

Assessing the determinants of unmet needs regarding contraceptive use among married women in Gurugram, Haryana, India

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ABSTRACT

Introduction

Unmet needs of family planning in India has subsided to an extent, but still the gaps in rural areas are high and a matter of concern. Family planning has two main objectives: To have only the desired number of children and to have proper spacing in pregnancies. Knowledge and practice of family planning are strongly related to education, labour force participation and fertility. This has led us to achieve the unmet need for family planning down to 9% from 13% as reported in NFHS-4.

Aim & Objectives

To find out the determinants of Unmet needs of contraceptives and the association of socio-demographic factors with the unmet needs.

Methodology

The study was a cross sectional study done in the rural area of Gurugram among the reproductive females in the age group of 18-45 years. Those who were willing to participate were included in the study. A pre-tested and pre-structured questionnaire was developed and given to the participants. Probability Proportional to Size was used as sampling method. The sample size was 360. Chi Square test was applied to find the statistical association.

Results: In the study, Unmet needs experienced by the study participants came out to be among 58(16.11%). The Unmet need for spacing was among 18 participants (31.03%) and unmet needs for limiting the number of children was felt by 40 participants (72.72%). Majority of females 48 of them (37.5%) who were sexually active and wanted to use any contraceptive method but was not currently using due to husband's or In-Laws decision against its use. The association between low education and poor socio-economic status was significant with high unmet needs prevalent among the participants.

Conclusion: Targeting unmet needs of Family Planning is needed the overall growth and development of a female including her mental and physical health.

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INTRODUCTION

Family planning is essential for promoting the well-being and autonomy of women, their families and their communities. Ensuring quality of care in contraceptive services is paramount for achieving high standards of health for all. The depth of this word summarizes reduction of poverty, maternal and child mortality, empowering women by lightening the burden of excessive childbearing and also reducing environmental degradation by stabilizing the population of the planet ^[1,2] WHO defines family planning as "a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes and responsible decisions by individuals and couples, in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country. ^[2]The population of India comprises of 18% of the total world's population of 7.6 billion. It is estimated that if the population keeps growing at the same rate, India will reach around 1.66 billion by 2050 AD thereby surpassing China in being the most populous country in the world. ^[3]Family planning is not just limited to deciding how many children one wants, and how often he/she wants to bear them. Many women in low and middle-income countries (LMICs) would like to limit or delay getting pregnant, but do not have access to consistent use of modern contraceptive methods. ^[4,5]These women experience an unsatisfied demand for contraception, which is commonly referred to as unmet need for family planning. ^[6] Unmet need for family planning (FP) is further defined as: unmet need for limiting, i.e. when the woman does not wish to have any more children; and unmet need for spacing, i.e. when the woman wishes to delay the birth of her next child. ^[7,8]As the need of the hour today is to control the exponentially growing population in India, the role of family planning gets crucial. Thus, the present study was planned to assess the different variables which determine the use of contraceptive methods and also intended to fill the gaps which are prohibiting the females from adopting any contraceptive method.

Methodology

This study was conducted under PHC Garhi Harsaru which is situated in the district Gurugram of Haryana

state. The study was supervised by the Department of Community Medicine, Faculty of Medicine & Health Sciences, SGT University. The study was conducted from June 2024 to June 2025. It was a Cross-Sectional study done in a rural community. Study was conducted among married women in the age group 18-45 years residing in the rural area under PHC Garhi Harsaru of Gurugram District, Haryana. **Inclusion Criteria:** Married women in reproductive age group 18-45 years and those who gave consent for the study were included. **Those** who were not co-operative and not willing to give consent for the study and unmarried/ widowed/ separated/ divorced women were excluded from the study. After going through the literatures extensively, sample size was estimated considering the prevalence of contraceptive use as 54% (according to NFHS-4)⁹, with confidence interval at 95% and precision level of 10%. The calculated sample size was 327 which is rounded off to 360 taking 10% as a drop out refusal rate. So, the optimum sample size is 360.

Sampling method

Two stage Random Sampling Technique using PPS (Probability Proportional to size) was adopted. In the first step i.e. Simple Random Sampling was done to identify the villages to be taken from the total 14 villages under PHC Garhi Harsaru. In the second step, PPS (Probability Proportional to Size) was done to identify the households to be taken from each village. The data collection was primarily done by the researcher herself. After taking informed consent, the pre-designed and pre-tested questionnaire-based performa was used for the data collection by house to house visit in study area. The study tool consisted of a predesigned pretested questionnaire with two parts:

The 1st part consisted of (a) **General background and Socio- demographic variables included:**

Personal characteristics: included couple characteristic as age, gender, education, duration of marriage, age at the time of marriage and age of first conception, working status and occupation, number and sex of live children.

Family characteristics: included place of residence (Rural /urban), religion, caste, type of family, socio-

economic status, number of children, exposure to media-Modified BG Prasad classification was used to measure the socioeconomic status:

The 2nd part consists of Assessment of knowledge and attitude towards unmet needs for family planning and contraception and the reasons for unmet needs of family planning and contraception.

Ethical Approval

The approval of the Institutional Ethical Committee of Faculty of Medical Sciences, SGT University was obtained before conducting the study. At the beginning of the interview, written informed consent was taken from the study participants. Assurance regarding the confidentiality of the information was ensured. After data collection, the data was compiled in Microsoft Excel 2010 spreadsheet and coding and tabulation was done. Further analysis was carried out using the Statistical Software SPSS version 21.0. Various statistical tests like proportions and chi square tests were applied. A significant p value was considered when it was less than 0.05 and it was considered highly significant when p value was less than or equal 0.01.

Results

The study "Determinants of unmet needs regarding contraceptive use among married women (18-45 years) in rural Gurugram, Haryana" is a community based cross-sectional study undertaken in PHC

Garhi Harsa. A total of 360 households were surveyed, in which total 392 eligible females were present. Out of these, 32 individuals were excluded from data analysis due to various reasons i.e., non-co-operation (6), missing value (5), pregnancy (9), underwent hysterectomy (12). Thus, the total number of study participants reached up to 360 as depicted below. A total of 360 subjects fulfilling the Inclusion Criteria were recruited for the study. The factors determining unmet needs regarding contraception were assessed and the association was also seen. In the study, unmet needs experienced by the study participants came out to be among 58(16.11%) as shown in Table 21. The Unmet need for spacing was among 18 (31.03%) and unmet needs for Limiting was experienced by 40 (72.72%).

Table 1 shows the distribution of factors that prevents the use of contraceptive methods among the study participants. Majority of females 48 (37.5%) were sexually active and wanted to use any contraceptive method but was not using due to husband's or In-Laws opposition. Another important reason for not using contraception was the fear of side-effects among 45 females (35.15%) that resisted them to adopt any family planning method. The reason for unmet needs also included religious prohibition as per 20 (15.62%) participants, Lack of information among or the unawareness among 10 females (7.81%) and lack of proper availability of the contraception among 5 (3.90%) participants.

Table 1: Factors contributing to unmet needs

| Reasons for not using Contraceptives | Number | Percentage |
|--------------------------------------|--------|------------|
| Husband/In- Laws Opposition | 48 | 37.50% |
| Religious Prohibition | 20 | 15.62% |
| Fear of Side Effects | 45 | 35.15% |
| Lack of Availability | 5 | 3.90% |
| Lack of Information | 10 | 7.81% |
| Total | 128 | 100% |

The Table 2 shows that the unmet needs were more found to be present in Muslims 12 (21.05%) as compared to Hindus 46 (15.18%). The reason for this could be the religious prohibitions that is very much prevalent in the Muslim population with respect to the use of contraception. The difference was not found to be significant. The unmet needs of contraceptive use are much related with the individual's education status. The demand for unmet needs and education level was statistically significant with each other. Among 58 females who had unmet needs for contraception, the prevalence was higher among those who were unemployed or were engaged in semi-skilled work. It was least among professional females. The association was statistically significant. Table 2 indicates the relation

between Unmet Needs and Socio-Economic Status according to Modified B.G.Prasad Classification. Among the 87 females, who were there in the Socio-Economic Status Class I, 2(3.45%) experienced Unmet Needs while 85(28.15%) had no Unmet Needs. It reduces with the declining Socio-Economic Status. It was seen that Socio-Economic Status and unmet needs of contraception was statistically significant. In the current study, unmet needs for family planning was higher in those who had 2 children 19 (32.76%) or had 3 children 18 (31.03%) followed by 1 child 17 (29.31%). While unmet needs was found minimal in those who had 4 or > 4 children (5.17%) or had no children 1 (1.72%). The association was found to be significant.

Table 2: Association of socio demographic factors and unmet needs

| Unmet needs | Present (n=58) | Absent (n=302) | Total | Significance Chi-square test CI =95% |
|------------------------|-------------------|-------------------|--------------|--|
| RELIGION | | | | |
| Hindus | 46 (15.18%). | 257(84.82%) | 303(100%) | $\chi^2=1.2$ p-value= 0.268 |
| Muslims | 12 (21.05%) | 45 (78.95%) | 57(16.11%) | |
| LITERACY STATUS | | | | |
| Illiterate | 19 (32.76%) | 40 (13.25%) | 59 (16.39%) | $\chi^2 = 20.3,$ p-value= 0.004 |
| Primary School | 9 (15.52%) | 82 (27.15%) | 91 (25.28%) | |
| High School | 24 (41.38%) | 100 (33.11%) | 124 (34.44%) | |
| Higher Secondary | 2 (3.45%) | 35 (11.59%) | 37 (10.28%) | |
| Diploma/Graduates | 4 (6.90%) | 45 (14.90%) | 49 (13.61%) | |
| OCCUPATION | | | | |
| Unemployed(Housewives) | 54 (93.10%) | 247(81.79%) | 301(83.61%) | $\chi^2 = 4.7,$ p-value= 0.192 |
| Semi-Skilled | 2 (3.44%) | 29(9.60%) | 31(8.61%) | |
| Skilled | 1(1.72%) | 11(3.64%) | 12(3.33%) | |
| Profession | 1(1.72%) | 15(4.97%) | 16(4.44 %) | |

| SOCIO-ECONOMIC STATUS | | | | $\chi^2 = 60.4$ p-value= <0.001 |
|----------------------------|-------------|-------------|-------------|------------------------------------|
| Class I | 2 (3.45%) | 85(28.15%) | 87(24.17%) | |
| Class II | 17 (29.31%) | 107(35.43%) | 124(34.44%) | |
| Class III | 15(25.86%) | 83(27.48%) | 98(27.22%) | |
| Class IV | 17(29.31%) | 26 (8.61%) | 43(11.94%) | |
| Class V | 7(12.07%) | 1(0.33%) | 8(2.22%) | |
| PARITY | | | | $\chi^2 = 11.2,$ p-value= 0.024 |
| 0 | 1(1.72%) | 37(12.25%) | 38(10.56%) | |
| 1 | 17 (29.31%) | 88(29.14%) | 105(29.17%) | |
| 2 | 19 (32.76%) | 97(32.12%) | 116(32.22%) | |
| 3 | 18 (31.03%) | 50(16.56%) | 68(18.89%) | |
| ≥ 4 | 3 (5.17%) | 30(9.93%) | 33(9.17%) | |
| LOCAL HEALTH WORKER VISITS | | | | $\chi^2 = 1.2$ p-value= 0.269 |
| Once a Week | 15(25.86%) | 104(34.44%) | 119(33.06%) | |
| Once a Month | 3 (5.17%) | 39(12.91%) | 42(11.67%) | |
| Once in 2 months | 14 (24.14%) | 58 (19.21%) | 72(20%) | |
| >2 months | 6 (10.34%) | 51 (16.89%) | 57(15.83%) | |
| Never Seen | 20 (34.48%) | 50 (16.56%) | 70(19.44%) | |
| Total | 58(100%) | 302(100%) | 360(100%) | |

Level of significance =95%

DISCUSSION

According to this study, the main reason for not using any contraception was husband or In-laws opposition (37.50%), followed by fear of side effects (35.15%), religious prohibition (15.62%), lack of information (7.81%) and lack of availability (3.90%) being the other reasons. In a study done by Singh S et al. [10] in rural Haryana, the main reason reported was fear of side-effects (37.5%) followed by In-laws disapproval (21.9%), inconvenient to use (19.8%) and lack of knowledge about the use (12.5%). In another study at Puducherry by George N et al. [11] the main reasons were cultural, familial and religious belief (60%) followed by fertility related health concerns (33.3%). In another study by Relwani et al. [12] the major reason was fear of side effects (34.9%). A study done in Uttar Pradesh, by Nazish R et al. [13],

the main reason was (28.1%) perceived little risk of pregnancy even after the use of contraception. In a study done in rural Maharashtra by Gore S et al. [14] the main reason was opposition by husband (32%), followed by fear of side effects (30%). In Nigeria, a study done by Fagbamigbe et al. [15] the main reason was Partner's opposition that led to high unmet needs. Unmet needs in this study was higher in Muslims (21.05%) as compared to Hindus (15.18%). The religious prohibitions in the Muslim culture could be the reason for them to hesitate from adopting any mode of contraception. In a study done in rural Bengal by Chakraborty et al. [16] states that Unmet needs among Hindus were 13.2% and in Muslims was 13.2%. In this study the unmet needs were highest among illiterates (32.76%) and lowest among graduate's or Diploma holders (6.90%). The

association was highly significant. In another study done in rural Haryana, the unmet need was found more to be in illiterates (29.7%) and the least in graduate and above (11.4%). A study done by Relwani et al. ^[12] also revealed a similar finding that those who were less educated up to SLCC (27.1%) had more unmet needs rather than those with higher education (11.2%). Another study by Halder A et al. ^[17] in rural Bengal had the similar findings which stated maximum number for unmet needs of contraception was seen in illiterates (16.7%) and least was seen with graduates (10.5%). In a study done in Nigeria ^[19], unmet needs were higher in those with no education (14.62%) and was lowest among those who had completed their higher secondary education (1.96%). Thus, in all these studies we can see that education imparts wisdom in every field including the use of contraception. In the study the unmet need was more than the national data, which means that the females in the study area have to be educated more regarding the various contraceptive methods and need to be guided to use any method according to what suits them.

This study reveals that the unmet needs were reported majorly in those who were unemployed including housewives (93.10%) and was low in professionals (1.72%). Similar results were found in a study done in rural Haryana by Singh S et al. ^[10] in which highest number of unmet needs was present in labourers (50%) It states that the females who are working become financial independent and more self-decisive. While house-wives are more dependent on in laws or husbands and are less motivated to adopt family planning norms. In contrast to the current study, in a study done by Vohra et al. ^[19] in rural Jaipur, the unmet need was found more in semi-professionals (80%) as compared to those who were unemployed. ^[20] The reason could be more awareness among unemployed workers due to regular health care visits or counselling sessions organized by them. Similar finding in contrast to this study was found in a study done in Ethiopia, by Worku et al. ^[21], the unmet for contraception was found more in employed (40.6%) rather than those who were housewives (29.2%).

This study shows that according to the Socio-economic status, Unmet Needs of contraception was least in SES I (3.45%) and the highest was SES IV (29.31 %.) The association was statistically significant. In another study done in rural Haryana by Singh S et al. ^[10], there was no unmet need in upper class while it was highest in lower class. Another study done in Madhya Pradesh by Sahastrabuddhe et al. ^[20] reveals that lower SES class V (53.4%) has higher unmet needs for contraception as compared to Class I (10.7%). In another study done by Chakraborty N et al. ^[16] in rural Bengal showed that Unmet needs for contraception was more in Class V (11.5%) and lowest in upper classes I (1.7%) and II (1.6%). In a study done by in rural Jaipur by Vohra et al., the unmet needs were found to be highest in Class V (49.31%) and it was least in Class I (19.44%). ^[19] A study in Cameroon by Samuel Kelodjoue et al. ^[22] shows that the unmet need for family planning is the highest among women in the lowest wealth quintile and the lowest among women in the highest wealth quintile (41% and 24%, respectively). Hence in this study, we see that Socio-Economic Status plays a major role in use of contraceptives. Those with better SES, plan their family and are aware of spacing methods. Those with better Socioeconomic status have thoughts on education of their child, their nutrition and way of living, in contrast to those who belong to low SES..

Parity or No. Of living children also play an important role in adopting any family planning methods. In the current study unmet needs were more among those who had 2 or 3 living children (32.76% and 31.93%) in contrast to as study done in Orissa ^[23] in which it was reported that the unmet need for family planning was lowest among those who had more than three living children (26.1%) as compared to those with two living children (30.6%) and one or no living child (56.1%). It may be due to the fact that those women who already had two or more than two living children would like to restrict childbearing and adopt any contraceptive methods but due to lack of knowledge or fear of husband they are not approaching to seek their family planning demands.

Conclusion & recommendations

For decades, information about unmet need for



contraception has enabled health professionals and policymakers to identify the investments needed in family planning programs in developing countries. In General, women are considered to have an unmet need if they are sexually active and want to avoid becoming pregnant but are not using contraception. The health care provider including ASHA and Anganwadi workers at grass root level should motivate the couple and provide appropriate information regarding various contraceptive methods. The importance of family planning should also be highlighted during VHND sessions and during home visits. Simultaneously they should counsel properly about the fear of side effect from husbands and In-Laws which is the major obstacle in acceptance of family planning measures. Efforts should be made to improve literacy of women, and help them to be financially independent in order to

empower them, thus they will lead to good contraceptive knowledge adopt any contraceptive method which in turn will decrease the burden of unmet needs.. By helping women prevent unintended pregnancies, programs can reduce unwanted births and unsafe abortions, and improve maternal and child health. The Policy makers and Health Programs should focus on not only helping the couple to adopt some or the other family planning methods but also should arrange counselling session regarding the unmet needs for the target couple. The adoption of family planning will not only limit the exponential population but also has a major role in improving maternal and child health as it caters to less abortions, more of planned pregnancies and thus better care of living children with respect to nutrition, education and overall health.

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