

SHORT ARTICLE

Determinants of Post - partum contraception practices in urban slums of central Karnataka, India

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Abstract

Background: The largest proportion of women with an unmet need for contraception is found among those in their first year after childbirth; concentrating efforts to reduce unmet need among these women could have additionally bigger impact on increasing contraceptive use than concentrating on any other group. **Aims & Objectives:** To know the knowledge & practices of post – partum contraception among mothers in urban slums. **Material & Methods:** Cross sectional study conducted in urban slums for duration of six months. Study population included mothers in extended post – partum period residing in urban slums. Mothers were interviewed using pre – tested, semi – structured questionnaire. Data was analyzed using SPSS v 22.0 and, chi square test and logistic regression analysis was employed. P value of <0.05 was considered statistically significant. **Results:** Majority of the mothers in our study were in the age group of 20-24 years (46%). Mean age was 21.6 ± 3.1years. Majority of the mothers (56%) were Hindus. Mean age of marriage observed was 18.2±2.1years. In the present study, majority (76%) had knowledge of post – partum contraceptive methods, but only 17% of the mothers were using contraception. Unmet need for post – partum contraception was found among 49% of mothers. **Conclusions:** In spite of being aware, the practice of family planning was very low among post-partum mothers. The study highlights the impact of socio cultural factors like religion, caste, number of living children, duration of marriage and ANC service utilization on post – partum contraception usage among mothers.

Keywords

Post - partum contraception; Mothers; Urban slums

Introduction

India was the first country to introduce a national family planning programme in the world, as early as the first five-year Plan (1951-56) (1).

Studies show that in India, 65% of the women have unmet need for family planning in the first year of post-partum (2). Contraceptive use is determined by availability of various contraceptive methods and

characteristics of acceptors which are important in understanding contraceptive use (3). Demographic and Health Surveys (DHS), done in 27 countries, show that 92 to 97 percent of the women did not want another child within two years after delivery, yet 35 % of them had their children spaced less than two years apart (4). Slum populations face greater health hazards due to overcrowding, poor sanitation,

and lack of access to safe drinking water and environmental pollution (5).

Aims & Objectives

1. To know the knowledge & practices of post – partum contraception among mothers of urban slums.
2. To know the determinants of post-partum contraception practices in urban slums.

Material & Methods

Study type: The present study was part of project conducted to know the utilization of health care services during antenatal, intra-natal & postnatal period among reproductive age women in urban slums.

Study area: This cross sectional study was conducted in slums of Davangere city.

Study population: Post-partum mothers aged 15 – 44 years residing in the study area and who were in their 3rd month of post-partum period.

Exclusion criteria: Post-partum mothers not willing to participate and not available at the time of study were excluded from the study.

Study duration: Study was conducted for a period of six months from 1st December 2015 to 30th May 2016.

Sample Size: The study population included 300 mothers in their post – partum period who had been previously selected for a project to know the service utilization pattern during pregnancy in urban slums.

Sampling: Davangere city is situated in the central part of the Karnataka state, 265 km towards north of state capital, Bangalore along national highway, with population of about half a million. It is the 6th-largest city in Karnataka state. There are 44 slums in Davangere city with population of 37,480. To represent the different geographical and socio-cultural characteristics, the city was divided into 4 quadrants by using map issued from Davangere Municipality. The four quadrants were named North East, North West, South East and South West. The slums were listed according to ward numbers. These wards were rearranged according to quadrants in which they belong. From each quadrant one slum was selected by using random number table.

Ethical approval: Ethical clearance from the institutional ethical review committee and after taking an informed consent from the study participants.

Data collection: The study was conducted in these four geographically selected slums of Davangere city.

Mothers in post – partum period were enumerated by house to house visit. Auxiliary Nurse Mid-wives' registers and Anganwadi records were used to identify those mothers who were missed during visits. All selected slums were visited once a month by rotation (by covering 1 slum per week) and interviewed all mothers who met the inclusion criteria, till the sample size of 300 was reached. At least three visits were made to include all the women who could not be contacted in the first visit. Mothers were interviewed using a pre-tested and semi-structured questionnaire. Data was collected regarding their socio demographic profile, the knowledge & practice of family planning patterns among post – partum mothers and factors influencing their decision to adopt post – partum contraception methods.

Data analysis: Data was analyzed with the help of Statistical software for social sciences (SPSS) v20.0 and presented using descriptive statistics (means, proportions, and percentages), chi square test and logistic regression analysis was employed. The strength of association was estimated by calculating the odds ratios (OR) with 95% confidence intervals (CI). P value of <0.05 was considered statistically significant and data was presented in the form of tables, and figures wherever necessary

Results

Socio-demographic profile of study population: Majority of the mothers in the study population were in the age group of 20-24 years (46%), followed by <19 years (38%). Mean age was 21.6 ± 3.1 years. In the present study 23% (77) of them were working either as coolie/maid servants, beedis/agarbathi makers or as a vegetable vendor. According to modified B G Prasad socio-economic classification, majority (74%) of the mothers belonged to class V and 26% of them belonged to class IV.

Teenage marriage (<18years) in our study area was found to be 33%. It was observed mainly among illiterate women (79%). The mean age of marriage observed was 18.2 ± 2.1 years. Majority of the mothers (63.3 %) had 1 child and 60 (20%) of the mothers had ≥ 3 children. Majority of the mothers (95.5%) had spacing of < 3 years from their last pregnancy. The mean duration of spacing between pregnancies was 1.4 years. The study showed 79% of the mothers had utilized ante natal care services.

[Table 1]

Distribution of mothers according to knowledge of different methods of post-partum contraception.

In the present study it was observed that majority (76%) had knowledge of contraceptive methods, among them 48% of mothers knew about temporary methods (oral pills, condom) followed by 17% of mothers about permanent methods (tubectomy, vasectomy) and 11% of mothers about copper IUCDs. (Figure 1)

Distribution of mothers according to their practice of post – partum contraception

In the present study majority (83%) were currently non-users of any type of contraceptive methods. 4% had opted for IUCD followed by condom by 6% of the study population, 7% had underwent tubectomy. (Figure 2)

Distribution of mothers according to the reasons for not practicing post – partum contraception methods. Desire to have a male child as the major reason for not using any type of contraception by mothers (34%) in the present study followed by being already pregnant (25.7%), resistance from family members (9%) and 14.3% gave lack of knowledge about whom to contact as the reason for not using the contraception. The unmet need for post – partum contraception among study participants' was 49%.

Distribution of post-natal mothers according to their source of information.

Among the mothers with whom were practicing post – partum contraception, health care personnel (ANM, AWW & MO) were the major source of information (77%). Family and friends were the source of information for 18% of the mothers and media 5%. [Figure 3]

Discussion

In the present study it was observed that majority (76%) had knowledge of contraceptive methods, 48% of temporary methods followed by 17% of permanent methods and 11% of natural methods (abstinence, calendar method). A similar observation was done by Ghosh S (6) in a study done in urban slums of Kolkata stated that 91.1% of the study population had knowledge of contraceptive with majority (65%) about oral contraceptive pills. In another study done by Shweta (7) in Kashi Vidyapeeth stated that majority (46%) of the study population had knowledge about female sterilization followed by oral contraceptive pills (17.6%), safe period (17.6%), condom (12.5%) and Intra uterine devices (6.35%) insertion.

In the present study majority (83%) were currently non-users of any type of contraceptive methods. 4% had opted for IUCD followed by condom by 6% of the study population, 7% had underwent tubectomy. According to DLHS IV (2012-13) (8) in Davangere district majority of women in reproductive age group were currently using female sterilization (66.2%). In similar study conducted by Ghosh S (6) in urban slums of Kolkata stated that majority of mothers were using oral pills (52.6%) followed by condoms (24.6%).

Husband's desire to have a male child was the major reason for not using any type of contraception by mothers (34%) in the present study and 14.3% gave lack of knowledge about whom to contact as the reason for not using the contraception. In a similar study conducted by Roma Patel (9) in urban slums of Ahmedabad stated that most common reason for not using contraception was wanting to get pregnant (22%), fear of side effects (12%), infrequent sex (11%) followed by familial objections (5%).

In our study respondents stated, in majority of situations (44.7%) the couple themselves made decisions on family planning methods followed by husband only (26.3%) and in-laws/parents/other family members like elderly brother-in-laws in 21.3% of the families. In a similar study conducted Ghosh S (6) in urban slums of Kolkata stated that in more than half of the families among study population the couple themselves made decisions on family planning issues (53.5%) and mother-in-laws were the decision makers in 6.8% of the population.

Among the mothers with who were practicing post – partum contraception, health care personnel (ANM, AWW & MO) were the major source of information (77%). Family and friends were the source of information for 18% of the mothers and media 5%. In a similar study conducted by Ghosh S (6) in urban slums of Kolkata stated that majority of the study population received the knowledge from family members (40%), T.V (38%) and friends (27%).

On logistic regression analysis contraceptive practice among post-partum mothers was significantly associated with adequate ANC service utilization [OR = 20.60, 95% CI: 51.99-2.80], and no. of living children [OR = 4.63, 95% CI: 15.42-1.39]. In a study conducted by Mahmud SM *et al* (10) contraceptive use was higher amongst females aged less than 30 years and those belonging to middle socioeconomic class and nuclear families. The significant influence of the women's' educational status on utilization

of family planning methods was observed ($p < 0.05$). In another study conducted by Kunwar S et al (11) contraception was practiced by only 54.4% women with a barrier method such as a condom, being the most common. Better education was the only factor significantly affecting use of contraception ($p < 0.027$). In another study conducted by Goel S et al (12) women's background characteristics such as educational attainment (secondary or higher education; $OR=1.29$, $p < 0.05$) and high standard of living ($OR=1.63$, $p < 0.001$) facilitated the adoption of the contraception practice.

Conclusion

In spite of being aware, the practice of family planning was very low among post-partum mothers. Majority wanted to postpone use of contraception for the purpose of male child. The study indicates the impact of socio cultural factors like religion, caste, number of living children, duration of marriage and ANC service utilization on post – partum contraception usage among mothers. In our study age, literacy status, occupation of the mother, type of family, and socio-economic status didn't have any significant effect on practices of post – partum contraception among mothers.

Recommendation

There is need to create not just awareness but also counsel the mothers, family members and community as a whole for behavior change, so that mothers could be supported in their decision to opt for family planning methods. Mothers should be addressed on not only on ANC checkup days but also in immunization clinics, mother group meetings in Anganwadis and during home visits by health workers. Strengthening IEC activities to increase community participation and their involvement could be improved by involving the private voluntary organizations and general practitioners also in the delivery of family planning services. Adolescent health education conducted in schools and colleges should stress on female literacy and awareness about legal age of marriage. Health education regarding benefits of avoiding teenage pregnancy and need to use spacing methods between pregnancies should be given. The responsibility to reduce maternal & infant mortality through promotion of family planning lies not only on the medical profession alone but also on the social and political leaders and on the policy of the government.

Limitation of the study

Family planning practice decision is influenced by life partner & other family members. The present study didn't explore this aspect in depth.

Relevance of the study

Several previous studies have stressed the importance of education, socio economic status in determining the post-partum contraception practices. Our study highlights the importance of other social factors like religion, caste, number of living children and duration of marriage in contraception practice.

Authors Contribution

All the authors were actively involved in study planning, data collection, compilation, analysis, preliminary report writing, proof reading and final manuscript submission.

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Tables

TABLE 1 SOCIO DEMOGRAPHIC PROFILE OF THE POST – PARTUM MOTHERS

Characteristics	Number (N = 300)	Percentage
Age [years]		
≤ 19	114	38
20 – 24	139	46
25 – 29	39	13
30 – 34	08	03
Literacy status		
Primary education (upto 5th std)	136	45
Higher primary (6th to 7th std)	23	08
High school (8th to 10th std)	118	39
Illiterate	23	08
Socio – economic status (Modified B G Prasad socio-economic classification)		
Class IV	78	26
Class V	222	74
Age at marriage		
< 18 years	99	33
≥18 years	201	67
Number of living children		
1	190	63.3
2	50	16.7
≥ 3	60	20
Spacing between last pregnancy		
< 3 years	105	95.5
≥ 3 years	05	4.5

Figures

FIGURE 1 DISTRIBUTION OF MOTHERS ACCORDING TO KNOWLEDGE OF DIFFERENT METHODS OF POST-PARTUM CONTRACEPTION

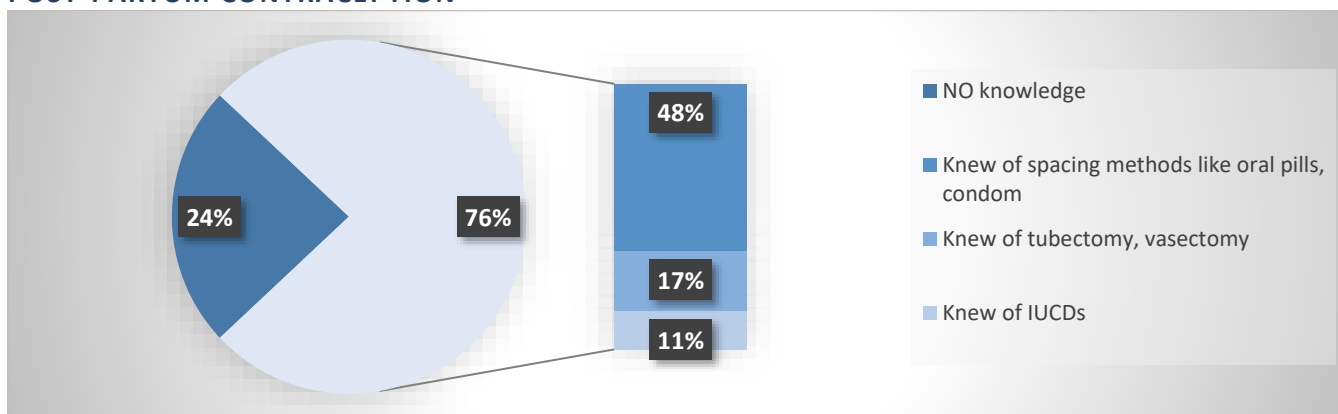


FIGURE 2 DISTRIBUTION OF MOTHERS ACCORDING TO THEIR PRACTICE OF POST – PARTUM CONTRACEPTION

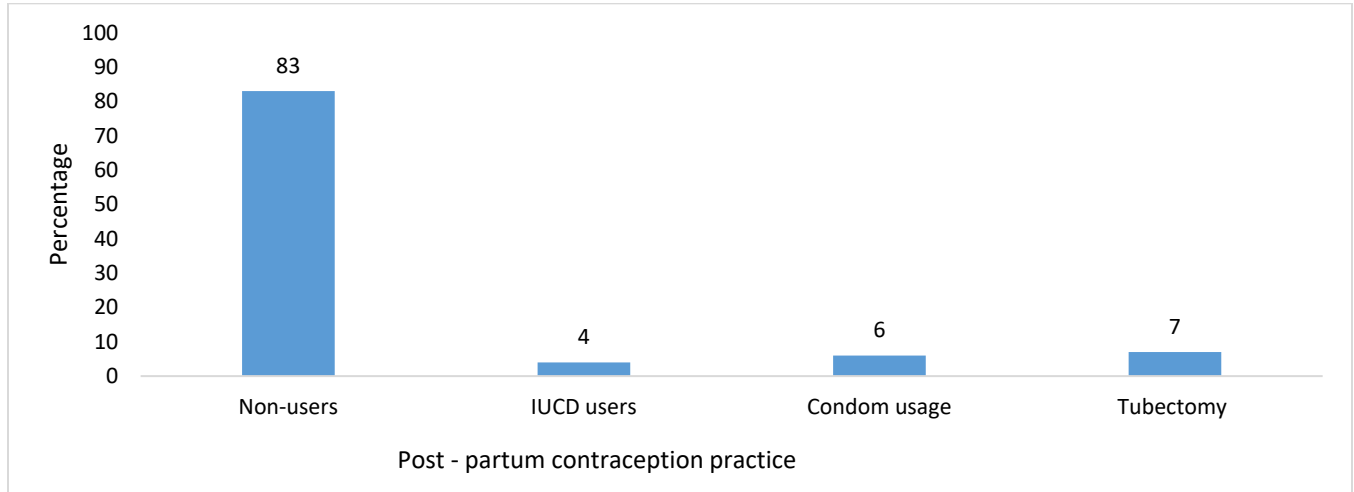


FIGURE 3 DISTRIBUTION OF MOTHERS ACCORDING TO THEIR SOURCE OF INFORMATION ABOUT POST – PARTUM CONTRACEPTION (N = 228)

