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# **Original Research Article**

# Awareness regarding birth spacing family planning methods among antenatal mothers

## Vidhya Rajan\*, Saraswathi Kandasamy

Department of Obstetrics and Gynecology, Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu, India

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### \*Correspondence: Dr. Vidhya Rajan,

E-mail: vidhyarajan3@gmail.com

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#### **ABSTRACT**

Background: According to WHO, the ideal interval between two pregnancies is 24 months. In India the contraceptive needs of young couples especially in the area of spacing pregnancies is largely unmet. Hence this study is undertaken to know the pre-existing knowledge of our antenatal population regarding contraceptive methods available for birth spacing. Aim of the study was to the knowledge and attitude regarding birth spacing family planning methods among antenatal mothers.

Methods: It was a cross sectional study. Antenatal mothers attending the antenatal outpatient department of SBMCH, who are intending to have another child are invited to participate in this study. With informed consent, they are asked to fill a questionnaire, with questions regarding their knowledge and attitude towards the advantages and disadvantages of various contraceptive methods for birth spacing. The results of the study were analyzed by statistical analysis inrespect to various demographic factors of the population.

Results: Total 92% of antenatal mothers were aware of health benefits associated with birth spacing. Yet only 45% were willing to adopt a method of contraception. Condoms is the most commonly preferred method for contraception (33.3%) and fear for side effects (43%) is the most common reason for not accepting a particular method of contraception.

Conclusions: Though the awareness regarding the need and methods available for birth spacing methods of are widely prevalent in our urban based population, there is still a high percentage of mothers with misconceptions regarding the side effects associated with the birth spacing methods. Hence health education and counselling would improve the acceptance of contraceptive methods for birth spacing.

Keywords: Birth spacing, Contraception, Birth interval

### **INTRODUCTION**

Short interval between a pregnancy followed by a live birth is associated with many adverse maternal and fetal outcomes.1 There is increased incidence of miscarriage, maternal anemia, maternal death, low birth weight, preterm birth.<sup>2</sup> According to World health organisation, the ideal interval between two pregnancies is 24 months which is associated with good maternal and perinatal outcomes. This is the ideal period for correcting nutritional losses of the previous pregnancy and lactation.3 It gives adequate time for the mother to recover from the physical, mental impact of the previous pregnancy. It also makes exclusive breast feeding for 6 months and continued breast feeding till two years a possible way of care for the infant. It has been estimated that if spacing between two pregnancies is 3 years in all pregnancies, we could reduce the under 5 mortality by 1.6 million.4

In Asia, studies have shown that the median birth interval at birth order two is 35 months.<sup>5</sup>

In India the contraceptive needs of young couples especially in the area of spacing pregnancies is largely unmet. The unmet contraceptive method is directly found to be a reason for short birth Intervel. The knowledge regarding the health benefits of birth spacing, and the methods available for birth spacing is largely unknown. The antenatal period provides a great window of opportunity when the young mothers will come in contact with health care providers during which health education can be provided regarding the need, benefits and methods available for birth spacing. Hence this study is undertaken to know the level of pre-existing knowledge of our antenatal population regarding various contraceptive methods available for birth spacing, their advantages and limitations.

#### **Objectives**

Objectives were to identify the prevalence of awareness regarding health benefits of birth spacing among the antenatal mothers; to identify the prevalence of awareness regarding various contraceptive methods available for birth spacing and the willingness to follow a particular method and to identify the knowledge regarding the side effects of various contraceptive methods available for birth spacing.

#### **METHODS**

### Type of study

Cross sectional.

#### Study place

Sree Balaji Medical College and Hospital.

### Study duration

October 2019 to October 2020.

### Sample group

### Inclusion criteria

Low risk antenatal mothers who would like to have another child were included.

### Exclusion criteria

Antenatal mothers in second or third pregnancy who intend not to have another child were excluded.

### Procedure

Antenatal mothers attending the antenatal outpatient department of Sree Balaji Medical College and Hospital who are intending to have another child are invited to participate in this study. After getting their informed

consent, they are asked to fill a questionnaire, with various questions regarding their knowledge and attitude regarding, the need, benefits, advantages and disadvantages of various contraceptive methods available for birth spacing. For women who can't read, the questionnaire will be explained by a trained health care professional. Their answers will be noted and tabulated.

### Ethical approval

The study was submitted to the institute's ethical committee and the approval was obtained.

### Statistical analysis

The results of the study were tabulated and analyzed by statistical analysis and statistical significance in respect to various demographic factors of the population was studied.

#### **RESULTS**

In our study participants 98% had education up to 10th standard and all had primary education.

Out of the 200 women who participated in the study, 92% were aware of the health benefits of spacing between two pregnancies (Table 1).

Table 1: Awareness regarding health benefits of birth spacing.

Variables	No of study participants
Birth spacing is beneficial to mother and baby - yes	184
Birth spacing is beneficial to mother and baby- don't know	16

Total 61% of mothers wanted to delay their next pregnancy by two to three years 9% wanted to delay next pregnancy by more than five years (Table 2).

Table 2: Preferred birth interval.

Spacing interval	No of participants (%)
1 to 2 years	5 (2.5)
2 to 3 years	122 (61)
3 to 4 years	33 (16.5)
4 to 5 years	22 (11)
More than 5 years	18 (9)

Most of the mothers were aware of more than one type of contraception as a mode of birth spacing.

Regarding the modes of contraception, condoms, pills, intrauterine devices (IUCDs) were the most common methods of contraception the mothers were aware

Only 12% were aware of injectable progesterones as a method of contraception (Table 3).

Yet, only 45% of pregnant mothers were willing to adapt a method of contraception after delivery for birth spacing.

Table 3: Awareness regarding methods of contraception.

Contraceptive methods	No of mothers aware of the method (%)
Intrauterine devices	180 (90)
Hormonal pills	138 (69)
Progesterone injectables	24 (12)
Natural methods of contraception	148 (74)
Condoms	194 (97)

The apprehension regarding side effect was more prevalent with birth spacing methods in as many as 90% of the population.

Of the women, who were willing to follow hormonal pills, 32% were apprehensive of taking the tablets regularly (Table 4).

Table 4: Acceptance of various methods of contraception.

Preferred method of contraception	No of participants (90/200) (%)
Condoms	30 (33.3)
Hormonal pills	20 (22.2)
IUCDS	24 (26.7)
progesterone injectables	4 (4.4)
Natural method of contraception	12 (13.3)

Total 29% of total the total study participants considered heavy menstrual bleeding as a common and troublesome side effect of Copper T insertion (Table 5).

Table 5: Reasons for not following a contraceptive method.

Reason for not following a contraceptive method	No of study participants (110/200) (%)
Fear of side effects	47 (43)
Not accepted by the partner	22 (20)
Not accepted by close family members	27 (24.5)
Difficult to access	4 (3.7)
Cost factor	10 (9.01)

Discussing with friends and relatives is a major source of information followed by counselling by health care workers (Table 6).

Table 6: Source of information.

Source of information	No of study participants (%)
Relatives	34 (17)
Friends	52 (26)
Health care workers	48 (24)
Printed media	24 (12)
Visual media	26 (13)
Education	16 (8)

#### **DISCUSSION**

Various studies have been conducted to know the preexisting knowledge about the various contraceptive mothers among antenatal mothers in our population at there is a wide range of difference between the findings of these studies depending upon the population under study the age education and social economic status. Since in our study most of the mothers belong to urban population with elementary education completed, 92% of mothers were aware of the benefits of birth spacing. This is in accordance with the studies that showed women with economic independence were able to plan their pregnancies better.<sup>7</sup>

In the study by sangavi et al the awareness regarding health benefits of birth spacing was 60%. 8 In the study by Utoo et al, only 39.3% were aware of contraceptive methods whereas in our study, almost all the pregnant mothers were aware of contraceptive methods and most of them were aware of more than one method of contraception.9 The acceptance rate of birth spacing was 45% in our study, which is in accordance with the study done by Minakshi et al, where the practice rate of contraception was 42.85% whereas in a study by Patel et al. the acceptance was only 15%. The awareness regarding In our study the source of information was mainly discussion with friends and relatives followed by health care workers whereas in Minakshi et al it was health care workers who were the main source of information.  $^{10}$ 

The high acceptance of condoms innour population is similar to the study by Kruthika et al.<sup>11</sup> The apprehension regarding side effects of copper T is high in our population leading to its low acceptance which is in line with the previous study by Gadre as et al.<sup>12</sup> And many women quote the fear of difficulty in conceiving in future as the reason for not opting PPIUCD.<sup>13</sup>

Progesterone injectable which is a very effective method of ccontraception.<sup>14</sup> Yet the awareness regarding this contraception is still very low among our study population. This high level of prevalence of misconceptions and fear regarding the side effects of and lack of knowledge need strong commitment from health policy makers in implementing the reversible long-term contraceptives in a successful manner.<sup>15</sup>

#### Limitations

The sample population in our study mostly comes from the urban women with basic education. Hence the study results may show high awareness about the contraceptive methods. Further study comprising women from both urban and rural population may give an exact measure of the awareness of our antenatal mothers regarding birth spacing methods.

#### CONCLUSION

Our study shows that the awareness regarding the need for birth spacing and the methods available are high in our population probably due to the increasing female literacy rate and sample being taken predominantly from urban population. Yet the increased misconceptions about the various modes of contraception is also widely prevalent. Proper health education and awareness programmes would help to widespread practice of birth spacing contraceptive methods that would improve the maternal and infant health in long-term.

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Institutional Ethics Committee

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