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# A STUDY OF CONTRACEPTIVE PREVALENCE, ITS KNOWELEGDE, USAGE AND DETERMINANTS IN A URBAN SLUM OF MAHARASHTRA, INDIA

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**ABSTRACT** **Background:** India was the first country in the world to have launched a National Programme for Family Planning in 1951. Acco. to NFHS 4 report, the contraceptive prevalence rate (CPR) among currently married women age 15-49 is 65 percent, only a slight decrease from NFHS-3 in Maharashtra. Although it is above the expected rate of 60% to have a stable population, still there is no reliable information available in this particular area about contraceptive prevalence. **Objective:** To find out the prevalence of contraceptive use and its determinants among the urban slum population **Materials and Methods:** A community-based cross-sectional study was conducted in urban field practice area of a govt medical college, Maharashtra, India, amongst married women aged between 15 and 49 years. Information was collected on a comprehensive, predesigned, pretested, and semi- structured proforma after taking verbal consent. The data was entered in Microsoft excel spreadsheet and was analysed using SPSS software version 20 and Chi Square test was applied wherever necessary. **Results:** Knowledge about contraceptive methods amongst study participants (99.5%) was almost universal. Only 43.5% women received knowledge about contraception from Hospital staff. Only 29.8 % (57) women were using any temporary method of contraception at the time of study.40.3% (77) women were using permanent methods. Total 18.8 % women had done MTP for unwanted pregnancy. **Conclusion:** Though knowledge regarding modern contraceptive methods and emergency contraception was high their usage was very low. Most of contraceptive methods used only by female. Bias for Male child also play major role in choice and usage of contraception.

**KEYWORDS :** Contraceptive Prevalence; Condom; Cu-T; Family Planning; Oral Pills; Modern Contraceptive Methods

## INTRODUCTION:

India is the pioneer country in the world to launch a nationwide family planning program in the year 1952. (1) Until the mid-1990s, almost all reproductive and child health programs focused exclusively on women in India. In 1998, an informed choice model of service delivery was introduced and currently, such a model without any targets or incentives is implemented in the country. (2) Already containing 18% of the world's population, India is projected to be the world's most populous country by 2022, surpassing China, its population reaching 1.6 billion by 2050. (3) Contraception is an important aspect of reproductive health and plays a major role in the prevention of unwanted pregnancy. (4) In spite of increased use of contraceptive, almost 50% pregnancies are unplanned & almost 60% pregnancies result in abortion. (5) contraceptive prevalence rate is "the percentage of women of reproductive age (15–49 years) who are married or in a union: Who are currently using, or whose sexual partner is currently using, at least one contraceptive method, regardless of the method used. (6)

Maharashtra state is the second populous state in India with 96.75 million population i. e. 9.42% contribution, though the TFR of Maharashtra is 1.8 to 2.1 % (replacement or below replacement level). (7) Acco. to NFHS 4 report, the contraceptive prevalence rate (CPR) among currently married women age 15-49 is 65 percent, only a slight decrease from NFHS-3 in Maharashtra. Although it is above the expected rate of 60% to have a stable population, still there is no reliable information available in this particular area about contraceptive prevalence. (8) There was a need to ascertain prevalence of contraceptive uses and factors influencing contraceptive usage particularly in this region of Maharashtra as no previous studies existing related to this particular subject.

## OBJECTIVE:

To find the prevalence of contraceptive use and its determinants among the slum population

## MATERIALAND METHODS:

A community based cross sectional study was carried out at a field practice area of UHTC, Department of Community Medicine, of a Govt. Medical College, Maharashtra. Ethics committee approval was taken from institutional ethics committee before the start of the study. The study was carried out among 191 participants from February 2016 to November 2016

Two stage sampling technique was used. In first stage, a particular area in a slum was selected and then in that area household was selected by simple random sampling technique. The main objective of this research was to study the knowledge of contraceptives, prevalence of contraceptive usage & factors affecting it, in this particular region.

All married women in the reproductive age group (15- 49 years) were included in the study. Pregnant, widowed, divorced women and those who were not willing to participate were excluded from the study. The study was conducted using a predesigned pretested, semi-structured questionnaire. A house-to-house survey was conducted in local language. Participants were explained about the objectives of the study and an informed consent was obtained from them.

The proforma included socio demographic details of women, questions related to age at marriage, age at the time of birth of first baby, sex of living child of participant and method of contraception. Respondents were asked which contraceptive method they were using currently, any history of MTP for unwanted pregnancy or having a unwanted baby. Knowledge and usage of emergency contraception was also assessed amongst study participants. The data was entered in Microsoft excel spreadsheet and was analysed using SPSS software version 20 and Chi Square test was applied wherever necessary.

## RESULTS:

Total 191 ever-married women in reproductive age group (15-49 years) were interviewed for study.

**Table 1- Socio-demographic characteristics of the Participants.**

| Characteristics | Categories | Frequency | Percent |
|---|---|---|---|
| **Age** | 15-24 | 29 | 15.2 |
| | 25-34 | 103 | 53.9 |
| | 35-44 | 50 | 26.2 |
| | 45 and above | 9 | 4.7 |
| **Education** | Illiterate | 5 | 2.6 |
| | Primary | 25 | 13.1 |
| | II$^{0}$ & Higher | 122 | 63.9 |
| | Graduate & Above | 39 | 20.4 |
| **Religion** | Buddhist | 105 | 55.0 |
| | Hindu | 83 | 43.5 |
| | Muslim | 2 | 1.0 |
| | Other | 1 | 0.5 |
| **Type of Family** | Extended | 25 | 13.1 |
| | Joint | 48 | 25.1 |
| | Nuclear | 118 | 61.8 |
| **BG prasad** | Class I | 16 | 8.4 |
| | Class II | 34 | 17.8 |
| | Class III | 39 | 20.4 |
| | Class IV | 90 | 47.1 |
| | Class V | 12 | 6.3 |

Maximum no. of the women (53.9%) were in between 25 to 34 years age group Only 31(16.2%) women were working. 11 % women were below the age of 18years at the time of marriage.88.5 % women were 18 to 29 years of age at the time of marriage. 49.2% were in 20 -24 years old and 20.4% were in 25-29 years of age at birth of first child

**Table 2- Different Variables affecting uses of contraception**

| Name of variable | Categories | Frequency | Percentage |
|---|---|---|---|
| Age at Marriage | <18 | 21 | 11 |
| | 18-29 | 169 | 88.5 |
| | >30 | 1 | 0.5 |
| Age at birth of first child | 15-19 | 41 | 21.5 |
| | 20-24 | 94 | 49.2 |
| | 25-29 | 39 | 20.4 |
| | 30-34 | 5 | 2.6 |
| Knowledge about contraceptive | Absent | 1 | 0.5 |
| | Present | 190 | 99.5 |
| Communication about contraceptive with spouse | Absent | 36 | 18.8 |
| | Present | 155 | 81.2 |
| Used any method of contraception ever | No | 37 | 19.4 |
| | Yes | 154 | 80.6 |
| Knowledge about emergency contraception | No | 118 | 61.8 |
| | Yes | 73 | 38.2 |
| Ever used any emergency contraception | NA | 2 | 1 |
| | No | 179 | 93.7 |
| | Yes | 10 | 5.2 |

Knowledge about contraceptive methods amongst study participants (99.5%) was almost universal. Source of knowledge for contraception were multiple.78.5% (150) women received knowledge about contraception from television. 43.5% women received knowledge about contraception from Hospital staff. 28.3% received knowledge about contraception from friends.19.4% women % received knowledge about contraception from husband, friends as well as female relative.

99.5% participants had awareness about oral pills.98.4% women were aware about Copper T or Intrauterine device. Only 2.1 % (4) women were aware about spermicide jelly.

97.4% (186) women were aware about condom.95.3% (182) women were aware of female sterilization. 88.5 % (169) women aware of male sterilization. Only 1.6 % (3) women were aware of Norplant.40.8% (78) women were aware of injection DMPA.9.9% (19) were aware of other methods like periodic abstinence, withdrawal etc. 81.2 % (155) women had communication with husband about contraception.

**Table 3: Women using any method of contraception at the time of study**

| Contraceptive Methods | Frequency | Percent | Valid Percent |
|---|---|---|---|
| Condom | 25 | 13.1 | 13.1 |
| Copper-T | 10 | 5.2 | 5.2 |
| Female Sterilization | 76 | 39.8 | 39.8 |
| Inj. DMPA | 1 | 0.5 | 0.5 |
| Lactational Amenorrhea | 5 | 2.6 | 2.6 |
| Male Sterilization | 1 | 0.5 | 0.5 |
| Not using any contraception | 57 | 29.8 | 29.8 |
| Oral pills | 7 | 3.7 | 3.7 |
| Periodic abstinence | 8 | 4.2 | 4.2 |
| Withdrawal | 1 | 0.5 | 0.5 |
| Total | 191 | 100.0 | 100.0 |

Almost 80.6 % women (154) used one or other contraceptive method in their lifetime.

Only 29.8 % (57) women were using any **temporary** method of contraception at the time of study. 39.8% (76) women had done Tubal ligation. Only 1 couple had Vasectomy.29.8% (57) not using any method of contraception. So overall prevalence of contraception is 70.1%, 62.8% women were using modern methods of contraception at the time of study. 13.1% (25) were using condom, 5.2% (10) were using copper T, **40.3% (77) women were using permanent methods.** 3.7% (7) were using oral pills. only one woman was using injection DMPA. Only 7.3 % women were using natural methods of contraception like lactational amenorrhea method, periodic abstinence, withdrawal at the time of the study. Only 38.2 % (73) women had knowledge about emergency contraception and only 5.2% (10) women have ever used emergency contraception.

Total 18.8 % women had done MTP for unwanted pregnancy.2.6% (5) women had unwanted child. 15.7% (30) women done MTP once for unwanted pregnancy while3.1% (6) women had done MTP twice for unwanted pregnancy. So total 21.5% (41) women had unwanted pregnancy.

**Table 4: Type Of Family * Used any method of contraception ever**

| | | used any method of contraception ever | | Total |
|---|---|---|---|---|
| | | no | yes | |
| Type of family | Nuclear | 14 | 104 | 118 |
| | Joint and Extended | 23 | 50 | 73 |
| Total | | 37 | 154 | 191 |

(Chi square =11.141, DF=1) P value is 0.001 which is highly significant. Most women living in nuclear families used one or other method of contraception ever in their lifetime as compared to those living in joint or extended families.

**Table 5: Sex Of Child * Used any method of contraception ever**

| | | Used any method of contraception ever | | Total |
|---|---|---|---|---|
| | | no | yes | |
| SEX OF CHILD | Female | 26 | 31 | 57 |
| | Male | 11 | 123 | 134 |
| Total | | 37 | 154 | 191 |

(Chi square =35.822[a], DF=1) P value is 0.000 which is very much significant. Women having Male child have used one or other method of contraception compared to women who were having girl child.

Nuclear type of family, having Male child was found to have positive influence on use of contraceptives. Education of women was found to have no effect on use of contraceptives.

## DISCUSSION

Almost three-fourths (73%) of households live in a pucca house. 21.5% women in age group of 15-19 years had given birth to first child which is 3 times higher than 7% which was seen in DLHS 4 survey of district [9] .11% (21) women got married before the age of 18 years which is high compared to 9.3 % in DLHS 4.[9] 95.3% (182) women were aware of female sterilization which is very high as compared to 60.5% NFHS data. (8)

In present study,29.8% respondents were not using any method of contraception which is high as compared to unmet need of contraception in India is 21.3 percent according to the District Level Household and Facility Survey-3 (DLHS-3), with 7.9 per cent for spacing (10) and 13.4 per cent for limiting in a study by Sulthana B et al (11) Current use of any family planning methods is 70.1% which is comparable with 71.6% for yavatmal district NFHS data but high as compared to DLHS 4 i.e. 65.3%(9)

Current use of condom is 13.1% in this study which is high as compared to 10.1 % in DLHS-4 Maharashtra urban area. Current use of female sterilization was 39.8 % which is low as compared to 47.8 % of DLHS-4 Maharashtra urban area. Current rate of male sterilization was 0.5% in present study which is comparable with 1 % in DLHS-4 Maharashtra urban area. Only 3.7% were using oral pills in the study which is slightly higher as compared to 2.3 % in DLHS-4 Maharashtra urban area.(9) Female sterilization and condom were two most commonly used methods of contraception which is similar to findings in a study by by Sulthana B et al (11)

Present study shows the contraceptive prevalence rate (CPR) among currently married women age 15-49 of 70.1 % which is high as compared to 65 percent NFHS 4 Maharashtra (8)

18.8 % women in present study had done MTP for unwanted pregnancy which is comparable with around 17 per cent of women gave history of MTP in a study by by Sulthana B et al(11)

Among all women, only 38.2 % (73) women know about emergency contraception is comparable to 41 % women in Maharashtra, according to NFHS 4 data, and almost double as compared to 18.7% in

a study by by Sulthana B et al (11). Ever use of Emergency Contraceptive Pills (ECP) in present study is 5.2% which is in high as compared to 1% DLHS-4 Maharashtra urban area. (9) Education of women was found to have no effect on use of contraceptives similar to a study by Anne Moursund et al. (12) In a study by Pathak V et al women who have sons were much more likely than women who have no sons to be using contraception which is same as in this study (13). Acceptability of contraceptive methods in relation to type of family was higher among the couples of nuclear families as compared to joint or extended families same as in a study by Gupta A et al, Bisoi S et al, Haldar A et al (14)(15)(16).

## CONCLUSION:

Though knowledge regarding modern contraceptive methods and emergency contraception was high their usage was very low. Most of contraceptive methods used only by female. Usage of terminal methods of contraception in male is very very low as compared to female sterilization. Self- help group should be built under guidance and coordination with ASHA and ANM so that women have access to correct knowledge about contraception so that it can transformed into actual practice. Bias for Male child also play major role in choice and usage of contraception. Females living in nuclear families seems to have a more autonomy to execute their reproductive intent as compared to those women living in joint or extended families.

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