

# Prevalence of Modern Contraceptive Methods among Rural Women of Field Practice Area of M.G. Medical College, Jaipur

Dr. J. P. Pankaj<sup>1</sup>, Dr. Anjali Jain<sup>2</sup>, Dr. Sanjay Chaudhary<sup>3§</sup>

<sup>1</sup>Senior Medical Officer, Multidisciplinary Research Unit, S.M.S. Medical College, Jaipur (Rajasthan) India

<sup>2</sup>Professor, Department of Community Medicine, M.G. Medical College, Jaipur (Rajasthan) India

<sup>3</sup>Associate Professor, Department of Community Medicine, Govt. Medical College, Pali (Rajasthan) India

§Corresponding author's Email: sanjay12july74@yahoo.com

**Abstract—Background:** India is the first country in the world who started family planning programme at the national level in 1952. In spite of that India is the second most populated country after China. It is obvious that despite good interventions and concerted efforts, we have failed in controlling our population. The available methods are more than adequate but what is lacking is the will to use them. So, the present study was planned to assess the contraceptive prevalence and factors associated with its use among married women in local rural community of Vatika village, Jaipur.

**Material and Methods:** A community based cross sectional study was carried out from January 2015 to December 2015 in a rural field practice area of Department of Community Medicine, Mahatma Gandhi Medical College, Jaipur. Total 550 married women of reproductive age group were interviewed and analyzed.

**Results:** In the present study, contraceptive prevalence was 43.27%. Tubectomy was the most common (50.42%) followed by condoms (34.88%). Oral contraceptive pills were the least preferred method of contraception with 3.36% women. Majority of women (85.29%) used it to limit their families while 14.71% used it for the purpose of spacing the birth of the next child.

**Conclusion:** Although all contraceptive methods are freely available, but still people are not using due to inadequate knowledge and social beliefs. So, there is an urgent need for more awareness and educational programmes in the communities especially in rural areas.

**Key Words:** Contraceptives, Prevalence, Rural Women.

## I. INTRODUCTION

World's population has crossed the seven billion mark and still growing rapidly. India contributes 17.5% of this share.<sup>1</sup> As the population grows, the pressure on natural resources will intensify. Population pressure will reduce the per capita availability of land for farming, which will affect availability of food grain, drinking water, health and education of people.<sup>2</sup> Every day more than 400,000 births take place around the world. Almost half are deliberate, happy decisions, but half are unintended and many of these are bitterly regretted. More than 300,000 women were asked, how many children they want to have in a series of surveys in over 50 low-income countries and it was observed that in almost every country surveyed, women are bearing more offspring than they intend.<sup>3</sup>

Contraception is a method which helps the woman to avoid unwanted pregnancy resulting from coitus and it is the best tool for population control. It provides a safe and effective way to regulate fertility and preserve health. There are many methods of contraception. An ideal contraceptive is the one, which is safe, effective, acceptable, inexpensive, reliable, reversible, simple, long lasting, and independent of coitus and requires less medical supervision.<sup>4</sup>

During the past 30 years, many countries have greatly improved their provision of family planning services. In the developing world, contraceptive use has risen from one in 10 couples to more than half of all couples.<sup>3</sup> In last five decades, the crude birth rate of India has declined from 40.8 per 1000 population (1951) to 21.6 per 1000 population (2012 SRS), infant mortality rate declined from 146 per 1000 live births (1951) to 42 per 1000 live births (2012 SRS) and total fertility rate from 6.0 (1951) to 2.4 (2012 SRS).<sup>5</sup> As per National Family Health Survey-3, female sterilization accounts for 37.3% of the modern methods of contraception used in India. Only 1.0% of couples rely on vasectomy while 5.2% rely on condoms.<sup>6</sup>

India's population growth is a cause of worry. But the problem of population growth is not the one without solutions and only regulations will not help to solve the problem. The sense of responsibility should come from within every individual. The extent of acceptance of contraceptive methods still varies within, between societies and among different castes and religion groups. The factors responsible for such varied picture operate at the individual, family and community levels with their roots in the socioeconomic and cultural milieu of Indian society.<sup>7</sup>

The present study was planned to assess the contraceptive prevalence and factors associated with its use among married women in a rural community of Vatika village, a rural field practice area of Department of Community Medicine, Mahatma Gandhi Medical College, Jaipur.

## II. METHODOLOGY

It was a community based cross-sectional study undertaken to find out the prevalence of current contraceptive use and its socio-demographic determinants among married women in reproductive age group (15-49 years) residing in the field practice area of Rural Health Training Centre, Department of Community Medicine, Mahatma Gandhi Medical College and Hospital, Jaipur. It was a large village with 1677 families residing in it. The village has population of 10590 as per Population Census 2011.<sup>8</sup> All the married women in the reproductive age group (15-49 years) residing in the village were included in the study while unmarried female of reproductive age group, married female less than 15 years and more than 49 years and married women who were not permanent resident of the village were excluded.

Total 550 women were interviewed by systematic random sampling. A list of families was obtained from Govt. Primary Health Centre as per recent Pulse Polio Micro plan conducted in recent year. It was verified and updated before conducting the study. First family was randomly selected. All the married women of the selected family in the reproductive age group (15-49 years) present at the time of data collection were included in the study. After selecting the first family, every third family was taken till the desired sample size was met.

House to house survey was done and data collected by taking interview of the married women. Help of local Auxiliary Nurse Midwife (ANM), Anganwadi Worker (AWW), Accredited Social Health Activist (ASHA) and social worker of the Department of Community Medicine was taken to build a rapport with local people. Each respondent was explained the purpose of the study prior to the administration of tools of data collection and informed consent was obtained. The confidentiality of the information was assured. A predesigned and pre tested questionnaire was used to collect the data. The collected data were entered into Microsoft Excel 2010 spreadsheet and analyzed.

### III. RESULTS

In the present study, out of 550 women were interviewed, 238 (43.27%) women aged 15-49 years were using some contraceptive method at the time of the study. The remaining women i.e. 312 (56.73%) were not using any form of family planning method (Table-1).

Among 238 women who used some method of contraception, 120 (50.42%) adopted tubectomy. Condoms were being used by the partners of 83 (34.88%) women. 15 (6.30%) women had adopted intra uterine devices as a method of contraception. There were 12 (5.04%) women whose partner had undergone vasectomy to meet the need for family planning. Oral contraceptive pills were being used by only 8 (3.36%) women (Table-2). 203 (85.29%) women used contraceptives to limit their families while 35 (14.71%) used them for the purpose of spacing the birth of the next child (Table-3).

Another analysis revealed that out of 238 women who used some kind of contraception, 195 (81.93%) women provided cafeteria approach to select the desired method while only 43 (18.07%) women said that no such choice was given to them. Majority of contraceptive user took contraceptives from primary health centre (41.18%) followed by ANM (20.17%), community health centre (18.49%), anganwadi worker /ASHA (12.61%) and a private source (7.55%).

**Table 1**  
**Distribution of women according to contraceptive practices**

Usage of contraception	Number	Percent
Users	238	43.27
Non-users	312	56.73
<b>Total</b>	<b>550</b>	<b>100</b>

**Table 2**  
**Distribution of users according to method of contraception**

Method of contraception	Number	Percent
Tubectomy	120	50.42
Vasectomy	12	5.04
Intra uterine devices	15	6.30
Oral contraceptive pills	8	3.36
Condoms	83	34.88
<b>Total</b>	<b>238</b>	<b>100</b>

**Table 3**  
**Distribution of users according to purpose of contraception**

Purpose of contraception	Number	Percent
Limiting births	203	85.29
Spacing births	35	14.71
<b>Total</b>	<b>238</b>	<b>100</b>

**Table 4**  
**Distribution of users according to source of contraceptive supply**

Source of contraceptive	Number	Percent
AWW / ASHA	30	12.61
ANM	48	20.17
PHC	98	41.18
CHC	44	18.49
Private	18	7.55
<b>Total</b>	<b>238</b>	<b>100</b>

#### IV. DISCUSSION

In present study, married women of 15 to 49 years were included. Similar reproductive span was taken by recent national level surveys (NFHS-3<sup>6</sup>, DLHS-3<sup>9</sup>). Majority of married women were between 20-39 years age group which is the most crucial in reproductive span.

Overall prevalence of modern contraceptive methods among women aged 15-49 years was found to be 43.27% and the finding were very close to NFHS-III data for Rajasthan<sup>10</sup> (44.4%) and previous studies by Kumar et al<sup>11</sup> at Panchkula, Haryana (39.3%), Chandhick et al<sup>12</sup> (45.2%) and Banerjee<sup>13</sup> in Hooghly district, West Bengal (39.5%). The contraceptive prevalence in present study was much less as compared to previous studies by Balaiah et al<sup>14</sup> in central Mumbai, Maharashtra (51.9%), Bhasin et al<sup>15</sup> at Delhi (59.8%), Kulkarni<sup>16</sup> at North Goa district (48.4%), Maurya et al<sup>17</sup> at Nicobar Island (65.71%), Patro et al<sup>18</sup> at Delhi (63.3%), Murarkar and Soundale<sup>19</sup> at Ambajogai, Beed, Maharashtra (48.63%), Balgir et al<sup>20</sup> at Patiala, Punjab (53.84%), Sherin Raj et al<sup>21</sup> in Rajasthan (49.5% to 57.8%) and Mishra et al<sup>22</sup> at Uttar Pradesh (60.2%). The contraceptive prevalence in present study was much more as compared to previous studies by Puri et al<sup>23</sup> at New Delhi (34.6%), Kumar et al<sup>24</sup> at south Delhi slums (32.5%), Bhattacharjee and Datta<sup>25</sup> at Siliguri subdivision of Darjeeling district (36.7%).

It was observed that the most commonly used contraceptive method was tubectomy (50.42%) in present study and similar finding was observed in DLHS-III data for Rajasthan (40.5%) previous studies by Kumar et al<sup>11</sup> at Panchkula, Haryana (41.3%), Chandhick et al<sup>12</sup> (34.2%), Banerjee<sup>13</sup> in Hooghly district, West Bengal (34.5%), Puri et al<sup>23</sup> at New Delhi (58.3%), Maurya et al<sup>17</sup> at Nicobar Island (73.19%), Patro et al<sup>18</sup> at Delhi (37%) . However, Bhasin et al<sup>15</sup> at Delhi (33.4%), Kumar et al<sup>24</sup> at south Delhi slums (10%) found condoms as most commonly used method. Bhattacharjee and Datta<sup>25</sup> at Siliguri subdivision of Darjeeling district (36.7%) found the oral contraceptive pills as most commonly used method.

Majority of women (85.29%) used these contraceptives to limit their families while 14.71% used it for the purpose of spacing the birth of the next child. About 41.18% women took contraceptives from primary health centre followed by ANM (20.17%), community health centre (18.49%), anganwadi worker or ASHA (12.61%) and private source (7.55%). The study revealed that out of the women who used some kind of contraception, 81.93% women were provided cafeteria approach to select the desired method of choice.

#### V. CONCLUSION

The contraceptive prevalence of modern methods was below the national and state average, there is a need for an effective education campaign among the study population. Lack of motivation and obstacles were the main causes of lower contraceptive prevalence for family planning which can be overcome by awareness and education campaign.

#### CONFLICT OF INTEREST

None declared till now.

## REFERENCES

- [1] Park K. Park's textbook of preventive and social medicine. 23<sup>rd</sup> ed. Jabalpur: BanarshidasBhanot; 2015.
- [2] National Population Stabilization Fund. JansankhyaSthirataKosh [Internet]. 2013 [last cited 2013 Nov. 19]. Available from: [http://jsk.gov.in/impactof\\_population\\_growth.asp](http://jsk.gov.in/impactof_population_growth.asp).
- [3] Potts M. The unmet need for family planning. *Sci Am*. 2000 Jan;88-93.
- [4] Suryakantha AH. Community medicine with recent advances. 3<sup>rd</sup> ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2014.
- [5] Annual Report of Department of Health & Family Welfare for the year of 2014-15. New Delhi: Ministry of health and family welfare. 2015. 371p.
- [6] International Institute for Population Sciences (IIPS). National Family Health Survey: Key indicators for India from NFHS-3 [Internet]. 2005-06 [last cited 2015 Jun. 19]. Available from: <http://www.rchiips.org/nfhs/pdf/India.pdf>
- [7] Singh RKN, Devi IT, Devi B, Singh MY, Devi N, Singh NS. Acceptability of contraceptive methods among urban eligible couples of Imphal, Manipur. *Indian J Community Med*. 2004; 29(1):13-7.
- [8] Census 2011 [Internet]. Available from: <http://www.census2011.co.in/data/village/80125-watika-rajasthan.html>
- [9] International Institute for Population Sciences (IIPS) India, Mumbai [Internet]. District Level Household and facility Survey (DLHS-3), factsheet India 2007-08 [cited on 24 Nov.2013]. Available from: <http://www.rchiips.org/pdf/rch3/state/India.pdf>
- [10] International Institute for Population Sciences (IIPS). National Family Health Survey: Key indicators for Rajasthan from NFHS-3 [Internet]. 2005-06 [last cited 2015 Jun. 19]. Available from: <http://www.rchiips.org/nfhs/pdf/Rajasthan.pdf>
- [11] Kumar R, Singh MM, Kaur M. Dynamics of contraceptive use in a rural community of Haryana. *Indian J Med Sci*. 1999; 53:201-11.
- [12] Chandhick N, Dhillon BS, Kambo I, Saxena NC. Contraceptive knowledge, practices and utilization of services in the rural areas of India (an ICMR task force study). *Indian J Med Sci*. 2003; 57:303-10.
- [13] Banerjee B. Socioeconomic and cultural determinants on acceptance of permanent methods of contraception. *J Fam Welf*. 2004; 50(1):54-8.
- [14] Balaiah D, Naik DD, Ghule M, Tapase P. Determinants of spacing contraceptive use among couples in Mumbai: A male perspective. *J Biosoc Sci*. 2005 Nov; 37:689-704.
- [15] 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.
- [16] Kulkarni MS. Women's exposure to mass media and use of family planning methods: A case study of Goa. *Indian J Community Med*. 2005; 30(1):17-8.
- [17] Maurya N, Sachdeva MP, Kalla AK. Contraceptive prevalence in an isolated population of Bay of Bengal. *Anthropologist* 2005; 7(1):53-6.
- [18] Patro BK, Kant S, Baridalyne N, Goswami AK. Contraceptive practice among married women in a resettlement colony of Delhi. *Health PopulPerspect Issues*. 2005; 28(1):9-16.
- [19] Murarkar SK, Soundale SG. Epidemiological correlates of contraceptive prevalence in married women of reproductive age group in rural area. *National Journal of Community Medicine*. 2011; 2(1):78-81.
- [20] Balgir RS, Singh S, Kaur P, Verma G, Kaur S. Contraceptive practices adopted by women attending an urban health centre in Punjab, India. *Int J Res Dev Health*. 2013 Aug; 1(3):115-9.
- [21] Sherin Raj T, Tiwari VK, Singh JV. Regional variations in unmet need of family planning in Rajasthan. *Health PopulPerspect Issues*. 2013; 36(1&2):26-44.
- [22] Mishra A, Nanda P, Speizer IS, Calhoun LM, Zimmerman A, Bhardwaj R. Men's attitudes on gender equality and their contraceptive use in Uttar Pradesh India. *Reprod Health*. 2014; 11(41):1-13.
- [23] Puri A, Garg S, Mehra M. Assessment of unmet need for contraception in an urban slum of Delhi. *Indian J Community Med*. 2004; 29(3):139-40.
- [24] Kumar S, Priyadarshni A, Kant S, Anand K, Yadav BK. Attitude of women towards family planning methods and its use: Study from a slum of Delhi. *Kathmandu Univ Medl J*. 2005; 3(11):259-62.
- [25] Bhattacharjee S, Datta S. Contraceptive use and its determinants in currently married women of tea gardens of Darjeeling, India. *Journal of the College of Community Physicians of Sri Lanka*. 2013 Jun; 18(1):10-8.