific Journal of Public Health. 2012;1002–12.

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