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Contraceptive use by women of rural Uttar Pradesh - A socio-demographic study

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Abstract

Introduction: The single most important problem that developing countries like India are facing today is uncontrolled growth of population. It is important to study the dynamics of contraceptive use, to understand current contraceptive use, preference and problems of different methods as well as their intention to use contraceptive methods in the future. **Objective:** To assess the knowledge and perception about contraceptive methods as well as use of the different methods among ever married women in the rural area of north India. **Methods:** This was a cross-sectional study. The married women residing for at least six months in the area was considered as a resident and included in the study. The data was collected by using structured questionnaire. A total of 520 ever married women were included in this study. The chi-square and logistic regression analysis was used for the analysis of the data. **Results:** All the women were aware at least one of the method of contraceptives. The contraceptive use was observed to be 26.2%. The contraceptive use was higher among the women of age 41-50 years (34.4%) (p=0.0001). The percentage of contraceptive use was higher among literate women than illiterates. There was significant (p<0.05) association between education of women and husband with use of contraceptive methods. The contraceptive use was higher among OBC (33.5%) compared with upper class (28.7%) and SC (16.3%) and this was statistically significant (p=0.01). A significant (p<0.01) association was observed between contraceptive use with living number of children. The multivariate logistic regression analysis revealed that age of women, education of women & husband and number of living children were found to be significant factors associated with the use of contraceptive use. **Conclusion:** The results of this study revealed that although the knowledge about contraceptive methods was universal, however its use over the years has not increased much.

Key Words

Family Planning; Contraceptive Use; Ever Married Women

Introduction

The single most important problem that developing countries like India are facing today is uncontrolled growth of population. With population of 1.21 billion, India is second most populous country of the world, second only to China, whereas seventh in land area with only 2.4% of land area [1]. To understand the dynamics of contraceptive use, it is important to study current contraceptive use, preference and problems of different methods as well as their intention to use contraceptive methods in the future. Avoidance of any methods of contraception or use of traditional contraceptive methods are considered ineffective ways of fertility control. Some of the factors related to nonuse are - a couple feels that they will have little chance of conception or are apprehensive about the method or are opposed to use the method for physical, social and religious reasons. Users of traditional methods may have the same objections to the use of modern methods as non-users have. Additionally, it is important to know the reasons for discontinuation of any family planning method by current users.

In a cross sectional observational study conducted in outpatient clinic in Dharwad between July-December 2012, 200 married women between 20-45 years were interviewed with predesigned questionnaire. Effort was made to identify reasons for wide gap between knowledge and practice of contraception. All women knew at least one method of contraception but 48% were using some sort of contraception. Most known method was female sterilization, least known were injectables and male sterilization. Common method chosen was female sterilization (70.8%). None adopted male sterilization. Reasons for not using contraception were desire to have child (25%), desire for boys (13.4%), worried about side effect (16.3%), opposition from family members (11.5%), felt pregnancy was

naturally spaced (11.5%), no specific reasons (10.5%), couldn't avail contraceptive facilities (5.7%), inconvenient to use (5.7%). Educational and motivational activities from doctors and health workers are needed to promote the use of contraception [2]. Although contraceptive methods are available for free through the public health system at the village level, promotion of spacing methods is not considered important by health workers. Studies suggest that providers tend to focus their counseling on limiting methods and find it challenging to counsel young couples about spacing methods [3].

Aims & Objectives

To assess the knowledge and perception about contraceptive methods as well as use of the different methods among ever married women in the rural area of north India.

Methods

Study design: This was a cross-sectional study conducted in the rural field practice area of the Department of Community Medicine, Hind Institute of Medical Sciences, Barabanki, Uttar Pradesh. The informed consent was taken from each woman after explaining the objective of the study. The married women residing for at least six months in the area was considered as a resident and included in the study. The married women whose native place was other than present place of residence but the duration of stay was more than six months were also included in the study. Those married women living in the area for less than six months were not included in the study.

Sampling: The stratified random sampling method was used to select the study subjects. Considering ever use of contraceptive method at national level [4] (46%) and assuming 90% power with 5% significance level, the required sample size was 495.

Tools of investigation: A predesigned and pretested interview schedule was used to elicit information on socio-demographic characteristics and required information. The schedule was pretested on a sample of married women and necessary modifications were made in the schedule to overcome the difficulties encountered during pretesting.

Data Collection: The households with ever married women were selected by systematic random sampling method. In case there was no eligible woman in the selected household, the next household was taken in the sample. The survey was carried out till the desired number of study units was completed. Each participant was explained about the purpose of the study prior to administration of tool. The confidentiality was assured. Interview was started with general discussion to gain confidence and it slowly extended to the specific points related to current contraceptive use and the associated socio-demographic characteristics.

Data Analysis: The data collected was entered in Microsoft Excel and checked for any inconsistency. The dichotomous/categorical variables were analyzed by using Chi-square statistics. The multivariate logistic regression analysis was carried out to find out the significant factors associated with the use of contraceptive methods. The p-value <0.05 was considered as significant. All the analysis was carried out by using SPSS16.0 versions.

Result

A total of 520 ever married women were interviewed. The knowledge about contraceptive methods and its use is described in the Table-1. All the women were aware about at least one of the methods of contraceptives.

The contraceptive use was observed to be 26.2% (136/520) among the ever married women. Table-2 depicts the association of contraceptive use with demographic factors. The contraceptive use was higher among the women of age 41-50 years (34.4%) than 21-30 (28.8%), <20 (17.6%) and 31-40 (17.2%) years and this was statistically significant (p=0.0001). The percentage of contraceptive use was higher among literate women than illiterates. There was significant (p<0.05) association between education of women and husband with use of contraceptive methods. However, no significant association was observed for occupation of women & husband, socio-economic status and religion. The contraceptive use was higher among OBC (33.5%) compared with upper class (28.7%) and SC (16.3%) and this was statistically significant (p=0.01). A significant (p<0.01) association was observed between contraceptive use with living number of children (Table-1).

More than half of the women received knowledge about contraceptive methods from television (TV)/radio (55.6%). However, 41.8% received from neighbor and friends and 40.4% from husband (Fig.1).The significant factors found to be significant in the univariate analysis, were entered in the backward multiple logistic regression model. The backward multivariate logistic regression analysis revealed that age of women, education of women & husband, number of living children were found to be significant factors associated with the use of contraceptive use (Table-2).

Discussion

More than half a million women die each year as a result of complications related to pregnancy and childbirth in developing countries across the world. In India, there were 68,000 maternal deaths in 2008 [5,6]. Of the 7.7 million child deaths reported worldwide in

2010, 22% occurred in India [5]. The Indian National Family Health Survey (NFHS-III) data further show that 12% of children ever born to currently married women have died [7]. Available studies demonstrate that the chances of infant and maternal survival would be 2.5 times as high with birth intervals of 3–5 years as with intervals of two or fewer years [8,9,10]. In this context, the postpartum period is particularly important.

Family planning method use in India leans heavily toward methods that limit fertility. The NFHS-3 shows that 77% of sterilized women did not use a family planning method before sterilization. Between the 1970s and the 1990s, the Indian Family Planning Program emphasized sterilization and set targets for the number of procedures [11]. As a consequence, the name Family Planning Program became associated with sterilization. Despite changing its name to the Family Welfare Program and removing the target approach, the program has not been successful in educating people about the concept and advantages of inter-pregnancy spacing or the use of contraceptive methods for spacing births.

Although contraceptive methods are at present available for free through the public health system even at the village level, promotion of spacing methods is not considered important by health workers. Studies suggest that providers tend to focus their counseling on limiting methods and find it challenging to counsel young couples about spacing methods [12]. Counseling about spacing methods can be time-consuming and providers must work against the myths and misconceptions about family planning use that are prevalent in the community. In addition, the lack of decision-making power about contraceptive use among young women makes providers view this counseling as futile [12]. Consequently, the inter-pregnancy interval has remained short. The median birth interval in India is 31 months; it is only 25 months for women aged 15–19 years [13] which is about 24 months in the present study among ever married women. Young, low-parity, postpartum women in Uttar Pradesh are at high risk of closely spaced births.

The knowledge about contraceptives has been almost universal among young people. Almost 99 percent of currently married women aged 15-24 years knew of some method of contraception [4,14]. The awareness about methods of family planning is also increasing over the years. However, adolescents and young women from the rural areas are less likely to have information about the spacing methods of family planning. The awareness of reversible method is relatively limited among young people. Nationally, for example, women are more likely to know about pills and least likely to know about IUD. Similar finding was observed in the present study.

In the present study, the current use of contraceptive was 26.1%. However, the use of contraceptive has been 29% [15], 36% [16] and 41% [4] in the district health surveys in Uttar Pradesh. The current use of contraceptive among young people has significantly increased since NFHS-1 (20%) [17] to NFHS-2 (27%) [18] and NFHS-3 (44%) [7]. Young people in urban areas are more likely to use contraceptive compared to rural. Further analysis of NFHS-3 shows that even among those young persons who are aware of a particular contraceptive method, the use of family planning method was low except for the traditional methods and condom.

The policy makers and programme implementers in Uttar Pradesh need to modify the strategy to increase the use of family planning methods among ever married women through information education and communication (IEC) materials especially to the young married women in rural areas.

Conclusion

The results of this study revealed that although the knowledge about contraceptive methods was universal, however its use over the years has not increased much.

Recommendation

There is a need of comprehensive educational program to motivate the women for the use of contraceptives.

Authors Contribution

Authors 1 & 2 contributed in data collection, analysis, and preparation of the manuscript, while author 3 contributed in study design and interpretation of the study findings.

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Tables

TABLE NO. 1 CONTRACEPTIVE USE IN RELATION TO SOCIO- DEMOGRAPHIC PROFILE OF THE WOMEN

Characteristic	No. of women (%)	Contraceptive Use No. (%)	p-value1
Age in years			
<20	34 (6.5)	6 (17.6)	0.001*
21-30	358 (68.8)	103 (28.8)	
31-40	99 (19.0)	17 (17.2)	
41-50	29 (5.6)	10 (34.4)	
Education of women			
Illiterate	91 (17.5)	21 (23.1)	0.003*
Primary	69 (13.3)	17 (24.6)	
Junior high school	88 (16.9)	22 (25.0)	
High School	101 (19.4)	27 (26.7)	
Intermediate	88 (16.9)	24 (27.3)	
Graduate & +	63 (16.0)	25 (39.7)	
Education of husband			
Illiterate	101 (19.4)	17 (16.8)	0.004*
Primary	50 (9.6)	10 (20.0)	
Junior high school	45 (8.7)	11 (24.4)	
High School	131 (25.2)	31 (23.7)	
Intermediate	102 (19.6)	24 (23.5)	
Graduate & +	91 (17.5)	43 (47.3)	
Occupation of women			
Housewife	184 (35.4)	44 (23.9)	0.13
Semi-skilled worker	122 (23.5)	24 (19.7)	
Skilled worker	154 (29.6)	53 (34.4)	
Semi Professional	36 (6.9)	11 (30.6)	
Professional	24 (4.6)	4 (16.7)	
Occupation of husband			
Unemployed	11 (2.1)	2 (18.2)	0.15
Semi-skilled worker	120 (23.1)	20 (16.7)	
Skilled worker	120 (23.1)	53 (44.2)	
Clerk/Shop-owner/Farm owner	160 (30.8)	41 (25.6)	
Semi Professional	76 (14.6)	13 (17.1)	
Professional	33 (6.3)	7 (21.2)	
Socio-economic status			
I & II	142 (27.3)	39 (37.4)	0.07
III	91 (17.5)	19 (20.9)	
IV	279 (553.6)	75 (26.9)	
V	8 (1.5)	3 (37.5)	
Religion			
Hindu	401 (77.1%)	111 (27.7)	0.06**

Upper	136 (33.9%)	39 (28.7)	
OBC	167 (41.6%)	56 (33.5)	
SC	98 (24.4%)	16 (16.3)	
Muslim	119 (22.9%)	25 (21.0)	
Type of family			
Joint	317 (61.0%)	81 (25.6)	0.11
Nuclear	203 (39.0%)	55 (27.1)	
No. of living children			
Nil	396 (76.2%)	79 (19.9)	0.002*
1 to 2	118 (22.7%)	56 (47.5)	
3 or more	6 (1.2%)	1 (16.7)	
Overall	520 (100.0)	136 (26.1)	

TABLE NO. 2 FACTORS ASSOCIATED WITH THE USE OF CONTRACEPTIVE-RESULTS OF MULTIVARIATE LOGISTIC REGRESSION ANALYSIS

Characteristic	Odds Ratio (95%CI)	p-value
Age in years		
<20	**1.00 (Ref.)**	
21-30	1.60 (1.11-3.42)	0.02*
31-40	0.99 (0.87-1.30)	0.10
41-50	2.23 (1.20-4.30)	0.01*
Education of women		
Illiterate	**1.00 (Ref.)**	
Primary	1.02 (0.79-1.19)	0.09
Junior high school	1.19 (1.05-1.97)	0.02*
High School	1.01 (0.88-1.45)	0.55
Intermediate	1.28 (1.12-2.79)	0.03*
Graduate & +	2.89 (1.14-5.32)	0.001*
Education of husband		
Illiterate	**1.00 (Ref.)**	
Primary	1.21 (0.99-2.23)	0.09
Junior high school	1.55 (1.13-3.66)	0.02*
High School	1.26 (0.80-3.60)	0.09
Intermediate	1.25 (0.95-4.14)	0.08
Graduate & +	3.21 (1.32-5.87)	0.001*
No. of living children		
Nil	**1.00 (Ref.)**	
1 to 2	2.78 (1.56-4.34)	0.001*
3 or more	0.87 (0.67-0.97)	0.02*

Figure

FIGURE NO. 1 SOURCE OF KNOWLEDGE ABOUT CONTRACEPTIVE METHODS (MULTIPLE RESPONSE)