

Dynamics of Utilization of Modern Contraception by the Females of Slums of Noida

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Abstract

Unplanned urbanisation has led to a significant rise in number of slums in metro cities of India. Gautam Buddh Nagar District, of Uttar Pradesh, is no exception. Family planning indicators remain dismally poor amongst the habitants, pushing them further into poverty. HCL Foundation in partnership with FPAI conducted a study “My Choice, My Right”: Enabling urban slum based communities including young people in Noida to lead better lives by choosing Family Planning. We used the study data to find out the dynamics of utilization of contraceptives in slums of Noida. A total of 735 women, in reproductive age group, were interviewed during the study. Only 53 percent were found to have knowledge regarding contraception. Only one-fourth (26 percent) of the overall respondents ever used any modern contraception method in the study area. Majority (91 percent) used either female sterilization (41 percent) or male condoms (37 percent) or OCP (13 percent). Policy makers, decision makers and implementors must consider level of awareness on contraception and use of modern methods as two critical factors while designing policy and intervention plans for this segment of population.

Keywords: Family Planning, Contraception, Women, Empowerment, SDG 5, Urban, Slums.

Introduction

As urbanization continues to persist in India, the wellbeing of the urban poor, whose majority live in slum settlements will increasingly drive national development indicators including SDGs and FP2020 goals. Most of the health indicators of urban slums are even worse than that of rural areas. It is therefore central to understand and identify ways to address the poor reproductive health outcomes among poor urban slum populations in the country.

Reproductive health presents a lifelong continuous process associated with various stages of women in the

family and society.¹ It should ensure safe and healthy sex life by using a collection of preventive methods and techniques. In 1951, India was the first country to launch National Family Welfare program (NFWP). Over the decades, the NFWP has seen a paradigm shift from population control to integrated approach with the National Rural Health Mission (NRHM). With NRHM, there was an integrated approach adopted applying both health and demographic specific indicators under NFWP. The revised goals not only aim at population control, it also includes protection of reproductive rights of women, to reduce Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) by increasing availability and accessibility towards modern contraceptive methods. Contraceptive usage and family planning correlates highly with the indicators maternal and child health. According to Sample Registration System (SRS) 2016 - 18 MMR in India has reduced from 130 per 1,00,000 live births to 113 per 1,00,000 livebirths. Total fertility has reduced from 2.7 (NFHS 3, 2005-06) to 2.2 (NFHS 4 2015-16). IMR has reduced to 41 per 1000 live births (NFHS 4, 2015-16) from 57 per 1000 live births (NFHS

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3, 2005-06).²⁻⁴

Study Background

To understand the knowledge and utilization of modern contraceptive methods amongst the women of urban slums, HCL foundation has conducted a study namely “My Choice, My Right”: Enabling urban slum based communities including young people in Noida to lead better lives by choosing Family Planning. We used the data to find out the dynamics of utilization of contraceptives in slums of Noida. Noida houses a large population of income poor and vulnerable people, living in compromised conditions of housing and sanitation in the urban slums, with less than optimal access to health services including family planning. The urban slums tend to be ever expanding due to the influx of migrants in search of a living, piling on, mostly from parts of UP, Bihar and West Bengal. The existing health, education, water, and sanitation facilities are not designed to reach this unchecked, unplanned growing population.

Objectives

- Find out the knowledge and utilization of modern contraceptive amongst respondents
- Study the dynamics of utilization of modern contraceptive in the females residing in slums of Noida

Methodology

i. Sampling technique: A Multi-stage cluster sampling technique was adapted for the selection of the respondents. In the first stage, a complete house listing was conducted prior to the individual survey. In the second stage, the entire study area was divided into clusters of approximately 500 households each geographically. A total 120 such clusters formed. One-third, i.e., 40 clusters were selected by systematic random sampling. From these selected 40 clusters (Primary Sampling Units), households for individual survey were identified based on the number of years household head is living in Noida, up to 5 years (migrant) and above (non-migrant). From the selected households in each PSU, 20 women in the age group 15-49 years were selected using random sampling technique. Household heads staying less than 6 months were excluded from the sample selection for individual survey. Within each household, only one person was selected for interview.

If the selected respondents were not present at home, 3 visits were made and after 3 visits, they were recorded as non-response. A total of 735 female respondents, in reproductive age group, were interviewed during the study.

ii. Techniques adopted for analysis: Univariate, bi-variate, and multivariate techniques were used to analyze the data. Statistical test like chi-square test was conducted to find the association between respondents' characteristics and their knowledge and present utilization of modern family planning methods. Also, binary logit regression was used to find the determinants of modern family planning method use.

Results and Discussion

Analysis was carried out to find socio-economic and demographic characteristics of the respondents. Results of the same suggests, most of the respondents (88 percent) were Hindu, one-third (36 percent) were illiterate, and two-third (68 percent) were homemaker. Nearly 68 percent got married at or after reaching the legal age for marriage. More than half (55 percent) respondents reported their age as more than 30 years and 41 percent found having more than two children (3 and above).

Further, the analysis reveals, a little more than half (53 percent) of them found having the knowledge regarding contraception. However, they mentioned various source for this knowledge, namely, friends/relatives/neighbours (63 percent), doctors (56 percent), husband/partner (47 percent) and ASHA/health worker (32 percent) amongst others. Most of them (85 percent) mentioned medical store as the source of the contraception followed by hospital/clinic (73 percent). When the question regarding ever use of contraception was asked, it was found that around half (49 percent) of the respondents amongst who had knowledge regarding contraception ever used a method of contraception. It suggests around one-fourth (26 percent) of the overall respondents ever used any modern contraception method in the study area. Information was also collected to find what method they used, it was emerged out that the majority (91 percent) used either female sterilization (41 percent) or male condoms (37 percent) or OCP (13 percent). However, current uses of contraception amongst respondents suggest, 47 percent found using

female sterilization, 35 percent male condoms and nearly 12 percent reported using oral contraception pills on the day of interview.

Additionally, analysis was done to find out the association between characteristics of the respondents with knowledge of contraception. Results of the same are being presented in Table 1.

Table 1: Association Between Characteristics and Knowledge Regarding Modern Contraception (N = 389)

Characteristics	Number	Value of Chi Square Test
Education*		
Illiterate	112	30.763
Primary	21	
Middle	49	
Secondary	126	
Higher Secondary	40	
Graduate and above	41	
Religion*		
Hindu	354	9.348
Others	35	
Caste		
Scheduled Caste (SC)	69	2.900
Scheduled Tribe (ST)	32	
Other Backward Class (OBC)	165	
Others	123	
Occupation*		
Homemaker	282	7.140
Working	107	
Husbands' Education*		
Illiterate	57	38.204
Primary	22	
Middle	50	
Secondary	152	
Higher Secondary	67	
Graduate and above	41	

Cont... Table 1: Association Between Characteristics and Knowledge Regarding Modern Contraception (N = 389)

Husbands' Occupation*		
Not Working	17	6.774
Working	372	
Standard of Living Index (SLI)*		
Low	141	31.431
Medium	201	
High	47	
Age of the Respondents*		
15-19	7	52.154
20-29	160	
30 & above	221	
Age at Marriage (respondent)		
<18	132	1.902
>=18	257	
Marital Status*		
Currently Married	380	7.824
Others	9	
Husband living with Respondent*	369	45.645
Children ever born*		
No child	46	54.581
1-2 children	182	
3-4 children	136	
5 & more children	25	
Pregnancy not resulted in live births	53	0.216

* p<0.05

The analysis suggests that characteristics namely, religion, education, education of husband, occupation of self and husband, standard of living index, age of the respondents, her marital status, children ever born and whether husband is living with the respondent or not emerged out having statistically significant association with knowledge regarding family planning. (Table 1)

As mentioned in methodology section, further, the research tries to find out the association between the characteristics of the respondents with their current use of modern contraception. Chi-square test was performed to see whether any statistically significant association between these variables were present or not. The results are presented in Table 2.

Table 2: Association Between Characteristics and Current Use of Modern Contraception (N =164)

Characteristics	Number	Value of Chi Square Test
Education*		
Illiterate	44	15.837
Primary	5	
Middle	26	
Secondary	60	
Higher Secondary	16	
Graduate and above	13	
Religion*		
Hindu	154	7.944
Others	10	
Caste*		
Scheduled Caste (SC)	26	10.222
Scheduled Tribe (ST)	20	
Other Backward Class (OBC)	64	
Others	54	
Occupation*		
Homemaker	128	9.506
Working	36	
Husbands' Education*		
Illiterate	27	33.586
Primary	5	
Middle	18	
Secondary	69	
Higher Secondary	30	
Graduate and above	15	
Husbands' Occupation*		
Not Working	5	21.063
Working	159	
Standard of Living Index (SLI)*		
Low	51	23.251
Medium	88	
High	25	
Age of the Respondents*		
15-19	5	20.692
20-29	52	
30 & above	106	
Age at Marriage (respondent)*		
<18	67	8.168
>=18	97	
Marital Status*		
Currently Married	159	27.239
Others	5	
Husband living with Respondent*	159	26.069

Cont... Table 2: Association Between Characteristics and Current Use of Modern Contraception (N =164)

Children ever born*		
No child	5	47.137
1-2 children	72	
3-4 children	75	
5 & more children	12	
Pregnancy not resulted in live births	22	0.104

* p<0.05

The analysis suggests that respondents' characteristics namely, religion, caste, education of respondents, education of husband, occupation of self and husband, standard of living index, age of the respondents, her marital status, age at marriage, children ever born and whether husband is living with the respondent or not found having statistically significant association with current use regarding modern family planning. (Table 2)

To find out the determinants of current utilization of modern family planning, binary logit regression was done with dependant variable current use of modern family planning =1 and non-using of modern family planning currently = 0. The characteristics of the respondents were used as predictors. The results of the binary logit regression are being presented in Table 3.

Table 3: Determinants of Utilization of Modern Contraceptive methods

Characteristics	Exp (B)	CI lower bound	CI Upper bound
Education#			
Illiterate ^R			
Primary	2.683	0.967	7.446
Middle	2.677	0.738	9.707
Secondary	1.327	0.468	3.768
Higher Secondary	1.849	0.337	2.136
Graduate and above	1.184	0.451	3.117
Religion#			
Hindu ^R			
Others	0.393	0.193	0.798
Caste*			
Scheduled Caste (SC) ^R			
Scheduled Tribe (ST)	1.001	0.553	1.811
Other Backward Class (OBC)	1.335	0.657	1.925
Others	1.867	1.175	2.968
Occupation			
Homemaker ^R			
Working	0.776	0.491	1.226
Husbands' Education			
Illiterate ^R			
Primary	0.543	0.197	1.499
Middle	1.348	0.367	4.952
Secondary	0.849	0.307	2.35
Higher Secondary	0.662	0.274	1.598

Cont... Table 3: Determinants of Utilization of Modern Contraceptive methods

Graduate and above	0.671	0.279	1.615
Husbands' Occupation			
Not WorkingR			
Working	1.333	0.472	3.762
Standard of Living Index (SLI)*			
LowR			
Medium	3.131	1.535	6.384
High	2.251	1.141	4.437
Age of the Respondents*			
15-19R			
20-29	1.727	0.978	3.658
30 & above	1.126	0.704	1.802
Age at Marriage (respondent)#			
<18R			
>=18	1.737	0.699	4.127
Children ever born*			
No childR			
1-2 children	8.377	2.298	13.539
3-4 children	0.774	0.356	1.679
5 & more children	0.532	0.256	1.107

* $p < 0.05$, # $p < 0.10$, R = Reference category

The analysis suggests that as education increases the utilization of modern contraception also increases ($p < 0.1$). It was also found that respondents followed other religion utilizing 0.61 times lesser modern method of contraception while comparing with Hindu women. Further, the analysis shows, respondents from other caste and OBC found utilized more than their Scheduled Caste counterparts ($p < 0.05$). Respondents found having 1-2 children utilized modern contraception 8.38 times more than the women who did not have any child. Contrary to that females reported 3-4 children and more than that found utilizing modern contraception less (Table 3).

Conclusion and Suggestions

The study suggests poor utilization of modern contraception amongst the females residing in slums of Noida. By and large only one-fourth (26 percent) amongst the respondents found utilizing any modern contraception during the survey. Utilization of contraception was more amongst educated women, women following Hinduism, women of other caste and

OBC women, women having higher economic status and 1-2 children. While policymakers and practitioners designing the policy and intervention plan the factors listed in the study should be considered.

Ethical Consideration

Respondents participated voluntarily in this study. Informed consent was taken. Interviews were conducted in Hindi. All data kept secure, password protected, and privacy of respondents ensured. At the end of interview, they were provided with information on modern family planning methods.

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Conflict of Interest: Nil

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