

Knowledge and practice of periodic abstinence among women in India

Begum Shahina^{1,2*}, Dwivedi Sada Nand¹, Mittal Suneeta¹, Pandey Arvind³

¹All India Institute of Medical Sciences, New Delhi, India

²National Institute for Research in Reproductive Health, Mumbai, India;

*Corresponding Author: shahina_appe@yahoo.com

³National Institute of Medical Statistics, New Delhi, India

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ABSTRACT

The use of contraceptive method to avoid pregnancy is a multifaceted phenomenon. Worldwide, 20 percent of married women of reproductive age are currently using periodic abstinence. To assess the knowledge and practice of periodic abstinence among currently married pregnant women, data were collected from the pregnant women attending the Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi, India. One thousand three hundred and thirty one (1331) currently married pregnant women were interviewed face-to-face. Approximately 29.3 percent of women were aware of the abstinence method, 11.5 percent women had history of using it. In-depth finding shows that 84.9 percent women did not have correct knowledge of fertile window of a menstrual cycle. Counseling about the correct fertile window of a menstrual cycle may increase the effectiveness of methods and hence reduce the incidence of unwanted pregnancies.

Keywords: Contraceptive; Natural Method; Rhythm; Safe Period Method; Traditional Method

1. INTRODUCTION

The choice of modern or traditional contraceptive method is a multifaceted phenomenon. Worldwide, 20 percent of married women of reproductive age are currently using a periodic abstinence [1]. In India, 5 percent of currently married women are relying on periodic abstinence [2]. Periodic abstinence is a method where couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to become

pregnant. Women are potentially fertile only 6 to 8 days of a menstrual cycle but how to identify these days is very important [3]. The traditional and easy formula is to keep track of length of menstrual period for at least six cycles and then subtract 11 days from the longest cycle and 18 days from shortest one to get the fertile window of a menstrual cycle [4]. The methods indicate that the fertile window may vary among women according to theirs' menstrual cycles [5]. To overcome this problem some researchers proposed the fixed duration of fertile window, *i.e.* from 9th to 19th days [4], 8th to 19th days [6], and 10th to 17th days [7] of a menstrual cycle. Among these proposed fertile window, method from 9th to 19th days is considered as standard days method [4] and it is 95 percent effective when used correctly [8]. There was lack of correct knowledge of fertile window period of a menstrual cycle among women [6,9]. The percent of users with correct knowledge of the fertile period varies from 8% to 91% [10]. In India, there has been little research into women's knowledge and understanding of the fertile period of a menstrual cycle. The present paper presents the knowledge of fertile window of a menstrual cycle among women who had heard of periodic abstinence and its use.

2. METHODS

Data were collected from 1331 currently married pregnant women attending the clinics of Obstetrics and Gynaecology at the All India Institute of Medical Sciences (AIIMS), New Delhi. Women who consented to participate in a study on unwanted pregnancies were interviewed face-to-face using a structured questionnaire which includes demographic, socio economic characteristics and birth history. Women were asked whether they had heard of periodic abstinence and if yes, the knowledge of fertile window of a menstrual cycle. The responses were

recorded as verbatim and further categorized as having correct knowledge of fertile window considering from 9th to 19th days, *i.e.* standard method [4] and also duration containing this interval.

3. RESULTS

3.1. Awareness of Periodic Abstinence

Out of 1331 currently married pregnant women, 390 (29%) had heard of the periodic abstinence. Significantly higher percentage (32.6%) of women aged 25 or more years were aware of the periodic abstinence method than that of women aged less than 25 years (21.6%). As the year of schooling increased the knowledge of the safe period method also significantly increased. Significantly more (43.9%) of working-women had heard of safe period method than non-working women (25.9%). Awareness of periodic abstinence method significantly decreased with increased in parity. Significantly higher proportions of ever users of modern family planning methods heard of periodic abstinence than their counter-

parts.

3.2. Correct Knowledge of Fertile Window of a Menstrual Cycle

Table 1 presents accuracy of the knowledge of fertile window of a menstrual cycle. It is evident that most of the women (96.6 percent) acquired inaccurate knowledge of fertile window. Higher proportion of women aged 25 years or more, schooling more than 12 years, working, with no living children and ever users of any modern family planning methods had correct knowledge of fertile window than their counterparts.

3.3. Ever User of Periodic Abstinence Method

It was found that 11.5 percent had ever used periodic abstinence (**Table 1**). The history of use of periodic abstinence was common in women aged 25 years or more (13.2%), years of schooling more than 12 (19.4%), working (17.8%), belong to nuclear family (13.5%) and

Table 1. Percent distribution of women by awareness, correct knowledge and practice of periodic abstinence according to selected background characteristics.

Background characteristics	Awareness of method N [% (95% CI)]	Correct knowledge of method N [% (95% CI)]	Ever used method N [% (95% CI)]
Current age (years)			
<25	87 [21.6 (17.6, 25.7)]	10 [2.5 (1.0, 4.0)]	30 [7.5 (4.9, 10.0)]
≥25	303 [32.6 (29.6, 35.6)]	50 [5.4 (3.9, 6.8)]	123 [13.2 (11.1, 15.4)]
Years of schooling			
0 - 4	36 [13.5 (9.4, 17.6)]	4 [1.5 (0.0, 3.0)]	21 [7.9 (4.6, 11.1)]
5 - 9	57 [20.1 (15.5, 24.8)]	6 [2.1 (0.4, 3.8)]	24 [8.5 (5.2, 11.7)]
10 - 12	118 [26.7 (23.4, 31.9)]	10 [2.4 (0.9, 3.8)]	38 [9.0 (6.2, 11.6)]
more than 12	176 [51.2 (45.4, 55.8)]	40 [11.1 (8.0, 14.6)]	70 [19.4 (15.6, 23.9)]
Religion			
Hindu	355 [29.4 (26.8, 31.9)]	54 [4.5 (3.3, 5.6)]	143 [11.8 (10.0, 13.6)]
Non-Hindu	35 [28.7 (20.7, 36.7)]	6 [4.9 (1.1, 8.8)]	10 [8.2 (3.3, 13.1)]
Working			
Yes	111 [43.9 (37.8, 50.0)]	24 [9.5 (5.9, 13.1)]	45 [17.8 (13.1, 22.5)]
No	279 [25.9 (23.3, 28.5)]	36 [3.3 (2.3, 4.4)]	108 [10.0 (8.2, 11.8)]
Parity			
0	106 [37.6 (31.9, 43.2)]	22 [7.8 (4.7, 10.9)]	23 [8.2 (5.0, 11.4)]
1	133 [30.6 (26.3, 35.0)]	17 [3.9 (2.1, 5.7)]	55 [12.7 (9.5, 15.8)]
2+	151 [24.6 (21.2, 28.0)]	21 [3.4 (2.0, 4.8)]	75 [12.2 (9.6, 14.8)]
Type of family			
Nuclear	194 [29.2 (25.7, 32.6)]	32 [4.8 (3.2, 6.4)]	90 [13.5 (10.9, 16.1)]
Extended	196 [29.4 (26.0, 32.9)]	28 [4.2 (2.7, 5.7)]	63 [9.5 (7.2, 11.7)]
Ever use modern contraceptive method			
Yes	235 [33.6 (25.6, 31.8)]	42 [5.1 (3.6, 6.6)]	118 [14.4 (12.0, 16.8)]
No	115 [22.4 (18.8, 26.1)]	18 [3.5 (1.9, 5.1)]	35 [6.8 (4.6, 9.0)]
Total	390 [29.3 (26.9, 31.7)]	60 [4.5 (3.4, 5.6)]	153 [11.5 (9.8, 13.2)]

ever user of any modern contraceptive methods (14.4%).

3.4. Knowledge of Fertile Window of a Menstrual Cycle

Table 2 shows that the knowledge of fertile window of a menstrual cycle varies among women who had heard of periodic abstinence. Higher percentage (31.5%) of women stated that first 10 - 15 days of a menstrual cycle are fertile period. Some of them considered first 19 to 21 days, from 7th to 20th days (0.3%), and from 8th to 23rd days (0.5%) as fertile window of a menstrual cycle, and some of them considered 5 to 7 days before menstruation (0.8%), 5 - 8 days before & after menstruation (6.4%) and first 8 days after menstruation (3.6%) as non-fertile period of menstrual cycle. Approximately, 5.9% of women had heard of the method but did not know the fertile window of a menstrual cycle. Only 60 women would not be at risk of unwanted pregnancy if they use it whereas 84.6 percent women would be at risk of unwanted pregnancy if they use this method because of incorrect

knowledge.

4. DISCUSSION

The present study showed that 29.3 percent of women had heard of periodic abstinence method. Majority of them were having inaccurate knowledge of fertile period of a menstrual cycle and 11.5 percent women had practiced it. The knowledge of fertile window of a menstrual cycle varies among women. Most of the women stated mid cycle of a menstrual cycle was a fertile window, while stating the day 14.4 percent women stated it wrongly, *i.e.* 10th - 18th days, 10th - 25th days, and 12th - 26th days.

Though some of the women had not accurate knowledge of fertile period but they would not be at risk of pregnancy because they abstain from sex for longer period like considering first 19 to 21 days of a menstrual cycle as fertile period, from 7th to 20th days, from 8th to 23rd days as fertile window of a menstrual cycle, while 5 to 7 days before menstruation, and first 8 days after men-

Table 2. Knowledge of fertile window (verbatim) among women who had heard of periodic abstinence method and are risk of pregnancy if they practice it.

Verbatim	Percent (N = 390)	At risk of pregnancy
5 to 7 days before menstruation are non-fertile period	3 (0.8)	No
5 to 8 days before & after menstruation are non-fertile period	25 (6.4)	No
10 days before & after menstruation are non-fertile period	3 (0.8)	Yes
First 5 to 8 days of a menstrual cycle are non-fertile period	14 (3.6)	No
First 10 to 17 days of a menstrual cycle are non-fertile period	22 (5.6)	Yes
6 th - 14 th days of a menstrual cycle are non-fertile period	1 (0.3)	Yes
15 th - 20 th days of a menstrual cycle are non-fertile period	1 (0.3)	Yes
2 days before & after menstruation are fertile period	3 (0.8)	Yes
5 - 7 days before & after menstruation are fertile period	30 (7.7)	Yes
10 days before & after menstruation are fertile period	4 (1.0)	Yes
First 8 days of a menstrual cycle are fertile period	58 (14.9)	Yes
First 10 - 15 days of a menstrual cycle are fertile period	123 (31.5)	Yes
First 17 - 18 days of a menstrual cycle are fertile period	3 (0.8)	Yes
First 19 - 21 days of a menstrual cycle are fertile period	11 (2.8)	No
5 th - 14 th days of a menstrual cycle are fertile period	2 (0.5)	Yes
7 th - 20 th days of a menstrual cycle are fertile period	2 (0.5)	No
8 th - 18 th days of a menstrual cycle are fertile period	1 (0.3)	No
8 th - 23 rd days of a menstrual cycle are fertile period	2 (0.5)	No
9 th - 16 th days of a menstrual cycle are fertile period	1 (0.3)	Yes
9 th - 19 th days of a menstrual cycle are fertile period	2 (0.5)	No
10 th - 18 th days of a menstrual cycle are fertile period	11 (2.8)	Yes
10 th - 25 th days of a menstrual cycle are fertile period	12 (3.1)	Yes
12 th - 26 th days of a menstrual cycle fertile period	33 (8.5)	Yes
Don't know	23 (5.9)	Yes

stration (3.6%) as non-fertile period of menstrual cycle. Approximately, 15 percent women stated first 8 days of menstruation cycle as fertile window because they believed that mouth of the uterus is open and increased the risk of conception [10]. Also this logic may be true for women (31.5%) who think that first 10 to 15 days of a menstrual cycle are fertile period. Sub-Saharan African women had low level of awareness of natural family planning methods and hence, wrong use of methods [9]. Wrong practice of method was also found in the present study. Among those who had heard of periodic abstinence, 7.7 percent (*i.e.* 30/390) of users were having correct knowledge of the fertile window, however 15.3 percent (60/390) women would not be at risk of unwanted pregnancy if they practice this method.

5. CONCLUSION

The decision to choose the periodic abstinence method as family planning method by couples may be influenced by many factors, but probably the most important factors are no side effects, no cost involvement, no threat to future fertility, no need to visit health facility, or dissatisfied with their past contraceptive modern methods [11]. It was found that women with higher education, belongs to nuclear family and history of using modern contraceptive method had correct knowledge and used periodic abstinence. The safe period method may be an effective strategy for reaching women who are not using any family planning method or are given limited choices for birth spacing or worried about side effects or experienced side effects of modern spacing method. It conveyed the need of intervention to provide the accurate knowledge to women so that those who select this method can practice it correctly. The counseling of safe period method may be incorporated relatively easily in national family program. Though this method cannot prevent the risk of sexually transmitted diseases but may help in reducing not only unwanted pregnancies but also repeated abortion to get rid of unintended pregnancies that may contribute enormously towards mothers and child health.

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