ABSTRACT

Introduction: National Family Planning Programme was launched in 1952, and India was the first country to adopt such programme. Reduction of birth rate and population stabilization was the main aim of this programme, but with the current status, this aim seems to be a complete failure. This study will help to evaluate the knowledge, attitude, and practice of women of rural area of central India, towards family planning.

Materials and Methods: This was a cross-sectional observational study. All participants were interviewed with the help of a predesigned questionnaire.

Results: Total 400 cases were interviewed. Contraceptive users were more in 30-40 years range (64.61%) and least in group < 20 years (41.17%). Illiterate females (18.75%) had the least contraceptive usage and graduated (69.76%) had maximum. 97.5% females were aware about contraceptive measures and media (43.07%) was major source. Only 56.25% participants showed a positive attitude towards family planning methods. 53.25% were contraceptive users. 41.31% opted tubal ligation, 21.59% oral contraceptive methods, and 14.08% male condoms. 46.75% were non-users of contraceptive methods. Reasons were eager to conceive (39.03%), husband’s denial (18.71%). Among contraceptive users, 51.17% have no side effects whereas 45.07% had backache or generalised weakness, 36.61% had a vaginal infection, 28.64% had menstrual problems.

Conclusion: The present study, clearly showed that having knowledge about family planning methods and practicing them in their routine life are two different things because practise is influenced by various socio-demographic factors. There is a need for a different approach toward the family planning programme.

Key Words: WHO, Family planning, Husband’s denial, Contraceptive

INTRODUCTION

According to World Health Organization (WHO), Family Planning is defined as “A way of thinking of individuals and couples and their living adopted by them voluntarily based upon their knowledge and attitude, promoting their health and family welfare and thus contributing to the social development of a country. Parenthood planning is an important and one of the significant aspect of it”.

National Family Planning Programme was launched in 1952, and India was the first country in the world to adopt such programme. Reduction of birth rate and population stabilization was the main aim of this programme, but with the current status, this aim seems to be a complete failure as projected population of India will be more than 1.5 billion by the year 2050, and every fifth birth in the world is an Indian. Each year approximately 55,000 women die in India due to pregnancy or childbirth-related complications. According to NFHS-3, around 30% of the fertility in India was unwanted, indicating a huge gap between the demand and supply of family planning measures. With different promotional activities by the government of India, awareness of contraception and family planning methods has significantly increased, but people of India being multi-linguistic, multi-religious, and multi-ethnic, have different levels of awareness and acceptance of methods of family planning. The study of Ethiopia, showed that having good knowledge about contraception does not necessarily mean the high con-
to assess the awareness and knowledge of various contraceptive practice’. It is thus, necessary to develop a special program to tackle the needs of different groups. Most of the women of reproductive age group have little or incorrect information about family planning methods. Even if they know some brand names of contraceptives, they do not know where to get them or how to use it. Even some women have false and misconception regarding these methods. This study will help to evaluate the knowledge, attitude, and practice of women of rural area of central India, towards family planning, to find the reasons for these unmet needs and factors affecting the outcome of family planning program and to have a better understanding of the situation in order to help the Government in the formulation of policies and modify its approach in this field.

AIMS AND OBJECTIVES

The aim of this study is to know about knowledge, attitude, and practice of Family Planning measures and explore the factors affecting the outcome of the family planning programme and to have a better understanding of the situation.

Objectives of this study:

- To assess the awareness and knowledge of various family planning methods
- Attitude of women regarding the usage of family planning methods and
- Current trends of practising different family planning method

MATERIAL AND METHODS

This was a cross-sectional observational study. It was conducted in the Dept. of OBGY at Datta Meghe Medical College, Shalinitai Meghe Hospital and Research Centre, Nagpur in collaboration with Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences, Wardha over a period of 9 months from 1st July 2019 – 31 March 2020.

Inclusion criteria

All married women in the reproductive age group (18-49 years) who attended the gynecology OPD (outpatient department) during the study period were selected as study subjects.

Exclusion criteria

- Unmarried women,
- Women who have undergone hysterectomy,
- All women in the antenatal period,
- Women in the post-partum period,
- Women in menopause,
- Women not willing to participate.

All participants as per inclusion and exclusion criteria, were included in the study. After taking their verbal consent and without breaching the respect and confidentiality and without affecting their course of treatment. Information was collected regarding their age, education, job profile, parity, knowledge about various contraceptive methods and their usage. They were also evaluated for different reasons for using and not using contraceptive methods. After the interview, they were given information about various contraceptive measures, suitable for their age group.

Statistical Analysis:

Statistical analysis was done by using SPSS software 23.0

RESULTS

Total 400 cases were interviewed with the predesigned questionnaire. All cases were in the age range from 18 years to 45 years with a mean age of 29.5 years. The maximum number of patients were in the age group of 20-30 years (152 out of 400) but users of contraception were more in the age group of 30-40 years (64.61%) and least in age group < 20 years (41.17%). Cases of almost all religions were included in this study. Hindu cases were more (221 out of 400), muslims were 88, buddhist were 64 and Christian were 25. Percentage of users of contraception in Hindu (60.63%), Buddhist (57.81%), and Christian (60%) were similar but in Muslim community least number of cases have contraception usage (29.54%). Knowledge of contraception increases with the education. Illiterate females (18.75%) had the least contraceptive usage whereas in cases who were graduated (69.76%) had maximum users. Among the study population, maximum were housewives (186), while others were doing agricultural work, labour work, and service job, but users of contraceptive measures were more in females having service jobs. Maximum females of the study had 1-2 children (229) but maximum users were in the group having 3 or more children, and the least users were seen in nullipara group.

Most of the females of study (97.5%) have heard about contraceptive measures through different sources like TV/Radio (43.07%), friends/relatives (30.25%) (table no 2), health professionals (23.07%). Maximum females have knowledge about male condoms (97.25%), oral contraceptives pills (97.5%), and female sterilisation i.e. tubal ligation (97.5%), but they have least knowledge about female condoms (2.5%), intradermal implants (1.25%) and natural methods (5.25%), whereas half of the study population knew about intrauterine devices (64.75%) and emergency contraception (46.15%). About 75% females of the study did not know about any non-contraceptive benefits of family planning methods.
When they were evaluated regarding their attitude towards family planning measures, 56.25% cases showed a positive attitude. Among them, 36% were interested for tubal ligation, 28.88% for oral contraceptive pills, and 22.66% were inclined for using male condoms. None of them showed their interest in using female condoms, intradermal implants, and emergency contraceptive methods.

213 patients (53.25%) of the study were using or had used in the past either of the contraceptive methods. Maximum females opted for a permanent method of family planning i.e. tubal ligation 41.31%. 21.59% were using oral contraceptive methods, and 14.08% were using male condoms. Whereas 7.98% used intrauterine devices, 6.1% used injectable contraception and only 5.16% had opted for male sterilisation i.e. vasectomy. Among these 213 patients, 48.82% and 25.35% used contraceptive methods for limitation of birth and spacing of children, respectively. 15.02% females were using contraceptive methods only because their husbands allowed them.

Among 187 females who had never used contraceptive methods, 73 patients (39.03%) were eager to conceive, whereas 38 females (18.71%) did not get permission from their husbands for using any methods of contraception. Other reasons for not using contraceptives were misconception regarding effects of contraception, friends or relative pressure (like the mother in law), not allowed by religion.

Among 213 contraceptive users, 109 (51.17%) did not have any side effects. 45.07% females had complaints of backache or generalised weakness, 36.61% had vaginal infection, 28.64% had menstrual problems, 22.06% had weight problems, 14.08% experienced behavioural changes after using contraceptive methods, and 11.27% suffered unsatisfied sexual life.

**DISCUSSION**

In our study among 400 females, maximum were in age group of 20-30 years (152 out of 400), but maximum contraceptive users were in the age group 30-40 years (64.61%), which is similar to the study of Qazi M et al. where maximum patients were in age range of 21-30 years and contraception use was more in age group of > 30 years (73.8%). This may be because 20-30 years age group being a highly fertile group, most of the female, especially in rural area, have their children or completed their family by 30 years of age, thus willing to opt for family planning methods more readily. Contraceptive usage increases with the literacy. 69.76% and 60.78% usage was seen in females who were graduated and studied upto 12th class, respectively. These findings were similar to the study of Qazi M et al. where 87.23% graduate females were using contraceptive methods and in the study of Nayak AU et al., where all graduates were using contraceptive methods.

Housewives had least usage of contraception 48.38%, compared to working women, whereas in the study of Qazi M et al., 70% housewives were contraceptive users and 80-90% of working women were users of contraception. Increased contraception usage in working women may be because they have given the chance of decision making in family matters. 97.5% of our population study have heard about atleast one of the methods of family planning, which was similar to the study by Qazi M et al. and Manjeera LM et al. and Tizta et al. in which around 94%, 95.2% and 96% of participants have knowledge of at least one method of contraception, respectively. This increased awareness may be because of different promotional activities undertaken by Government.

Major source of information regarding family planning is media including TV and radio(43.07%), which is compared with the study of Nayak AU et al. television and radio were source of information for 56 and 25% of participants, whereas in the study of Kashyap P et al. television and radio were source for 54% and 25% of population. In our study, health professionals were source for 23.07% of participants, whereas in both these studies health professional accounts for 32% and 42% of source of information, respectively. Most of the participants had knowledge about male condoms(97.25%), oral contraceptive pills(97.5%), and tubal ligation (97.5%), which is much higher than studies of Qazi M et al. and Thapa P, et al. where participants had knowledge of condoms (85% and 89.6%), oral contraceptive pills (72% and 84.68%) and tubal ligation (68% and 62.7%) respectively. In our study, 56.25% participants showed positive attitude towards family planning methods, which is very less when compared to study of Qazi M et al., Thapa P, et al. which is 80% and 90.4%, respectively.

In our study, only 53.25% participants (213 out of 400) were practising different family planning methods which is much less when compared with the study of Qazi M et al. where 60% of participants were practising contraception whereas in the study of Zangmu Sherpa et al. 38.23% had never used contraceptive methods (i.e. usage is 62%). Among 213 contraceptive users, tubal ligation was the preferred choice of contraception 41.31%. Other methods used were oral contraceptive methods (21.59%), male condoms (14.08%), intrauterine devices (7.98%), injectable contraception (6.1%) and male sterilisation i.e. vasectomy (5.16%). Whereas in the study of Qazi M et al., 65.8% participants used condoms, 17.5% used oral contraceptive pills, and 16.7% used intrauterine devices and in the study of Nayak AU et al., 59% used condoms, 18% used oral contraceptive pills, 41% used intrauterine devices, 27% opted tubal ligation and 10% used injectable contraception. In the study of Thapa P et al., 14.1% participants used condoms and 14.1% used oral contraceptive pills, 6% used intrauterine devices, 18.5% opt-
ed tubal ligation, 35.6% used injectable contraception like depo-provera, and only 2.2% choose male sterilisation i.e. vasectomy.

In different studies, the choice of different contraception made by participants differed. This difference in usage may be influenced by the degree of availability, compliance, and consistency for using and different local government policies like giving incentives, free of cost or subsidised medicines. In our study limitations of birth (48.82%) and spacing of children (25.35%) were the main reasons behind using contraception and the role of the husband in contraception usage played an important role (15.02%). In the study of Qazi M et al., around 60% female choose contraception as it is easily available and comfortable to use and in 50% cases, husband made the decision. In the study of Nayak AU et al., 41% participants used contraception for spacing, and 32% used for stopping birth. In our study, 187 participants (46.75%) were not using any of the contraceptive methods and reasons given by them were eager to conceive (39.03%), not allowed by husband (18.71%), 13.36% females had various misconception regarding effects of contraceptives on their health and 11.22% had pressure from relatives (like the mother in law). In the study of Qazi M et al. and Nayak AU et al., reasons for not using contraception were lack of proper knowledge in 50% and 44% cases whereas, husband pressure was seen in 13.8% and 14% cases, respectively. In the study of Jahan U et al., 32.1% stopped using contraceptive methods due to lack of knowledge in 42.4% cases and in 60.55% cases they desired for next child.

Side effects among contraceptive users were seen as menstrual problems (28.64%), weight problems (22.06%), generalised weakness (45.07%), vaginal infection (36.61%) and unsatisfied sexual life (11.27%). These are the high incidences of side effects when compared with findings of study by Qazi M et al., where 25% participants had menstrual disorder, 10% cases had weight problems and 7% had behavioural problems.

**CONCLUSION**

The present study, clearly showed that having knowledge about family planning methods and practicing them in their routine life are two different things. Awareness and knowledge about contraception are increasing due to various promotional activities done by government and NGOs via media, different camps, putting large hoardings. But attitude and practice are influenced by various socio-demographic factors, where education and religion plays very important role. Being a patriarchal society, the role of the husband is also very important. Since family planning methods are not only for limitation of birth and wellbeing of a woman but it is for the welfare of each family of society, strengthening the economy of the country and also for the ecological balance of the earth. Thus, family planning programmes should be a multidisciplinary activity. It should involve educating both husband and wife and other family members, empowering women for decision making, increasing literacy rate, and strengthening the health system of the country, so that misconception regarding contraception can be corrected by health workers and allied people as and when required.

Though this study involved a small group of participants, it provided insights into the local contexts related to family planning knowledge, attitudes, perception and practices and also highlighted the need for a different approach toward family planning programmes.

**Acknowledgement:** Authors acknowledge the immense help received from the scholars whose articles are cited and included in references of this manuscript. The authors are also grateful to authors/editors/publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed.

**Conflict of interest:** The authors declare that there is no conflicts of interest.

**Financial support:** none

**Ethical approval:** This was a cross sectional observational study and it was approved by the ethical committee of the institute and has been performed.

**REFERENCES**

1. Park K. Demography and family planning. Text book of preventive and social medicine, 21st Ed: Jabalpur, M/s BanarsidasBhanot Publishers; 2011:443,445,447,454.
2. Renjhen P, Kumar A, Pattanshettty S, SagirA,Samarasinghe CM. A study on knowledge, attitude and practice of contraception among college students in Sikkim,India. J Turkish Ger Gynecol Assoc 2010;11:78-81.
3. Khan, Moizuddin M., S.T. Shahauddin, and G. ShroffAjit. “Study of knowledge and practice of contraception in urban slum community, Mumbai.” International Journal of Current Medicine and Applied Science, Vol. 3, No.2, 2014, pp. 35-41.
4. Vaidyanathan, Anjana, et al., “A comparative study on the contraceptive methods preferred in rural and urban areas in Tamil Nadu.” Stanley Medical Journal, Vol. 1, No. 2, 2014, pp. 4-8.
5. Rai SK, Dasgupta R, Das MK, Singh S, Devi R, Arora NK. Determinants of utilization of services under MMJSSA scheme in Jharkhand ‘Client perspective’s: A qualitative study in a low performing state of India. Ind J Pub Health. 2011;55:252-9.
6. Mahawar P, Anand S, Raghunath D, Dixit S. Contraceptive knowledge, attitude and practices in mothers of infant: a cross-sectional study. Natl J Community Med. 2011;2:105-7
7. Tilahun T, Coene G, Luchters S, Kassahun W, LeyE, Temmerman M, et al.. Family Planning Knowledge, Attitude and Practice among Married Couples in JimmaZone,Ethiopia. PLoS One 2013;8:e61335.
8. Qazi M, Saqib N, Gupta S. Knowledge, attitude and practice of family planning among women of reproductive age
group attending outpatient department in a tertiary centre of Northern India. Int J Reprod Contracept Obstet Gynecol2019;8:1775-83.

9. Nayak AU, Ramakrishnan KG, Venkateswar KN, Vijayshree M. Assessing the knowledge, attitude and practice of contraception in rural India: a necessary step in achieving population control. Int J Reprod Contracept Obstet Gynecol2017;6:3328-31.

10. Manjeera LM, Neetha SR. Contraceptive practices among reproductive age group of women in Justice KS Hegde Medical College Hospital, Mangalore. Int J Reprod Contracept Obstet Gynecol, 2013;2(1):39-46.

11. Tilahun T, Coene G, Luchters S, Kassahun W, Leye E, Temmerman M et al.. Family planning knowledge, attitude and practice among married couples in Jimma Zone, Ethiopia. PloS one. 2013;8(4):e61335.

12. Kashyap P, Prasad S. Assessing the Knowledge, Attitude and Practice of Contraception in Semi-Urban Area in India: A Qualitative Assessment of Contraceptive Usage. Int J Med Res Health Sci 2018, 7(10): 150-154

13. Thapa P, Pokharel N, Shrestha M(2018) Knowledge, Attitude and Practices of Contraception among the Married Womenof Reproductive Age Group in Selected Wards of Dharan Sub-Metropolitan City. J Contracept Stud Vol.3 No.3:18

14. Sherpa S Z, Sheilini M, Nayak A.Knowledge, Attitude, Practice and Preferences of Contraceptive Methods in Udupi District, Karnataka. jfrh.tums.ac.ir September 2013, Vol. 7, No. 3, 115

15. Jahan U, Verma, Gupta S, Gupta R, Mahour S, Kirti N et al.. Awareness, attitude and practices of family planning methods in a tertiary care hospital. Uttar Pradesh, India, Int. J Report Contracept Obstet Gynecol. 2017;6:500-6.

| Age in years | Number of patients | Users of Contraception | Percentage |
|--------------|--------------------|------------------------|------------|
| < 20 years   | 34                 | 14                     | 41.17%     |
| 20-30 years  | 152                | 66                     | 43.42%     |
| 30-40 years  | 130                | 84                     | 64.61%     |
| >40 years    | 84                 | 49                     | 58.33%     |

| Religion      | Number of patients | Percentage |
|---------------|--------------------|------------|
| Hindu         | 221                | 60.63%     |
| Muslims       | 88                 | 29.54%     |
| Buddhist      | 64                 | 57.8%      |
| Christians    | 25                 | 60%        |
| Others        | 2                  | 50%        |

| Educations    | Number of patients | Percentage |
|---------------|--------------------|------------|
| Illiterate    | 64                 | 18.75%     |
| Upto 5th class| 58                 | 46.55%     |
| Upto 10th class| 182             | 61.54%     |
| Upto 12th class| 51               | 60.78%     |
| Graduation    | 43                 | 69.76%     |
| Postgraduation| 2                  | 50%        |

| Occupation    | Number of patients | Percentage |
|---------------|--------------------|------------|
| House wife    | 186                | 48.38%     |
| Agriculture work| 94              | 54.25%     |
| Labourer      | 84                 | 54.76%     |
| Service job   | 36                 | 72.22%     |

| No. of children| Number of patients | Percentage |
|---------------|--------------------|------------|
| Nullipara     | 47                 | 34.04%     |
| 1-2 children  | 229                | 43.23%     |
| 3 or more     | 124                | 79.03%     |

| Knowledge and awareness | Number of patients | Percentage |
|-------------------------|--------------------|------------|
| Heard about family planning measures | 390 | 97.5% |

| Source of information   | Number of patients | Percentage |
|-------------------------|--------------------|------------|
| Radio/ TV               | 168                | 43.07%     |
| Newspaper               | 12                 | 3.07%      |
| Friends/Relatives       | 118                | 30.25%     |
| Health professional     | 90                 | 23.07%     |
| Others                  | 12                 | 3.07%      |

| Contraceptive methods known | Number of patients | Percentage |
|-----------------------------|--------------------|------------|
| Male Condom                 | 389                | 97.25%     |
| Female condoms              | 10                 | 2.5%       |
| Oral contraceptive pills    | 390                | 97.5%      |
| Intrauterine devices(copper T) | 259          | 64.75%     |
| Intradermal implants        | 5                  | 1.25%      |
| Natural methods             | 21                 | 5.25%      |
| Female sterilization        | 390                | 97.5%      |
| Male sterilization          | 280                | 70%        |
| Emergency contraception     | 180                | 46.15%     |
| No idea                    | 10                 | 2.5%       |

| Knowledge of non-contraceptive benefits of family planning methods | Number of patients | Percentage |
|---------------------------------------------------------------------|--------------------|------------|
| Prevention from STD                                                | 95                 | 23.75%     |
| Protection against cancer                                          | 87                 | 21.75%     |
| Improvement of health                                              | 100                | 25%        |
| No idea                                                            | 300                | 75%        |
Table 3: Attitude towards use of family planning methods

| Practice family planning methods (in near future) | Number of patients | Percentage |
|--------------------------------------------------|--------------------|------------|
| Yes                                               | 225                | 56.25%     |
| No                                                | 175                | 43.75%     |

Encourage others for using family planning methods

| Yes | 215 | 53.75% |
| No  | 185 | 46.25% |

Type of method

| Condom | 51 | 22.66% |
| Female condoms | 00 | 00 |
| Oral contraceptive pills | 65 | 28.88% |
| Intrauterine contraceptive device | 14 | 6.22% |
| Intradermal implants | 00 | 00 |
| Injectable contraception | 7 | 3.11% |
| Natural method | 4 | 1.78% |
| Female sterilization | 81 | 36.0% |
| Male sterilization | 3 | 1.33% |
| Emergency contraception | 00 | 00 |

Table 4: Different family planning methods using currently / used in the past.

| Contraceptive methods | Number of patients | Percentage |
|-----------------------|--------------------|------------|
| Yes                   | 213                | 53.25%     |
| No                    | 187                | 46.75%     |

Contraceptive methods

| Condoms | 30 | 14.08% |
| Female condoms | 00 | 00 |
| Oral contraceptive pills | 46 | 21.59% |
| Intrauterine contraceptive device | 17 | 7.98% |
| Injectables | 13 | 6.10% |
| Intradermal implants | 00 | 00 |
| Natural method | 8 | 3.75% |
| Female sterilization | 88 | 41.31% |
| Male sterilization | 11 | 5.16% |
| Emergency contraception | 00 | 00 |

Reasons for using contraception

| Limitation of birth | 104 | 48.82% |
| Spacing of children | 54  | 25.35% |
| Husband's decision | 32  | 15.02% |
| Comfortable and easy to use | 9  | 4.22% |

Table 5: Side effects of contraceptives methods.

| Side effects | No. of patients (out of 213 patients) | Percentage |
|--------------|---------------------------------------|------------|
| No side effects | 109 | 51.17% |
| Menstrual problems | 61 | 28.64% |
| Weight gain/ weight loss | 47 | 22.06% |
| Bitchache/ generalised weakness | 96 | 45.07% |
| Vaginal infection | 78 | 36.61% |
| Unsatisfied sexual life | 24 | 11.27% |
| Behavioural disturbances | 30 | 14.08% |
| Others | 10 | 4.69% |

Reasons for not using contraception

| Reason | 187 patients | Percentage |
|--------|--------------|------------|
| Willing to conceive | 73 | 39.03% |
| Not allowed by husband | 35 | 18.71% |
| Misconception regarding effects of contraception | 25 | 13.36% |
| Relatives/ friends pressure (eg. Mother in law) | 21 | 11.22% |
| Not allowed by religion | 16 | 8.55% |
| Non availability | 7 | 3.74% |
| No idea about any contraception | 10 | 5.34% |