

## ORIGINAL ARTICLE

## Unmet Need of Family Planning in A District of Western Uttar Pradesh

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## Article Cycle

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## Abstract

**Background:** Despite great progress in the last decades, more than 120 million women worldwide want to prevent pregnancy but are not using contraceptives. **Objective:** To assess the prevalence of contraceptive use among the study group. To calculate the current unmet need of family planning **Material& Methods:** Community based, Cross-sectional study was done among 280 married women of reproductive age group residing in Agra City, using a standardized questionnaire to assess their fertility preferences & practices. **Results:** The Contraceptive Prevalence Rate is calculated as 45.4%. The unmet need of spacing is 21.0% and unmet need of limiting is 22.2%. Thus unmet need of family planning is 43.2%

## Key Words

Unmet Need; Family planning; Contraceptives; Contraceptive prevalence rate; Unmet Need of Limiting; Unmet Need of Spacing

## Introduction

The job of family planning remains unfinished. Despite great progress over the last several decades, more than 120 million women worldwide want to prevent pregnancy but they and their partners are not using contraceptives (WHO). (1)

Against this enormous figure, which stands as a challenge in the backdrop, India is steadily making progress towards raising the couple protection rate. Though the contraceptive prevalence rate has steadily risen from 10.4% in 1971 to the current CPR of 55.8% (NFHS-III) (2), but still India lags far behind in its mission to population stabilization.

The Current Use of Modern Contraceptives in Uttar Pradesh lags far behind at 42.4% as compared to the National figure of 55.8%. Further the gap between the rural and urban figures is astonishing.

The present study was undertaken to assess the contraceptive use rate and the unmet need of family planning among the women residing in Urban Agra.

## Aims &amp; Objectives

1. Assess the prevalence of contraceptive use among the study group
2. Calculate the current unmet need of family planning

## Material and Methods

**Research Setting:** The study was conducted in Agra City, situated in the South- West part of Uttar Pradesh. The population of the district is 4.3 million (Census 2011). Agra is divided into 90 Municipal Wards. **Study Design:** Present study was a Community- based, Cross- sectional Study. **Study Population:** Married women of Reproductive age group [MWRA] residing in the City of Agra.

**Exclusion criteria: -**

- Those who were separated but not divorced
- Those who were diagnosed as infertile
- Those who did not give consent

The study was approved by the Institute's ethical committee and an informed written consent was taken from every respondent before administering the interviewer- rated questionnaire.

**Duration of Study:** The study was completed in a period of one year & six months i.e. from May 2013 to August 2014. **Sample Size:** For valid inferences, a minimum sample size was calculated using the formula given below <sup>3</sup>:

$$N = Z_{\alpha/2}^2 P Q / L^2$$

where  $Z_{\alpha/2} = 1.96$ , Value of the standard normal variate corresponding to level of significance alpha 5%. Taking 41.2% as the prevalence (according to Annual Health Survey <sup>4</sup>, CPR for modern methods in Urban Agra) and 15% as the allowable error, we calculated a Sample size= 253.7 couples  $\approx$  254 couples. Considering 10% drop- outs, a total of 280 couples were registered & interviewed for the quantitative study.

**Sampling Technique:** Multistage simple random sampling technique was used to reach the sampling unit. Agra City has 90 municipal wards. Two wards were randomly selected from the list of the wards. From the selected wards, a slum and a non-slum colony was randomly picked.

- Thus one slum (Khatipara) was randomly selected from one urban ward and one Non-slum (Shahganj) was randomly selected from the other ward.
- At each selected area, a center-place was visited and thereafter, a spinning pointer used, to select a random direction. The first house was selected by using the currency note. Thereafter house to house visits were done till the sample size was completed i.e. 140 respondents from each area. If a house had more than one MWRA, the first respondent only was picked from that household. Before starting the semi- structured interview, the MWRA were explained the purpose of study and were motivated to participate and reveal the correct information.

Informed written consent was taken from the participants, in their local language (Hindi/ English) and their confidentiality was maintained.

Data collection continued till the required number of respondents was interviewed based on the Questionnaire.

**Data Collection Tools:** 280 MWRA were interviewed using Semi- structured Pre- tested, Interviewer- rated Questionnaire. The questions focused in the following domains:

**Socio- Demographic Characteristics:** Name, age, duration of marriage, religion, type of family, years of formal education, Socio economic status

**Fertility Preferences and Behavior:** Detailed obstetric history, desired family size and desired birth interval.

**Contraceptive Use Patterns:** Current use of contraceptive method

**Data Processing and Analysis:** The information collected on the study schedule was transferred on the pre- designed classified tables and analyzed according to the aims and objectives.

Quantitative Data analysis was done to draw the valid inference for which statistical tests (z- test, Chi-square and Fischer Test) was applied according to the need. The data analyses was done using SPSS-20 (Trial version) software and the online statistical calculators at <http://physics.csbsju.edu/>

## Results

**Table 1** depicts that the mean age of the respondents was 28.7 years. More than half (53.9%) of the Respondents were aged between 21- 30 years, while a third (33.3%) were in the age group of 31- 40 years. Only 7.8% of the Respondents were more than 40 years of age.

Almost half the Respondents (48.2%) were married for past 3- 10 years and another 18.9% for duration of 11- 17 years. Only a sixth of the Respondents (15.0%) were married for two years or lesser. The mean duration of marriage was 9.73 years.

The mean number of schooling years among respondents was 7.6 years, whereas their husbands had an average 9.2 years of formal education. About a third of the respondents (31.8%) were illiterate. 43.5% had a schooling for less than 11 years, being uniformly distributed over less than 7 years of schooling (13.2%); 7- 9 years of formal education (15.7%) and 9- 11 years of education (14.6%); whereas 24.6% had completed more than 11 years of schooling.

According to Modified Kuppuswami Socio Economic Scale (2013), as many as 40.7% of the respondents belonged to upper lower class, while almost a third (34.3%) comprised of upper middle class. Lower middle class constituted another 22.1% of the study population.

**Table 2** depicts that among the 280 Respondents, 45.4% were current users of contraceptive methods (Terminal or Non Terminal), while 54.6% were not availing the benefits of any method. Thus the Couple Protection Rate is calculated as 45.4% for the given sample.

Among the Non-users, 22.2% were currently pregnant of whom; majority (94.2% of the Pregnant Respondents) had not intended the current conception. 82.4% of the Pregnant Respondents reported a Mistimed conception whereas 11.8% stated that the present conception was unwanted.

Among the 119 Non-users, 25.2% intended to conceive, whereas 48.7% did not desire any more children. A fourth of the Non-users (26.1%) did not wish to conceive till another 2 years since the date of interview.

Thus of the 280 Respondents, 22.2% did not want any more children (Unmet Need of Limiting) and 21.0% did not desire an early conception (Unmet Need of Spacing), together constituting Unmet Need of Family Planning as 43.2%

## Discussion

The present study documented that 45.4% of the participants were current users of modern contraceptive methods. This proportion was similar to the modern contraceptive use rate reported by NFHS-III (Uttar Pradesh) 2005-06<sup>2</sup>, AHS (Urban Agra) 2010-11<sup>4</sup>, MLE (Agra) Report 2011<sup>5</sup>, Sonam Zangmu Sherpa *et al* (2013)<sup>(9)</sup> from Karnatka (42.4%, 41.2%, 48.1%, 44.1% respectively) but was much lower than that reported by National NFHS-III (2005-06), Neelu Saluja<sup>(7)</sup> (2011) from Haryana and Naphade Bhagyashri *et al* (2014) from Maharashtra (55.8%, 59.2% and 59.9%) reflecting inter- state variations.

The present study found the unmet need of family planning to be much higher (43.2%) than that reported by National NFHS- III (2005-06), NFHS-III Uttar Pradesh, DLHS-3 (2007-08) data and the report of Malini M Bhattathiri from Tamil Nadu (2014)<sup>(8)</sup> i.e. (12.8%, 21.2%, 20.5% and 39%) but it is lower than that reported by Nirankar Singh *et al* from Punjab in 2009 (56.5%)<sup>(6)</sup>.

High unmet need does not necessarily signify family planning failure but may instead be taken as a success indicator showing a high contraceptive demand. As a community begins to realize their need to limit or space childbirth, the contraceptive demand rises and because there exists a gap between the need realization and the action to meet the need, both temporally and numerically, the unmet need soars up.

Thus it may be a reflection of the transition that the Indian Community is undergoing.

Further, the variation between national data and that reported by the present study could either be

because of different research settings and inter-state variations or due to the fact that the present study did not consider the traditional contraceptive methods which had been considered as family planning methods by the surveys.

## Conclusion

The authors thus conclude that though the contraceptive prevalence in the study group in Agra is 45.4%, which is slightly higher than the CPR in Uttar Pradesh, still a substantial proportion of women (43.2%) report that their need of family planning remains unmet. This enormous figure demands attention from the policy makers and implementers to analyze the reasons behind the unmet need and to implement the solutions.

## Recommendation

The authors recommend that further studies must be conducted to uncover the factors behind high unmet need and to understand the barriers in acceptance of modern contraceptive methods.

## Limitation of the study

- To determine the unmet need of family planning a larger sample size should have been considered according to the formula based on unmet need rather than CPR.
- Despite the best of the efforts and motivation from the investigator the respondents might not have given complete and unbiased information.

## Relevance of the study

The study provides the data for Urban Agra and highlights that despite a progression in contraceptive prevalence rate, unmet need of family planning remains a resilient challenge demanding due attention.

## Authors Contribution

Kaushal M planned, designed and conducted the field research & analysis and documented the results Misra S K; Kaushal SK & Prakash G guided the study Kumar A assisted in the field research.

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## Tables

**TABLE 1 SOCIO DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

Age (in years)	Respondents n (%)
<= 20	14 (5%)
21- 25	77 (27.5%)
26- 30	74 (26.4%)
31- 40	93 (33.3%)
> 40	22 (7.8%)
Mean	28.7 yrs
SD	06.3 yrs
Duration of marriage (years)	
< 1	01 (0.4%)
1- 2	41 (14.6%)
3- 5	63 (22.5%)
6- 10	72 (25.7%)
11- 17	53 (18.9%)
>= 18	50 (17.9%)
Mean	9.73 yrs
SD	7.4 yrs
Years of Formal Education	
Illiterate	89 (31.8%)
< 7 yrs	37 (13.2%)
7- 9yrs	44 (15.7%)
9- 11yrs	41 (14.6%)
> 11yrs	69 (24.6%)
Mean	7.6 yrs
SD	5.8 yrs
Family Type	
Joint	169 (60.4%)
Nuclear	111 (39.6%)
Religion	
Hindus	192 (68.6%)
Muslims	72 (25.7%)
Others	16 (5.7%)
Occupation	
Housewife	216 (77.2%)
IGA at home	46 (16.4%)

<b>IGA outside home</b>	18 (6.4%)
<b>S E Status*</b>	
<b>Class I</b>	4 (1.4%)
<b>Class II</b>	96 (34.3%)
<b>Class III</b>	62 (22.2%)
<b>Class IV</b>	114 (40.7%)
<b>Class V</b>	4 (1.4%)
<b>Total</b>	280

\*According to Modified Kuppuswami Status (2013)

**TABLE 2 CONTRACEPTIVE PREVALENCE AND UNMET NEED OF FAMILY PLANNING**

No of Respondents:	Pregnant n (%)	Non-Pregnant n (%)	Total
<b>Contraceptive Current Users</b>	0	127 (100.0%)	127 (45.4%)
<b>Contraceptive Non Users</b>	34 (22.2%)	119 (77.8%)	153 (54.6%)
<b>Intending Pregnancy</b>	2 (5.8%)	30 (25.2%)	32 (11.4%)
<b>Not Intending Pregnancy</b>	32 (94.2%)	89 (74.8%)	121 (43.2%)
<b>Unwanted/Want No More</b>	4 (11.8%)	58 (48.7%)	62 (22.2%)
<b>Mistimed/ Don't want Next till 2 years</b>	28 (82.4%)	31 (26.1%)	59 (21.0%)
<b>Total</b>	34	246	280