

Contraceptive practices in Muslim-predominated slums of Aligarh, Uttar Pradesh

Arslan Neyaz¹, Malik S Ahmed², Priyanka C Sahu¹

¹Department of Community Medicine, NIMS Medical College, Jaipur, Rajasthan, India.

²Department of Community Medicine, Kannur Medical College, Kannur, Kerala, India.

Correspondence to: Arslan Neyaz, E-mail: arslanneyaz2002@yahoo.com

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Abstract

Background: India is the second most populous country in the world. Of the total slum dwellers worldwide, 17% of them are present in India. Although the total fertility rate (TFR) for the country has decreased to 2.5 in the period from 2009 to 2010, there are still miles to go to reach the replacement level of 2.1.

Objective: To assess the utilization pattern of family planning services by eligible couples and to identify the factors affecting it.

Materials and Methods: A cross-sectional study was carried out from July 2012 to June 2013 with a sample of 405 women in the reproductive age group; they were selected using systematic random sampling. Data entry and statistical analysis were performed using the SPSS, version, 17.0.

Result: About 55.6% couples were presently practicing contraceptive methods. About 94.3% couples were using temporary method for contraception. The most common method used was condoms. Female sterilization was the only permanent method accepted by couples in our study. Only 23.6% couples were utilizing the government facility for the procurement of the contraceptives. Higher age, higher levels of education, and occupation of the couples led to the increased utilization of contraceptive practices in a significant manner. Better standard of living, increasing birth order, and having a nuclear family was also found to be significantly associated with contraceptive practices.

Conclusion: Sociodemographic factors play an important role in the utilization of family planning services in slum areas. The Muslim community in slums preferred temporary methods of contraception over permanent ones with the private sector being the major service provider.

KEY WORDS: Contraception, family planning, Muslim, slum

Introduction

It is estimated that there are 998 million slum dwellers worldwide. Of the slum dwellers present globally, India holds 17% of them.^[1] The National Family Planning Program was first initiated by India.^[2] India ranks the second most populated nation in the world with a population of 1.21 billion.^[3]

The usage of contraceptives varies according to different regions. Variations are observed within different communities within the same area also.^[4] Religion occupies a key role in the social, economic, and political aspects of a majority of societies, and the support or rejection given to family planning is largely dependent on the religion.^[5] This study was conducted with the objective to assess the utilization pattern of family planning services by eligible couples and to identify the factors affecting it in the slum areas of Aligarh.

Materials and Methods

Study Type, Period, Site, and Population

This community-based cross-sectional study was conducted from July 2012 to June 2013 in two slums that were selected randomly from the list of 128 registered slum areas

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Table 1: Sampling of slum by applying PPS

Area	Household	Population	Sample to be drawn
Jeevangarh	948	7,326	265
Firdous nagar	657	3,866	140
Total	1,605	11,192	405

of Aligarh. Jeevangarh comprised 948 households with a population of 7,326 people, while Firdaus Nagar comprised 657 households with a population of 3,866 people.

Sample Size Calculation

As the prevalence of institutional delivery was 32.6% in the slums of Aligarh,^[6] the study was done with a sample size of 405, with 15% relative error and nonresponse rate of 10%.

Sampling Technique

By applying probability proportionate to size (PPS), the sample was taken from each of the registered slum [Table 1].

Households were taken as sampling units, and systematic random sampling technique was used to select the households. In every slum, the first house was selected randomly using the currency note method. Subsequent houses were determined by adding sampling intervals to it.

Inclusion and Exclusion Criteria

All married women of reproductive age group (15–49 years) were included in the study. Pregnant women were excluded from the study.

Data Collection Process

Assistance of medicosocial workers, block mobilization coordinator, and community mobilization coordinator was taken to identify the households. If no married women of reproductive age group (15–49 years) were present in the house, the next house was taken up. Any house where a pregnant woman resided was excluded from the study; then, the very next house was taken up. In case, if there were more than one eligible female subject in the household, any one of them was randomly selected. After obtaining informed verbal consent, they were interviewed using a semi-structured questionnaire. The questionnaire was administered to the eligible female subjects, and relevant information about the family planning services utilization was recorded along with the sociodemographic data. The socioeconomic status was assessed by using Standard of Living Index.

Study Variable

Sociodemographic variables: age, education and occupation of couples, type of family, birth order, socioeconomic status, and religion.

Contraceptive practices: utilization, type of contraceptive used, and the facility from where contraceptives were procured.

Statistical Analysis

Utilization of family planning services were compared with sociodemographic characteristics of couple by appropriate tests of significance. Cross tabulations were obtained in order to compare couples accepting and not accepting contraceptives with respect to the various sociodemographic variables with the help of χ^2 -test. Data analysis was performed using IBM SPSS, version 17.0. A *p* value of <0.05 was considered as significant for rejecting null hypothesis.

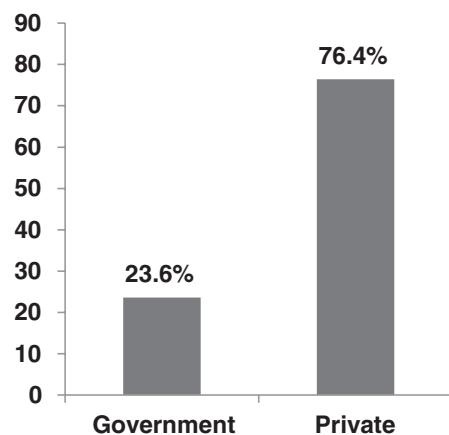
Result

Distribution of Study Population According to Sociodemographic Factors

Almost all the couples were Muslim (98.3%) by religion. Most of the women were in the age group of 25–29 years (42.7%), and the husbands were in the age group of 30–34 years (36.5%). More than half the number (56.0%) of women and 41.2% of the husbands were illiterate. Majority (98.5%) of the women were housewives. More than half the number of the husbands (51.9%) was unskilled workers. Majority of the deliveries were of the birth order ≥ 3 (39.5%). Considering the Standard of Living Index, 40.7% families belonged to medium, followed by low (35.8%) and high standards of living (23.5%) [Tables 2 and 3].

Family Planning Practices

More than half the number of the couples (55.6%) were currently practicing contraceptive methods [Figure 1]. Among the users, 94.3% couples were using temporary methods. The most common temporary method was condoms. Female sterilization (5.8%) was the only permanent method accepted by couples in our study [Table 4]. Less than one-third of couples (23.6%) were utilizing the government facility for the procurement of the contraceptives [Figure 2].

**Figure 1:** Source of contraceptives (*n* = 225).

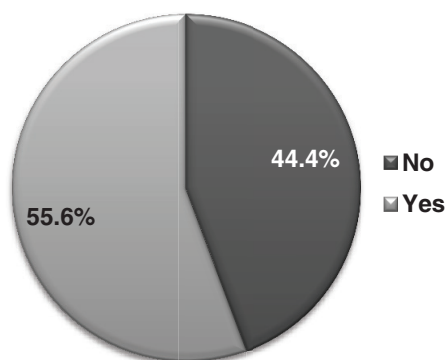


Figure 2: Currently using contraception ($n = 405$).

Table 2: Age and education of study population ($n = 405$)

Variables	Wife, n (%)	Husband, n (%)
Age (years)		
≤19	13 (3.2)	1 (0.2)
20–24	111 (27.4)	36 (8.9)
25–29	173 (42.7)	118 (29.1)
30–34	79 (19.5)	148 (36.5)
≥35	29 (7.2)	102 (25.2)
Education		
Illiterate	227 (56.0)	167 (41.2)
Up to primary school	51 (12.6)	60 (14.8)
Up to high school	85 (21.0)	125 (30.9)
Intermediate/diploma	24 (5.9)	23 (5.7)
Graduate and above	18 (4.4)	30 (7.4)

Table 3: Sociodemographic profile of study population ($n = 405$)

Sociodemographic characteristics	Frequency, n	Percentage
Religion		
Hindu	7	1.7
Muslim	398	98.3
Type of family		
Nuclear	273	67.4
Joint	132	32.6
Birth order		
1	111	27.4
2	134	33.1
≥3	160	39.5
Standard of living index		
Low	145	35.8
Medium	165	40.7
High	95	23.5

Table 4: Method of contraception

Methods	Frequency, n	Percentage
Temporary		
Condom	193	85.8
OCP	6	2.7
IUCD	13	5.8
Permanent		
Female sterilization	13	5.8
Total	225	100

Factors Affecting Family Planning Service Utilization

Higher age, higher levels of education, and occupation of the couples led to increased utilization of family planning practices in a significant manner. A better standard of living, increasing birth order, and having a nuclear family were also found to be significantly associated ($p < 0.05$) with family planning practices [Tables 5 and 6].

Discussion

In this study, 55.6% couples were currently practicing contraceptive methods. Contraceptive acceptance rate ranged from 50% to 60% in the study conducted at the slums of Bangladesh, Bangalore city, Karnataka; Vellore town, Tamil Nadu; Rohtak, Haryana; and Delhi.^[2,7–10] Lower acceptance of family planning services were observed in the study done by Ghosh et al.^[11] (32.4%); Mihir and Geeta^[12] (35.62%); Velankar^[13] (21.4%); Joshi and Patil^[14] (44.5%); and Khokhar and Mehra^[15] (24.7%), while Makade et al.^[16] (68.42%) and Upadhyay and Sharma^[17] (66.7%) reported higher prevalence of contraceptive use among eligible couples in slum areas.

Among the users, 94.3% couples were using temporary method. The most common temporary method used was condoms (85.8%). Female sterilization (5.8%) was the only permanent method accepted in our study. Similar to our study, temporary method being the most common means of contraception was observed by various authors across India.^[11,18,19] Condom (54%) was the most common method of contraception in Lucknow, Uttar Pradesh;^[18] while oral contraceptive pill (OCP) (52.6%) and intrauterine contraceptive device (IUCD) (63.7%) were the most accepted at Calcutta, West Bengal, Amritsar, and Punjab.^[11,19] However, Mony et al.^[9] has shown much lower usage of temporary methods in the slums of Vellore town. This wide variation in different studies can be attributed to different sociodemographic status of study population.

Less than one-third of the couples (23.6%) were utilizing the government facility for the procurement of the contraceptives. Similar results were seen in studies conducted by, Kamal^[7] and Kumar et al.^[18], where 20%–25% couples utilized the government health facility for the procurement of contraceptives. In contrast to this, the government health facility was the major source of procurement in the slums of periurban Amritsar, Punjab.^[19]

Table 5: Association of family planning practices with age and education of the couples

Variables	Family planning				χ^2 value	P
	No		Yes			
	n	(%)	n	(%)		
Age of wife (years)						
≤19	9	69.2	4	30.8	10.501	0.03
20–24	60	54.1	51	45.9		
25–29	66	38.2	107	61.8		
30–34	33	41.8	46	58.2		
≥35	12	41.4	17	58.6		
Age of husband (years)						
≤19	0	0	1	100	20.82	<0.001
20–24	25	69.4	11	30.6		
25–29	62	52.5	56	47.5		
30–34	49	33.1	99	66.9		
≥35	44	43.1	58	56.9		
Education of wife						
Illiterate	123	54.2	104	45.8	25.168	<0.001
Up to primary	23	45.1	28	54.9		
Up to high school	22	25.9	63	74.1		
Intermediate/diploma	6	25	18	75		
Graduate and above	6	33.3	12	66.7		
Education of husband						
Illiterate	95	56.9	72	43.1	30.406	<0.001
Up to primary	32	53.3	28	46.7		
Up to high school	42	33.6	83	66.4		
Intermediate/diploma	5	21.7	18	78.3		
Graduate and above	6	20	24	80		

Higher age, higher levels of education, and occupation of the couples led to increased utilization of family planning practices in a significant manner. A better standard of living, increasing birth order, and having a nuclear family were also found to be significantly associated ($p < 0.05$) with family planning practices. In urban slums of Mumbai, age, education, and parity of women showed a significant relationship with contraceptive practices.^[14] Khokhar and Mehra^[15] observed that age and parity of women were significantly associated with contraceptive service utilization. The socioeconomic status was associated with family planning practices in study done by Patro *et al.*^[4] and Ghosh *et al.*^[11] Type of family showed no significant association with contraceptive practices, according to the studies done at Kolkata and Mumbai.^[11,14]

Our study showed a number of strengths. It was a cross-sectional study conducted in those sections of our population (slum dwellers and Muslims), which has been shown in earlier studies to be lagging behind in family planning practices, in particular, and maternal and child health indicators in general.^[4,5] Moreover, the sample was collected by random sampling and not purposive one. But, in spite of these

strengths, we experienced certain limitations. Although we recognized households using female staffs, we observed a cultural barrier when female subjects refused to give consent, because the team taking the interview included a male member. This can be seen by the fact that we faced a nonresponse rate of 16%. Moreover, those who participated hesitated many times irrespective of the fact that a female health worker was always present while conducting the interview.

Conclusion

Even after effort since several decades on family planning at national level, contraceptive acceptance was found to be 55.6% in slums. Operationally, still, family planning practices were mainly women centered. The Muslim community gives more preference to temporary methods when compared with permanent method. Acceptance of spacing methods by couples is useful for decreasing total fertility and improving the health of mother by delaying the next birth. There is underutilization of the family planning services in public sector when compared with private sector.

Table 6: Association of family planning practices with various sociodemographic factors

Sociodemographic factors	Family planning				χ^2 value	P
	No		Yes			
	n	(%)	n	(%)		
Occupation of wife						
Working	0	0	6	100	4.872	0.02
Homemaker	180	45.1	219	54.9		
Occupation of husband						
Unemployed/retired	1	20	4	80	21.308	<0.001
Unskilled worker	113	53.8	97	46.2		
Semi-skilled/skilled worker	43	42.6	58	57.4		
Clerical/shop/farm	21	25.6	61	74.4		
Professional	2	28.6	5	71.4		
Birth order						
1	54	48.6	57	51.4	11.109	0.004
2	44	32.8	90	67.2		
≥3	82	51.3	78	48.8		
Type of family						
Nuclear	107	39.2	166	60.8	9.351	0.002
Joint	73	55.3	59	44.7		
Standard of living index						
Low	82	56.6	63	43.4	15.22	<0.001
Medium	57	34.5	108	65.5		
High	41	43.2	54	56.8		

References

- UN-HABITAT. *State of the World's Cities 2006/2007*. London: Earth Scan, 2006. Available at: <http://mirror.unhabitat.org/pmss/getElectronicVersion.aspx?nr=2101&alt=1> (last accessed on March 18, 2015).
- Saini NK, Singh M, Gaur DR, Kumar R, Rajput M. Awareness and practices regarding spacing methods in urban slums of Rohtak. *Indian J Community Med* 2006;31(2):84–5.
- Government of India. *Census of India 2011, Provisional Population Totals, Paper 1 of 2011, India Series 1*. New Delhi, India: Office of the Registrar General and Census Commissioner, 2011. Available at: http://censusindia.gov.in/2011-prov-results/data_files/india/paper_contentsetc.pdf (last accessed on March 18, 2015).
- Patro BK, Kant S, Baridalnye N, Goswami AK. Contraceptive practices among married women in a resettlement colony of Delhi. *Health Popul-Perspect Issues* 2005;28(1):9–16.
- Mishra V. *Muslim/Non-Muslim Differentials in Fertility and Family Planning in India*. Population and Health Series. Honolulu, Hawaii: East-West Center Working Papers, 2004. p. 112. Available at: <http://www.eastwestcenter.org/fileadmin/stored/pdfs/POP-wp112.pdf> (last accessed on March 18, 2015).
- Khan Z, Mehnaz S, Khaliq N, Ansari MA, Siddiqui AR. Poor perinatal care practices in urban slums: possible role of social mobilization networks. *Indian J Community Med* 2009;34(2):102–7.
- Kamal SMM. *Contraceptive Use and Method Choice in Urban Slum of Bangladesh*. Kampala, Uganda: International Conference on Family Planning: Research and Best Practices 2009, Session F05: Contraceptive Practice in Asia, 2009. Available at: http://fpconference.org/2009/media/DIR_169701/15f1ae857ca97193fff83a4fffd524.pdf. (last accessed on February 22, 2015).
- Veeramatha CS. *Reproductive and Child Health Programmes in the Urban Slums of Bangalore City: A Study on Unmet Needs for Family Welfare Services*. Bangalore, India: Institute for Social and Economic Change, 2007. Working Paper 182. Available at: <http://www.isec.ac.in/WP%20-%20182.pdf> (last accessed on February 22, 2015).
- Mony PK, Verghese L, Bhattacharji S, George A, Thoppuram P, Mathai M. Demography, environmental status and maternal health care in slums of Vellore town, Southern India. *Indian J Community Med* 2006;31(4):230–3.
- Bhasin SK, Pant M, Metha M, Kumar S. Prevalence of usage of different contraceptive methods in East Delhi—a cross sectional study. *Indian J Community Med* 2005;30(2):53–5.
- Ghosh S, Samanta A, Mukherjee S. Knowledge and practice of family planning in married women of reproductive age group in a slum of Kolkata. *Al Ameen J Med Sci* 2013;6(1):34–9.
- Mihir G, Geeta K. Socio-demographic and morbidity profile of slum area in Ahmedabad, India. *Natl J Community Med* 2010;1:106–10.
- Velankar DH. Knowledge, attitude and practices regarding contraceptive methods of family planning in an urban slum community of Mumbai. *Bombay Hosp J* 2009;51(2):149–54.
- Joshi SM, Patil SB. Knowledge and practices of family planning in an urban slum of Mumbai. *Indian J Prev Soc Med* 2007;38:1–4.
- Khokhar A, Mehra M. Contraceptive use in women from a resettlement area in Delhi. *Indian J Community Med* 2005;30(1):21.

16. Makade KG, Padhyegurjar M, Padhyegurjar SB, Kulkarni RN. Study of contraceptive use among married women in a slum in Mumbai. *Natl J Community Med* 2012;3(1):40–3.
17. Upadhyay J, Sharma AK. Fertility patterns and family planning acceptance among slum dwellers in Kanpur. *J Fam Planning* 1995;41(2):61–8.
18. Kumar A, Bhardwaj P, Srivastava JP, Gupta P. A study on family planning practices and methods among women of urban slums of Lucknow city. *Indian J Community Health* 2011;23(2):75–7.
19. Devgun P, Gill KP, Kumari R. A cross sectional study to know the extent and pattern of usage of family planning methods in

the slums of periurban Amritsar. *Indian J Matern Child Health* 2011;13:1–8.

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