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Original Research Article

## The knowledge, attitude, practice of contraception in breastfeeding mothers

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### ABSTRACT

**Background:** The nationwide Family Planning Programme was started in India in 1952, making it the first country in the world to do so. In spite of this about 56% eligible couples in India are still unprotected against conception. Even after 63 years of national level family planning programme there exists a KAP- GAP i.e. a gap between the knowledge, attitude and practices regarding contraception. Hence this study to reassess where we stand and also use it as an opportunity to increase the awareness, sensitize and motivate the eligible couples for contraceptive use and decrease the KAP-GAP.

**Methods:** A structured questionnaire was given to postnatal breastfeeding mothers attending Outpatient department Obstetrics and gynecology and Pediatrics and postnatal wards of Sri Dharmasthala Manjunatheshwara College of Medical Sciences and Hospital, Dharwad from 1 November 2014 to 1 October 2015, and results tabulated.

**Results:** In this study 48.4% of the mothers knew that exclusive breast feeding could be used as a method of contraception. About 54.6% mothers used one or the other type of contraception during breastfeeding. Most practiced contraception being condom followed by Cu-T. A very small number of mothers considered oral contraceptive pills and injectable contraception in the form of Depot-Provera.

**Conclusions:** In most of the women attitude towards use of family planning method was satisfactory but there exists disparity between the knowledge and practice of contraception.

**Keywords:** Breastfeeding, Contraception, Family planning, KAP-GAP

### INTRODUCTION

Population explosion has been India's major problem since independence. It is a major obstacle to the overall progress of the nation. In addition to this, increasing number of births has a deleterious effect on the health of the mother, which in turn hinders social and economic uplift of the family.

High parity is related to increased maternal, perinatal and infant deaths and is also associated with nutritional

problems of both mother and child. Adoption of family planning methods is one of the best solutions to tackle this problem.

There exists a KAP-GAP i.e. a gap between the knowledge, attitude and practices regarding contraception. Good communication skills and behaviour change is required to bridge this gap. Therefore, it is important to stimulate social change and motivating them.

A WHO expert committee has defined five methods in 1975 to evaluate the success of Family Planning Programmes. One of them is the evaluation of knowledge, attitude, motivation and behaviour among people. In April 1976, the country framed its first-National population policy which is now running under RCH (Reproductive and child Health) program, so that each and every couple of India get aware of the need of the family planning methods.<sup>1,2</sup>

Objective to study the knowledge, attitude, practice of contraception in breastfeeding mothers, to study most prevailing contraception method used by mother with child less than 1 year, to educate them about various types of contraception its side effects and cost effectiveness and motivate them on practice of contraception and to estimate the KAP GAP.

## METHODS

Postnatal breastfeeding mothers attending out-patient department Obstetrics and Gynaecology and Paediatric and postnatal wards of Sri Dharmasthala Manjunatheshwara College of Medical Sciences and Hospital, Dharwad from November 2014 to October 2015. The study was observational study consisting of 500 postnatal breastfeeding mothers. The sample size for the study was 500 postnatal mothers.

### Inclusion criteria

- Married women between ages 15-45 years
- Primipara and multipara
- Women of children less than 1 year of age.

### Exclusion criteria

- Women wanting permanent method of contraception (tubectomy/ vasectomy)
- Mother in puerperium
- Non-cooperative women who refused to furnish necessary information.

The study instrument for the investigation was structured questioner. Part 1 include general information about the mother. Part 2 divide into section 1 and 2.

### Section 1

To assess the Knowledge of contraception. Questions are again divided into 6 main groups, questions were asked on basic contraception and on 5 types on contraception and the answer is categorized into 3 types to obtain a total of 20 elements.

### Section 2

To assess Attitude towards contraception. It is subdivided into 4 groups and the answers are categorized into 5 types to obtain a total of 17 elements

### Section 3

To assess contraception practiced. It was subdivided into 6 groups and questions are asked on the type of contraception practiced.

### Administration of questionnaire

Mothers who were post puerperal and having child less than 1 year attending the outpatient department of Obstetrics and Gynecology for their postnatal checkup and Pediatrics for vaccination of their child between November 2014 to October 2015 are questioned till the desired sample size is obtained.

Mothers were taken into the examination room with adequate space and ventilation. They are explained about the need and benefit of the study and what is expected from them. An informed consent is taken.

The questions were asked in the order of Proforma prepared and answers were ticked. Doubts of the mother were well explained, and questions were made clear to them. After a detailed question and answer session both the husband and wife were counseled regarding:

- Types of contraception available
- Suitable contraception for the mother at that point of time
- Side effects if any
- Mode of administration and duration of action
- The need for contraception and birth spacing.

Patient and husband after counseling are given a "Cafeteria approach" for the use of contraception. They are also followed up by phone calls to know the effectiveness of counseling.

### Statistical analysis

The collected data has been spread on the Microsoft Excel sheet and statistical software used was SPSS 20. Graphs and tables were generated using Microsoft Excel. Chi-square test has been used to find out the significance.

## RESULTS

Most of the patients in the study were of age 21-30 years, of which 58.5% between 21-25 years and 29.2% between 26-30 years.

There were no patients below 20 years, 8.4% were 31-35 years and 3.6% more than 35 years respectively.

In this study most of the mothers were 1-10 std educated. There was no mother who did not do schooling and no mother was educated to post graduate and professional level. Mothers who did 11-12 std were 7.6%.

Most mothers in this study were housewives 96.2%. Office going constituted 3.8% and none were professional workers.

Normal vaginal delivery constituted 29.6% caesarean 2.8% rest 67.6% were either vacuum or forceps assisted vaginal deliveries.

**Table 1: Age distribution of the study.**

Age	Numbers (%)
<20	none
21-25	294 (58.5)
26-30	146 (29.2)
31-35	42 (8.4)
>35	18 (3.6)
Total	500

**Table 2: Education status of the mother.**

Education	Number (%)
No schooling	00
1-10 std	446 (89.2)
11-12 std	38 (7.6)
Degree	16 (3.2)
Post graduate	00
Professional	00

**Table 3: Occupation of the mother.**

Occupation	Number (%)
Housewife	481 (96.2)
Office going	19 (3.8)
Professional	None

**Table 4: Mode of delivery.**

Mode of delivery	Number (%)
FTVD	338 (67.6)
FTND	148 (29.6)
LSCS	14 (2.8)

**Table 5: Parity of the mother.**

Parity	Number (%)
Primipara	272 (54.4)
Multipara	205 (41.0)
Grandmultipara	23 (4.6)

In this study primiparas were 54.4% and multipara were 41%. A small number were grandmultipara 4.6%.

In this study 49.6% mothers acquired knowledge about contraception from health professionals 44% from family and friends 12% from television and 12% from newspaper and a small number 1.6% from radio.

**Table 6: Source of information on contraception.**

Source of information	Number (%)
Health professional	248 (49.6)
Television	12 (2.4)
Radio	8 (1.6)
Newspaper	12 (2.4)
Friends and family	220 (44.0)

**Table 7: Contraceptive practices.**

Contraceptive practices	Numbers	Percentage
Contraceptive used	273	54.6
Contraceptive not used	227	45.4
Total	500	100.0

**Table 8: Association of education with contraceptive practices.**

Education	Contraceptive practiced	Contraceptive not practiced	Total
No schooling	-	-	
1-10 std	202 (45.3)	244 (54.7)	446
11-12 std	16 (42.1)	22 (57.9)	38
Degree	9 (56.3)	7 (43.8)	16
Postgraduate	-	-	-
Professional	-	-	-
Total	227 (45.4)	273 (54.6)	500
Inference	The association between education and contraceptive usage is not statistically significant with $\chi^2 = 0.928, df=2, p=0.629$		

**Table 9: Association of occupation with contraceptive practices.**

Occupation	Contraceptive practiced	Contraceptive not practiced	Total
Housewife	215(44.7)	266(55.3)	481
Office going	12(63.2)	7(36.8)	19
Professional	-	-	-
Total	227(45.4)	273(54.6)	500
Inference	The association between occupation and contraceptive usage is $\chi^2 = 2.513, df=1, p=0.113$ The odds of contraceptive usage is 2.121 times among office going women than housewives. Odds ratio=2.121 with 95% confidence interval=0.821 to 5.480 which is statistically not significant		

**Table 10: Knowledge of contraception among breastfeeding mothers.**

Knowledge	True	False	Don't know
Pregnancy can occur even in the absence of resumption of menses	154	226	120
Chances of pregnancy increases after resumption of menses	128	232	140
Contraception should be used during breast feeding	126	236	138
<b>Exclusive Breast Feeding</b>			
Exclusive Breast feeding means no other substitute other than milk for 6 months	131	215	154
In exclusive breast feeding, sometimes periods do not start	93	255	152
Can Exclusive Breast feeding be used as contraception	242	152	106
<b>Condoms</b>			
Can condoms be used as a contraceptive method	144	201	155
<b>Cu-T</b>			
Cu-T is a device which is placed in the:			
Uterus	242		
Tubes	139		
Ovary	119		
Vagina	0		
Abdomen	0		
Can Cu-T used as a contraceptive method	81	259	160
Can Cu-T used in caesarean section	133	367	0
<b>Birth control pills</b>			
Can birth control pills be used as a contraceptive method	86	112	302
Are the birth control pills used during breast feeding same like other contraceptive pills	168	332	0
<b>Hormonal Injections</b>			
Can Hormonal injections be used as a contraceptive method	112	169	219
These injections should be taken every three months	13		
<b>Others</b>			
Can periodic abstinence be used as a contraceptive method	159	131	210
Can coitus interrupts be used as a contraceptive method	251	177	72
Periodic checkup during the use of contraception is necessary	133	331	36

**Table 11: Attitude of contraception in breastfeeding mothers.**

	Agree	Strongly agree	Uncertain	Disagree	Strongly disagree
<b>Exclusive Breast Feeding</b>					
Exclusive Breast feeding is an unreliable method of contraception	66	93	62	222	57
Night feeding is difficult	39	67	181	172	41
Addition of artificial / supplementary feeds decreases the contraceptive effect	86	235	83	63	33
<b>Condoms</b>					
Condoms is easy to use	42	84	228	69	77
Condoms have a high failure rate	65	303	46	52	34
<b>Cu-T</b>					
Cu-T causes more bleeding	46	295	77	58	24
Cu-T causes more pain abdomen	0	84	184	183	49
Cu-T cause weight gain	12	111	182	161	34
Cu-T cause weight loss	22	54	53	184	187
Cu-T cause uterine perforation	15	32	103	86	264
Pregnancy can happen with Cu-T in situ	18	115	188	147	32
<b>Birth control pills</b>					
Usual birth control pills cause decrease in milk	0	74	196	181	49
Birth control pills causes bleeding	12	111	178	165	34
Birth control pills causes weight gain	22	35	221	126	96
Birth control pills causes weight loss	18	41	150	179	112
Birth control pills causes carcinoma	21	161	172	95	51
Daily intake of tablets is difficult to maintain	24	278	66	38	94

**Table 12: Practice of contraception in breastfeeding mothers.**

	Months postpartum											
	1	2	3	4	5	6	7	8	9	10	11	12
Breast feeding	NA	50	50	50	50	50	50	50	43	28	16	6
breast feeding	NA	0	0	0	0	0	0	0	6	1	5	5
Artificial feeds	NA	2	10	89	28	10	5	0	0	0	0	0
Exclusive breast feeding	NA	50	50	40	11	5	0	0	0	0	0	0
Condoms	NA	1	1	2	7	10	20	30	24	12	8	1
Cu-T	NA	13	9	2	9	9	6	8	0	0	2	2
Oral contraceptive	NA	0	2	0	0	2	0	3	0	0	0	0
DEPO PROVERA	NA	0	0	0	0	5	5	6	3	5	2	3

**Table 13: Association of knowledge with contraceptive practices.**

Knowledge about contraception	Good knowledge (N)	Contraception practiced N (%)
Pregnancy can occur even in the absence of resumption of menses	154	61 (39.6)
Chances of pregnancy increases after resumption of menses	128	63 (49.2)
Contraception should be used during breast feeding	126	68 (54.0)
Exclusive Breast feeding means no other substitute other than milk for 6 months	131	47 (35.9)
In exclusive breast feeding, sometimes periods do not start	93	50 (53.8)
Can exclusive Breast feeding can be used as a contraceptive method	242	120 (49.6)
Can condoms be used as a contraceptive method	144	70 (48.6)
Cu-T is a device which is placed in the uterus	242	120 (49.6)
Can Cu-T used as a contraceptive method	81	37 (45.7)
Can Cu-T used in caesarean section	133	64 (48.1)
Can birth control pills be used as a contraceptive method	86	40 (46.5)
Can Hormonal injections be used as a contraceptive method	112	59 (52.7)
These injections should be taken every three months	13	03 (23.1)
Can periodic abstinence be used as a contraceptive method	159	76 (47.8)
Can coitus interrupts be used as a contraceptive method	251	107 (42.6)
Periodic checkup during the use of contraception is necessary	133	62 (46.6)

Mothers educated 1-10 std about 45.3% followed contraceptive methods and 54.7% did not follow any type of contraception. About 42.1% mothers who studied 11-12 practiced and 57.9% did not practice any contraception. Mothers educated up to degree 56.3% practiced and 43.8% did not practice any contraception.

**DISCUSSION**

Family planning is defined by WHO as, -a way of thinking and living that is adopted

Voluntarily, upon the basis of knowledge, attitudes and responsible decisions by individuals and couples, in order to promote the health and welfare of family groups and thus contribute effectively to the social development of a country.<sup>3-5</sup>

An observational study was conducted involving 500 postnatal mothers both delivered at Sri Dharmasthala Manjunatheshwara College of Medical Sciences and

Hospital, Dharwad and other hospitals who came for postnatal visit and for vaccination from November 2014 to October 2015.

Most of the patients in the study were of age 21-30 years.31-35 years and 3.6% more than 35 years. The use of spacing methods is highest among women aged 20-24 years, whereas female sterilization is the highest among women aged 45-49 years indicating that fertility goals are already met with by this age. A study by Rahmanpour et al also observed that maximum number 56.7% of mothers were between 20 to 30 years.<sup>6</sup> In this study most of the mothers were literate, educated between 1-10std. There were neither illiterates nor postgraduate professionals. Amongst them about 45.3% followed contraceptive methods and 54.7% did not follow any type of contraception. About 42.1% mothers who studied upto 11-12<sup>th</sup> practiced and 57.9% did not practice any contraception. Of the graduated mothers 56.3% practiced and 43.8% did not practice any contraception. So,

education does have a major impact on fertility and contraceptive practice.<sup>7,8</sup>

Most mothers in this study were housewives 96.2%. Office going constituted 3.8% and none were professionals. The association between occupation and contraceptive usage is not statistically significant. In few other studies higher level of education showed higher association with contraception use and women with skilled jobs practiced contraception 1.5 times more than women who were not working.<sup>9</sup>

Normal vaginal delivery constituted 29.6% caesarean 2.8% rest 67.6% were instrumental vaginal deliveries. Term and preterm deliveries were included. Mode of delivery also affected the choice of contraception. In this study patients who underwent LSCS preferred condom as method of contraception and none used Cu-T. And most of the Cu-T users were mothers who underwent FTVD. The association between occupation and contraceptive usage is not statistically significant.

In this study primiparas were 54.4% and multipara were 41%. A small number were grandmultipara 4.6%. This shows that patients going for temporary methods are primiparas and often multiparas go for permanent method of sterilization. The use of contraceptives was more common in grand multipara in a study by Jabeen et al.<sup>10</sup>

In this study 49.6% mothers acquired knowledge about contraception from health professionals 44% from family and friends 12% from television and 12% from newspaper and a small number 1.6% from radio. Reddy et al 11 stated that the major source of knowledge about Family Planning methods for the study population was magazines (64%) followed by personal relations i.e. spouse, friends and relatives (62%), mass media (54%) and health personnel (34%).

In present study only 26.2% of mothers knew that exclusive breast feeding means no other substitute other than breast milk for 6 months. These included multiparas due to previous experience and counseling in the hospitals. Most of the primiparas were unaware of this did not have adequate knowledge about the appropriate way of breastfeeding. In a different study 15% knew the meaning of exclusive breast feeding, and 15% of the mothers had idea on importance of night feeding.<sup>12</sup>

48.4% of the mothers knew that exclusive breast feeding could be used as a method of contraception. Most of them were multiparas. Only 28.8% of the study group knew that condom can be used as a method of contraception.

In the study 60.4% mothers did not know that oral contraceptive pill is a contraceptive method and only 17% mothers knew adverse effects of these pills. About injectable contraception only 2.6% mothers knew that it should be taken once 3 months. 57.8% mothers thought it is taken once in 2 months. 48.4% mothers knew that Cu-

T is placed in the uterus. Most of these mothers had education of 1-10 std. This shows inadequate postnatal counseling which could be important in a developing country like India. In this study 50.2% mothers knew that coitus interrupts can be used as a method of contraception. But most of them were of the opinion that it is very difficult to practice as it requires strong determination. In present study half of the mothers knew two types of natural method of contraception. 50.2% knew coitus interruptus as a method of contraception and 48.4% knew exclusive breast feeding as a method of contraception. This included mothers of all education level.

A Cochrane Database Strategies for communicating contraceptive effectiveness says Knowledge of contraceptive effectiveness is crucial in making an informed choice. The consumer has to comprehend the pros and cons of the contraceptive methods being considered. Choice may be influenced by understanding the likelihood of pregnancy with each method and factors that influence effectiveness. The objectives being to review all randomized controlled trials comparing strategies for communicating to consumers the effectiveness of contraceptives in preventing pregnancy. Results showed some methods of communicating contraceptive effectiveness appeared to work.<sup>13</sup>

Only 13.2% mothers agreed that exclusive breastfeeding is an unreliable method of contraception, 44.4% disagreed to it. The reason for this could be the cultural constraints of practicing sexual abstinence soon after child birth. Also, the fear of using modern methods of contraception by the rural women. Only 34.4% mothers felt night feeding is difficult. The percentage of people who strongly agreed that addition of artificial or supplementary feeds would decrease the contraceptive effectiveness was 47%.

Only 8.4% mothers felt that condoms are easy to use and 60.6% felt high failure rate with condoms. And most of them were multipara Regarding Cu-T 59% agreed that Cu-T causes more bleeding. 9.8% thought there is no pain associated with Cu-T and 52.8% thought there is no risk of perforation with it. Only 3.6% thought that pregnancy could occur with Cu-T in situ.

About oral contraceptive pills the attitude of the mothers were 33% thought there is no bleeding with the use of contraceptive pills. 4.4% thought there is weight gain with it and 3.6% thought there is weight loss. 32% felt there is chance of carcinoma with contraceptive pills and 55.6% mothers felt taking contraceptive pills every day is difficult. Regarding exclusive breast feeding it was 100% till 3 months then gradually decreased to 5 mothers in 6<sup>th</sup> month to none after 7 months. In a different study a total of fifty-three mothers had stopped breastfeeding at the time of the survey 6months post-partum, out of which only one mother stopped breastfeeding before six months.<sup>13</sup> Regarding condom usage a total of 26.2%

mothers practiced this method. A very small number used it in the 2<sup>nd</sup> to 4<sup>th</sup> month postpartum. Condom was the most used modern method of contraception. 12% of mothers used Cu-T as contraception in this study. Maximum usage was seen in the 2<sup>nd</sup> month postpartum. Most of the primipara mothers used Cu-T in this study. Percentage of oral contraceptive pill users was only 1.4%. They practiced it from 3<sup>rd</sup> to 8<sup>th</sup> month and maximum usage was seen after 6 months. According to Rahmanpour et al study oral contraceptives pills (OCP) was the most preferred method amongst 47 women but after three month none of them reported its use, as OCPs was not advised to mothers with infants less than 12 months age in Iranian health centers.<sup>6</sup>

Only 7.8% mothers in this study used injectable contraception and most of the practiced it after 5 months. Thus, in present study 54.6% mothers used one or the other type of contraception during breastfeeding. Most practiced contraception being condom followed by Cu-T. A very small number of mothers considered oral contraceptive pills and injectable contraception in the form of Depot-Provera. In present study most, common reason for not using contraception was wanting of male/female child and the need for many children to look after parents in old age. In a study by Jabeen, et al non-user of contraceptive in this study were.<sup>10</sup>

69.2% and the major reasons for the nonuse were, intentions to have more children followed by pressure from the husband, prohibition by the religion and desire for son. In another study overall only 32.2% were using contraceptive measure of any sort and Copper-T was the most common contraceptive measure.

## CONCLUSION

Contraceptive methods are practiced by breastfeeding mothers of age between 21-25 years with moderate degree of education with most of them being housewives. Study showed that there is no association between education and profession with practice of contraception. However reversible contraception was mostly used by the primipara mothers. Most of the females' attitude towards use of family planning method was satisfactory but it is their husbands or in laws' who decide. They have no choice related to child birth and contraceptive use. There is disparity between the knowledge and practice of contraception. This could be because of social constraints. Given the heavy emphasis on sterilization, women tend to adopt family planning only after they have achieved their desired family size. Also, male child preference appears to have some effect on contraceptive use. There is KAP-GAP in our women. A very good antenatal and postnatal teaching on contraception is required to bridge this gap.

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