



A Cross-Sectional Study on Knowledge, Attitude and Practices among Breastfeeding Mothers

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I. INTRODUCTION:

In a developing country like India, over population is a major concern. Despite progress resulting from making contraception widely available, there is poor acceptance of contraceptive methods either due to ignorance or due to fear of complications using them.^{1,2,3,4} Other than that there are other social, cultural, traditional, religious and financial limitations.^{5,6}

Knowledge, attitude and practices of contraception among lactating mothers is a study carried out to know the prevailing contraceptive awareness among breast feeding mothers and also to educate them regarding various modern methods of contraception which can be used during this time. This study also enabled in reaching out to maximum number of mothers at a time when they are most receptive to contraceptive advice. Thus, on one side where it assesses their knowledge and attitude regarding contraception, on the other side, it also helps in educating regarding proper breast feeding and its benefits as contraception.

The study focuses on the following:

Exclusive breast feeding for 6 months.

Explaining the advantages and disadvantages of various modern methods of contraception.

Cafeteria approach regarding various contraceptive methods.

Follow up for a period of 1 year.

There are various studies carried out to know the knowledge, attitude and practices of various contraceptive methods used among breastfeeding mothers but they are few and far between. Women, who practice exclusive breast feeding, none ovulate at six weeks; but by nine weeks, 1% does. This proportion increases to 17% at 12 weeks and 36% at 18 weeks.⁶ Thus there is an innate need to know the knowledge, attitude and practices regarding various contraceptive methods among lactating mothers.

The desire to control reproduction is not a 20th century phenomenon. In the past, woman used

birth control primary to avoid pregnancy. The earliest documented forms of birth control were dances, rituals, amulets, and myths. By the 2nd-century CE, Greek gynecologist, Soranus knew that women were fertile during ovulation and promoted the rhythm method.

In the ancient medical manuscript, the Ebers Papyrus (1550 BC), women were advised to grind dates; acacia tree bark, and honey together into a paste and apply it with seed wool to the vulva. Modern science has shown that, since acacia ferments into lactic acid, a well-known spermicide, this method may have been effective. Other compounds that were smeared around the vagina included olive oil, pomegranate pulp, ginger, and tobacco juice.^{7,8}

Pessaries (vaginal suppositories or diaphragms) have been recorded as early as 2nd-century BC. Substances used include elephant or crocodile dung, leaves, and seaweed. Another so-called pessary, which was developed by a man, was a wooden block, similar in size and shape to a doorstep. Other methods have included placing an apricot pit in the uterus, or a product consisting of cocoa butter, boric acid, and tannic acid.^{8,9} Throughout history, women have also used objects such as sea sponges or soft wool as a sperm barrier, often in combination with lemon juice or vinegar as a spermicide. Oriental women used oiled paper to "cap" the cervix, while European women used beeswax.^{8,9}

Soluble pessaries came into the market in the 1800s- these were quinine or cocoa butter tablets that were inserted into the vagina before intercourse. The control of conception by introducing a foreign body into the uterus is not new. This principle was known to the Arabs in the Middle East, who were controlling conception in camels by introducing a small round stone into each horn of the uterus. The original device first used in 1909 was made of silkworm gut.

In 1929, Grafenbergh a German gynecologist used an IUD made of silver with a failure rate of 1.6 per cent. However, due to



injudicious use, Grafenbergh's silver ring fell into disrepute.^{7,8}In 1934, a new device was reported by Ota in Japan. Considered the forerunner of modern IUDs, the Ota ring is still in use today. It was Oppenheimer of Israel and Ishihama of Japan, who, in 195/879, really revived serious interest in IUDs. The Japanese were the first to utilize plastic material in the manufacture of IUDs, which led to the development of our modern IUDs.^{9, 10, 11}

Oral contraceptives have been available for more than 4,000 years. Women in ancient China drank mercury to prevent pregnancy. Later, women in India imbibed carrot seeds, and an aboriginal group in Eastern Canada drank a tea brewed with beaver testicles.^{12,13}In Ancient Greece and Rome, the juice of the siphium plant was a popular and effective form of oral contraceptive, which women took once a month. Unfortunately, the siphium plant only grew in one place in Cyrene, was extinct by the 1st century CE.^{12,13}In the 2nd century CE, Soranus advised women to drink the water that blacksmiths used to cool hot metals. Urine and animal parts and poisons such as mercury, arsenic, and strychnine were used as oral contraceptives. Modern contraception began in 1937, when investigators demonstrated that the female hormone progesterone can halt ovulation in rabbits.¹⁴In 1949, scientists at the University of Pennsylvania achieved the production of synthetic progestins. Continued research led to the development of two synthetic estrogens- mestranol and ethinyl estradiol.^{14,15}In 1950s The Pill tested well among women. The U.S. Food and Drug Administration (FDA) approved the first oral contraceptive for marketing in the United States. Ortho Pharmaceutical introduces its first birth control pill in 1963. In 1973, Ortho Pharmaceutical Corporation introduced the first progestin-only pill, which contained 350 mcg of norethindrone with no estrogen component. Multi-phasic pill formulations- called bi-phasics and tri-phasics- were introduced in 1982 and 1984, respectively. These formulations contained both estrogen and progestin- but the level of progestin varied during the monthly reproductive cycles.¹⁵

Contraceptive methods are, by definition, preventive methods to help women avoid unwanted pregnancies. They include all temporary and permanent measures to prevent pregnancy resulting from coitus. It is recognized that there can never be an ideal contraceptive- that is, contraceptive that is safe, effective, acceptable, inexpensive, reversible, simple to administer, independent of coitus, long-lasting enough to obviate frequent administration and requiring little or no medical supervision. Also, a method which may be quite suitable for one

group may be unsuitable for another because of different cultural patterns, religious beliefs and socio-economic milieu. As there is no single method likely to meet the social, cultural, aesthetic and service needs of all individuals and communities, the search for an "ideal contraceptive" has been given up.^{19,20}The present approach in family planning programmes is to provide a "cafeteria choice" that is to offer all methods from which an individual can choose according to his needs and wishes and to promote family planning as a way of life.

The contraceptive methods may be broadly grouped into two classes-spacing methods and terminal methods.^{21,22,23,24}

Spacing methods

- Barrier methods
Physical methods- condom, vaginal Diaphragm
Chemical methods- vaginal spermicide
Combined methods
- Intrauterine devices
- Hormonal methods
Oral contraceptives
Injectable contraceptives
Implants
Vaginal rings
- Miscellaneous- Coitus interruptus, Natural family planning method, Exclusive breast feeding .

Permanent methods:

Male sterilization- Vasectomy
Female sterilization- Tubectomy

Aims:

To assess the knowledge, attitude and practices of contraception among breast feeding mothers and also emphasize on them the benefits of breast feeding as a contraceptive method.

Objectives:

To find out the prevailing contraceptive practices among breast feeding mothers.

To find out which contraceptive method is acceptable to most breast feeding mothers.

To get a positive change in attitude of women regarding contraceptive use.

Materials and method:

An observational study conducted among 100 postnatal breast feeding mothers in postnatal wards



in OBG of SIMS, Shivamogga between August 2018 to August 2019.

Inclusion criteria:

Both primipara and multipara
Immediate postnatal breastfeeding mothers.

Exclusion criteria:

Patients wanting permanent methods (Tubectomy/ Vasectomy) as contraception.
Patients who are not breast feeding/ breast feeding contraindicated.
Done through Structured questionnaire which includes two parts.

Part I: General and specific information of the mother.

Part II: It is divided into three (3) sections.

Section I- Questions to assess the knowledge of contraception.

Section II- Questions to assess the attitude towards contraception.

Section III- Questions asked during a 12 months follow up.

The Questionnaire assessed.

After collection of information through the questionnaire, detailed counseling is done with the mother and sometimes with the husband regarding various contraceptive methods, their advantages and disadvantages are explained and

they are offered a “cafeteria approach” to use any contraceptive method they want.

All mothers are then followed up every month for a period of 12 months through phone and letters to know the method of contraception they used, their compliance and problems if any.

Type of Scale Used

For Knowledge Element- 3-point Likert Scale is used. The individual items in the 3 points were valued as- True=1 False=2 Don't know=3

For Attitude Element- 5-point Likert T- Scale is used. The individual items in the 5 points were valued as –

Strongly agree=1 Agree=2 No comments=3 Disagree=4 Strongly disagree=5

Statistical Methods:

Chi-square and Fisher Exact test has been used to find the significance of proportion of Contraceptives practiced.

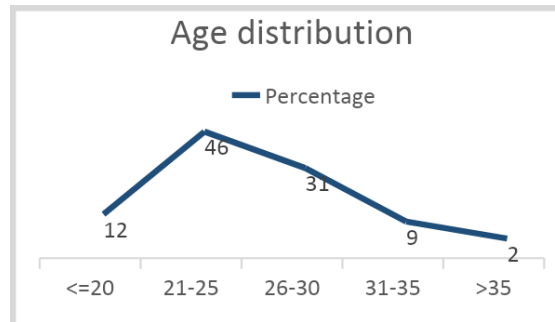
Odds ratio has been used to find the strength of relationship between contraceptive practiced and education, occupation and mode of delivery.

Observations

A total of 100 postnatal breastfeeding mothers were enrolled in the study. A detailed questionnaire was given to them and their knowledge and attitude assessed according to the answers.

Table 1- Age distribution of the study

Age groups (in years)	Number (%)
20≤	12
21-25	46
26-30	31
31-35	9
>35	2
Total	100

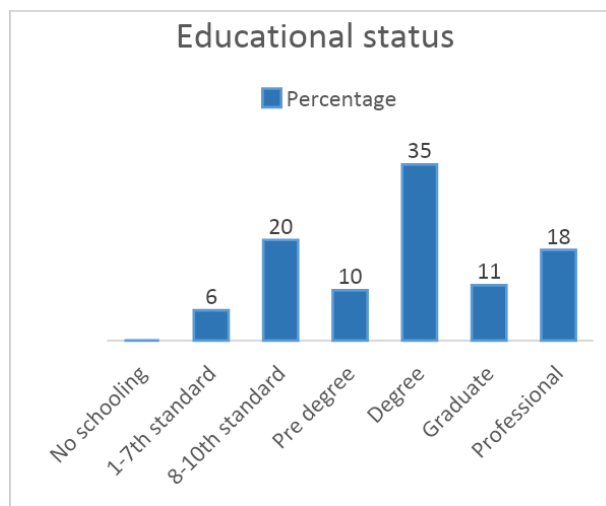


Most of the patients in the study group were of the age group 21-30 years with 46% being in the age group 21-25 and 31% being in age group 26-30 years. Less than 20 years constituted 12%

and others such as 31-35 years and >35 years constituted 9% and 2% respectively of the total. This is in consistency with the reproductive age group in which most pregnancies occur.

Table-2 – Educational status of the mother

Education	Number (%) (n=100)
No schooling	-
1-7 standard	6
8-10 standard	20
Pre degree	10
Degree	35
Post graduate	11
Professional	18



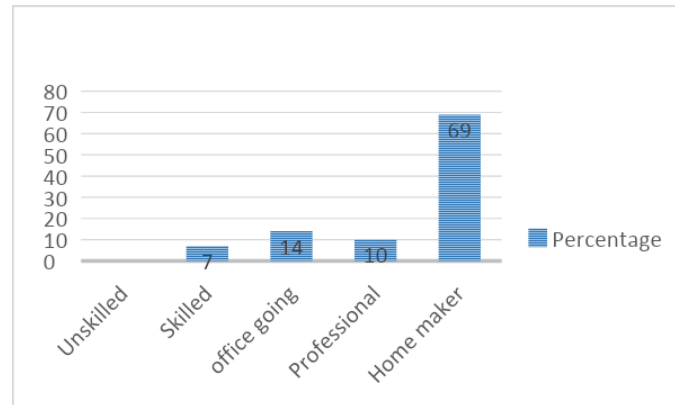
In the study most patients were of educational qualification of 'Degree' constituting 35% of the population. 'Pre degree' and 'Post graduate' constituted 10% and 11% respectively,

whereas professional qualification containing mothers constituted 18% of the total. Also mothers having education of 1-10 std constituted 26% of the study group.



Table 3- Occupation of the mother

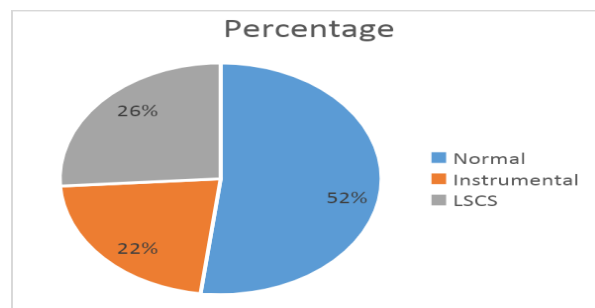
Occupation	Number (%) (n=100)
Unskilled	0
Skilled	7
Office going	14
Professional	10
Housewife	69



Most mothers taken in the study were housewives (69%); Office going constituted 14% and Professional 10% of the total. Others such as skilled workers constituted 7% of the total mothers.

Table 4- Mode of delivery

Mode of delivery	Number (%) (n=100)
Normal	52
Forceps	22
LSCS	26



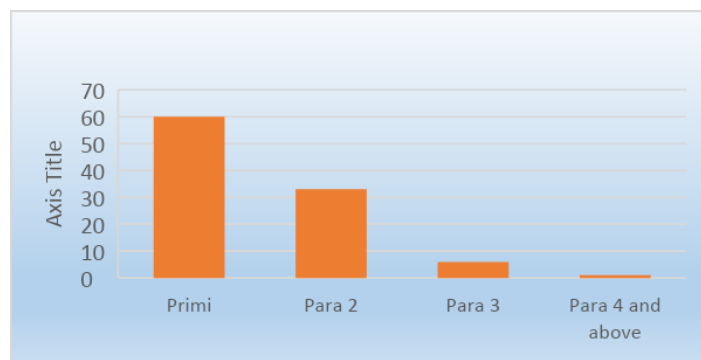
Normal delivery comprised 52% of the deliveries. Caesarean delivery constituted 26% whereas Forceps delivery comprised 22% of the

total mode of delivery. Most of the forceps delivery was outlet forceps delivery and the rest was low-mid forceps delivery.



Table 5- Parity of the mother

Parity	Number (%) (n=100)
Para1	60
Para 2	33
Para 3	6
Para 4 & More	1



Primipara constituted 60% of the mothers whereas rest were multiparous with Para 2 constituting 33%.

Table 6 - Knowledge of Contraception among breast feeding mothers

Question number and questions	True	False	Don't Know
EXCLUSIVE BREAST FEEDING			
1. Exclusive breast feeding means no other substitute other than the milk for 6 months	52	24	24
2. In Exclusive breast feeding, sometimes periods does not start	28	25	47
3. Can exclusive breast feeding be used as a contraceptive method	16	34	50
CONDOMS			
4. Can Condoms be used as a contraceptive method	85	6	9
COPPER-T			
5. Cu-T is a device which is placed in the uterus	50	18	32
6. Can Cu-T be used as a Contraceptive method	76	12	12
7. Can Cu-T be used in cesarean section	16	56	28
BIRTH CONTROL PILLS			
8. Can birth control pills be used as a contraceptive method	28	42	30
9. Is the birth control pills used during breast feeding same like other contraceptive pills	55	6	39
HORMONAL INJECTIONS			
10. Can Hormonal Injections be used as a contraceptive method	24	26	50
11. These Injections have to be given every three month	9	9	6
OTHERS			
12. Can periodic abstinence be used as a contraceptive method	58	12	30
13. Can Coitus interruptus be used as contraceptive method	7	36	57
14. Can hormonal implants be used as a contraceptive method	8	11	81
15. Periodic check up during the use of contraceptive is necessary	49	41	10



Table 7- Attitude of Contraception use among breast feeding mothers

Question number and questions (N=100)	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
EXCLUSIVE BREAST FEEDING					
1. Exclusive breast feeding is an unreliable method of contraception	3	14	31	37	15
2. Night feeding is difficult	9	17	3	31	40
3. Addition of artificial/ Supplementary feeds decreases the contraceptive effect	7	12	37	27	17
CONDOMS					
4. Condoms is easy to use	41	53	1	3	2
5. Condoms have a high failure rate	5	34	49	3	9
COPPER-T					
6. Cu-T causes more bleeding	18	40	23	16	3
7. Cu-T causes pain abdomen	25	41	23	6	5
8. Coming to hospital only for Cu-T is burden	15	33	13	25	14
BIRTH CONTROL PILLS					
9. Usual birth control pills causes decrease in milk	4	24	48	19	5
10. Birth control pills causes bleeding	16	39	28	7	10
11. Birth control pills causes weight gain	5	39	37	13	6
12. Daily intake of tablets is difficult to maintain	7	33	4	33	23

Table 8- Breast feeding and Contraceptive practices

Breast feeding/ Contraceptive Methods	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Feeding Practices												
Breast feeding	100	100	99	97	95	91	83	78	68	63	52	37
Artificial feeds	-	3	8	9	25	42	72	88	95	99	100	100
Night feeding	100	100	99	97	96	94	90	86	77	67	56	43
Contraceptive Practices												
Exclusive breast feeding	100	97	92	91	75	58	28	12	5	1	-	-
Condoms	-	2	2	4	4	4	9	10	12	12	11	9
Copper -T	-	-	2	3	5	6	7	9	9	11	12	12
Oral Contraception	-	-	2	2	2	1	1	-	-	-	-	-
Depot Provera	-	-	-	3	3	5	4	5	3	-	-	-
Sexual Abstinence	98	92	88	69	57	56	49	42	40	43	36	39



Table 9- Association of Education with Contraceptive Practices

Education	Contraceptive Practiced	Contraceptive Not Practiced	Total
No schooling	-	-	-
1-7 standard	1(3.2)	5(7.2)	6
8-10 standard	4(12.9)	16(23.2)	20
Pre degree	2(6.5)	8(11.6)	10
Degree	21(45.2)	14(30.4)	35
Post graduate	9(13.0)	2(6.5)	11
Professional	10(25.8)	8(14.5)	18
Total	47(100.0)	53(100.0)	100
Inference	Mothers with education level of degree or more are 2.50 times more likely to use contraceptives when compared to the mothers with pre degree education with $p < 0.001$.		

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Table 10 - Association of Occupation with Contraceptive Practices

Occupation	Contraceptive Practiced	Contraceptive Not Practiced	Total
Unskilled	-	-	-
Skilled	1(3.2)	6(8.7)	7
Office going	9(29.0)	5(7.2)	14
Professional	6(19.4)	4(5.8)	10
Housewife	15(48.4)	54(78.3)	69
Total	31(100.0)	69(100.0)	100
Inference	Office going and professional mothers are 6.25 times more likely to use contraceptives with $p < 0.001$		

Office going and professional mothers are 6.25 times more likely to use contraceptives with statistical significance of $p < 0.001$.

Table 11 – Association of mode of delivery with Contraceptive practices

Mode of delivery	Contraceptive Practiced	Contraceptive Not Practiced	Total
Normal	15(48.4)	37(53.6)	52
Forceps	9(29.0)	13(18.8)	22
LSCS	7(22.6)	19(27.5)	26
Total	31(100.0)	69(100.0)	100
Inference	Mode of delivery is not statistically associated with the contraceptive practices with $p = 0.628$		

48.4% of mothers who had normal delivery practiced one of the modern contraceptive methods whereas mothers who had Forceps delivery and LSCS 29% and 22.6% practiced contraception. Thus mode of delivery is not statistically associated with the contraceptive practices with $p = 0.628$.



Table 12- Association of knowledge with Contraceptive Practices

Knowledge about contraceptives	Good Knowledge	Contraceptive practiced	Poor Knowledge	Contraceptive practiced after counseling
1. Exclusive breast feeding means no other substitute other than the milk for 6 months	52	20 (38.46%)	48	11 (22.92%)
2. In Exclusive breast feeding, sometimes periods does not start	28	8 (28.57%)	72	23 (31.94%)
3. Can exclusive breast feeding be used as a contraceptive method	16	3 (18.75%)	84	28 (33.33%)
4. Can Condoms be used as a contraceptive method	85	28 (32.94%)	15	3 (20.00%)
5. Cu-T is a device which is placed in the Uterus	50	15 (30.00%)	50	16 (32.00%)
6. Can Cu-T be used as a Contraceptive method	76	26 (34.21%)	24	5 (20.83%)
7. Can Cu-T be used in cesarean section	16	10 (62.5%)	84	21 (25.00%)
8. Can birth control pills be used as a contraceptive method	28	10 (35.71%)	72	21 (29.16%)
9. Is the birth control pills used during breast feeding same like other contraceptive pills	9	4 (44.44%)	91	27 (29.67%)
10. Can Hormonal Injections be used as a contraceptive method	24	10 (41.66%)	76	21 (27.63%)
11. These Injections have to be given every three month	9	4 (44.44%)	91	27 (29.67%)
12. Can periodic abstinence be used as a contraceptive method	58	16 (27.58%)	42	15 (35.71%)
13. Can Coitus interruptus be used as contraceptive method	7	4 (57.14%)	93	27 (29.03%)
14. Can hormonal implants be used as a contraceptive method	8	2 (25.00%)	92	29 (31.52%)
15. Periodic check up during the use of contraceptive is necessary	49	21 (42.86%)	51	10 (19.60%)

II. DISCUSSION

An observational study consisting of 100 postnatal breastfeeding mothers were undertaken to investigate the Knowledge, Attitude and Practices

of contraception in Shimoga institute medical sciences.

Most of the patients in the study group were of the age group 21-30 years with 46% being



in the age group 21-25 and 31% being in age group 26-30 years. Less than 20 years constituted 12% and others such as 31-35 years and >35 years constituted 9% and 2% respectively of the total. This is in consistence with the reproductive age group in which most pregnancies occur.

In the study most patients were of educational qualification of 'Degree' constituting 35% of the population. 'Pre degree' and 'Post graduate' constituted 10% and 11% respectively, whereas mothers with professional qualification constituted 18% of the total. Also mothers having education of 1-10 std constituted 26%. Thus mothers of all educational level were included in the study. In our study the mothers with education level of degree or more were 2.50 times more likely to use contraceptives when compared to the mothers with pre degree education. This is in consistence with other studies where the highest rates of contraceptive use were recorded among women with some formal education; 25% of the women in union with a primary or higher education were using a family planning method (Kent M M .et al⁷⁸). Use of contraception was strongly related to education, being lowest among women with little or formal education.

Most mothers taken in the study were housewives (69%); office going constituted 14% and professional 10% of the total. Few mothers were found to be working before pregnancy but not during the pregnancy and were included as per present occupational status. Others such as skilled workers constituted 7% of the total mothers.

Normal delivery comprised 52% of the deliveries. In this group both preterm as well as term deliveries were included. Caesarean delivery constituted 26% whereas Forceps delivery comprised 22% of the total mode of delivery. Most of the forceps delivery was outlet forceps delivery and the rest was low-mid forceps delivery. Mode of delivery also affected in the choice of contraception as most women who underwent Caesarean delivery did not opt for Copper-T as a contraceptive.

Primipara constituted 70% of the mothers whereas rest were multiparous with Para 2 constituting 29%. Thus we see that most of the mothers going in for temporary method of contraception constituted primipara whereas mothers having more than 2 children usually go for permanent method of contraception, mostly tubectomy.

52% of mothers knew that exclusive breast feeding means no other substitute other than milk for first six months whereas 48% did not know about exclusive breast feeding. In the first group are the mothers who have received antenatal

and postnatal counseling about advantages of exclusive breast feeding. Also most of the multiparous women knew about exclusive breast feeding and most of the primiparous mothers were unaware about it. Again it may be due to counseling given during previous childbirth. In another study conducted by Halderman and Nelson et al, found that 8% of women who said that they planned to breastfeed never started, and by 6 weeks postpartum, 24% of women discontinued breastfeeding. Of those who were continuing, 65% were supplementing.

In our study 28% of mothers knew that during exclusive breast feeding sometimes there is a delay in the onset of menstruation. Most of the mothers in this group were multiparous mothers who based on their previous experience knew about the menstrual delay. 25% mothers disagreed about the delay in the onset of menstruation after delivery and constituted mainly of both multipara who based on their previous knowledge were answering accordingly and primipara who have not received any information about this and thought that menstruation returns after delivery. Another 47% mothers didn't know about the menstrual changes.

50% of the mothers in the study had the knowledge that exclusive breast feeding can be used as a contraceptive. This is similar to other studies- Udigwe GO et al⁷² and Vural B et al⁷⁹ where 52% and 25.68% mothers respectively had the knowledge that exclusive breast feeding can be used as a contraceptive.

Half of the mothers didn't know that exclusive breast feeding can be used as a contraceptive method and another 34% thought that Exclusive breast feeding cannot be used as a contraceptive. These groups constituted mothers of all educational level and signifies the lack of proper antenatal counseling which could be important in a developing country like India. In another study done by Vural B et al⁷⁹, nearly fifty-two per cent of women were not aware of the contraceptive property of breastfeeding, 48.16%, did not know the importance of frequency and duration of suckling on fertility reducing effect of lactation.

In our study about half of the mothers knew about at least one modern contraceptive method. The most known contraceptive method was condom and about 85% mothers agreed that it can be used as a contraceptive method during breast feeding. This is similar to other studies done to know the knowledge of contraception among mothers- 60.8% of the couples possessed some knowledge about at least one modern method of contraception (Sharma V, Sharma A. et al⁷³). % knew of at least one contraceptive and the leading



known contraceptive was oral contraceptives (Odai I. et al⁷⁴) More than 90% of women interviewed knew of modern contraceptive methods (Shane B. et al⁷⁵) 91% of the mothers had knowledge of at least one contraceptive method. Oral contraception was the most familiar method in rural Egypt, followed by the IUD (Khalifa AM et al⁷⁶)

About 50% mothers didn't know about injectable contraceptives- Depo-Provera and mostly comprised of primipara. Only 24 women knew that Depo-Provera can be used during breast feeding, out of which only 9 women knew the correct 3-monthly interval of intake of these injections, which show a very low level of knowledge among breast feeding mothers about injectable contraceptives.

In natural methods of contraception, sexual abstinence was the most commonly used

contraceptive method; 98% in 1st month to 39% at 12th month. In another study done by Dehne KL. et al⁷¹ depicted significant diversity in duration's of individual postpartum sexual abstinence and varied between 40 days to 3 years, with shorter duration's associated with stricter adherence to Islamic belief.

Only 7% mothers thought that coitus-interruptus can be used as a contraceptive method and shows the difficulty in using this method by most couples as a contraceptive.

Only 8% mother knew about other modern method of contraception such as Implants and was seen in mothers having high education and good occupational status.

Regarding periodic check up, half of the mothers (49%) thought that periodic check up during the use of any contraceptive is necessary.

	Study et al	Vural et al	Udigwee et al	Odai et al	Sharma et al	Shane et al	Khalifa et al	Duong et al	Abu et al	Kent et al	Zheng et al
EBF as contraceptive	50	25.68	52	-	-	-	-	-	-	-	-
Knowledge of 1 Contraceptive	50	-	-	66.3	60.8	90	91	-	-	-	-
Practice of 1 contraceptive	31	53	-	-	19	55	35	-	-	-	-
Practice at 4 months	12	-	33	-	-	-	-	17	-	-	-
Practice at 6 months	16	-	-	-	-	-	-	43	-	-	-
Practice at 1 year	31	-	-	-	-	-	-	60	-	-	-
Practice of IUD	12	30.15	64	-	-	-	-	57	60.8	32	-
Practice of OCP	2	-	-	49	-	-	24	-	6.9	52	5
Practice of Condom	12	16.48	-	-	-	-	-	25	-	-	7
Practice of Traditional methods	39	23.86	-	-	11.2	-	-	14	-	28.4	12
Practice of Depot	5	-	-	-	-	-	-	-	-	14.3	-

Table -COMPARISON WITH SIMILAR STUDIES ELSEWHERE

17% mothers agreed that breast feeding is an unreliable method of contraception, whereas 52% of them thought it to be a reliable method of contraception. This may be due to cultural constraints where most of the women after delivery practice sexual abstinence and fear to use any modern method of contraception. In a study done

by Monteith R S et al, among Indians the major reason given for non use of contraceptives unrelated to pregnancy was lack of knowledge of contraception or where to obtain family planning services. The methods of choice for nonusers desiring to use a method were oral contraceptives (27%), sterilization (18%) and injectable (14%).



71% mothers feel that breast feeding the baby in the night is not difficult and feels that breast feeding is much easier than use of other methods of feeding. 26% women who feel breast feeding to be difficult, most of them were office going.

94% mothers felt that condoms are easy to use but half of them didn't know that it has got a high failure rate.

According to 58% mothers Copper-T causes increased bleeding and 66% women thought that Copper-T causes pain abdomen. 39% mothers felt that coming to hospital only for Copper-T insertion is a burden.

Regarding the use of oral contraceptive pills, 28% mothers felt that the commonly used combined oral contraceptive pills causes decrease in the quantity of milk, but most of the mothers who felt it are the ones who wanted to use natural method of contraception such as sexual abstinence or exclusive breast feeding.

All the patients were followed up every month for a period of 12 months to know which contraceptive method they followed.

Breast feeding was seen almost in all mothers up to 3 months. This may be due to the study itself which includes only mothers who are breast feeding and a lower margin of 3 months was taken arbitrarily. After 7 months the percentage of women who were breast feeding decreased slowly (83%) to the end of 12 months when only 37% women were breast feeding. Regarding addition of supplementary feeds, it increased from 6 months from 42% to the end of 12 months when all mothers have started artificial feeds other than breast feeding (100%).

Regarding contraceptive practices, exclusive breast feeding was seen during the first six months with 100% women practicing it during the first month to 58% who were using it in the 6th month. After six months the number of women using it decreased with almost none after nine months.

31% mothers in the study were practicing one of the modern methods of contraception. In other studies done by Vural B et al⁷⁹ more than fifty-three per cent of women were using one of the modern contraceptive methods, in Khalifa AM et al⁷⁶ 35% mothers used contraception and in Sharma V et al⁷³ only 19% of them were using a modern method of family planning. Contraception practiced at 4 months in the study was 12%, that in Udigwe GO et al⁷² 33% and in Duong D et al⁶⁹ 17%. At 6 months 16% of the mothers were using one modern method of contraception whereas in Duong D et al 43% of them were using the

contraceptive. At 1 year the contraceptive practice in the study group was 31%.

Regarding the practice of condoms during breast feeding it was seen to increase after seventh month and was 12% in the study group. In other studies done by Vural B et al⁷⁹, Duong D et al⁶⁹ and Zheng J. et al⁷⁷ 16.48%, 25% and 7% respectively used condoms as contraceptive.

Copper-T use started at third month with 2% using at 3rd month to 12th month when about 12% mothers were using it as a contraceptive. Copper-T was the most used modern contraceptive in the study. In the study done by Vural B et al⁷⁹, Kent M M .et al⁷⁸ and others about 30-32% mothers were using Cu-T as a contraceptive.

Oral contraceptive use was almost negligible in our study. In a study done by Zheng J. et al⁷⁷ 5% used oral contraceptive pill whereas in another study done by Abu Ahmed A et al⁷⁰ 6.9% were using oral contraceptives.

Depo-Provera use was seen in between 4th to 9th month of the study with only few patients (3% at 4th month to 5% at 8th month) using them. In a study done by Adinma JI .et al⁸⁰ 14.3% used Injectables.

Most of the couples in the study were using traditional methods such as sexual abstinence as a contraceptive with 98% using it at 1st month to 39% using it at 12th month. It may be due to cultures and tradition where sexual abstinence is used for some time following the delivery. In other studies the results were Vural B .et al⁷⁹ 23.86%, Sharma V. et al⁷³ 11.2%, Duong D, et al⁶⁹ 14%, Zheng J. et al⁷⁷ 12% and Adinma JI. et al⁸⁰ 28.4%.

Thus the number of patients who used contraceptive methods during breast feeding was 31% and the most common contraceptive method used was Sexual abstinence, with condoms and Copper-T use coming next to it. Only a few patients used Depot-Provera and Progestin-only pill use was seen only in one patient.

II. CONCLUSION

Contraceptive methods are practiced by the breast feeding mothers who are in the age group of 20-30 years (77% in the study) having a good educational qualification. In our study contraceptive use among mothers with a minimal educational level of degree was 2.50 times more than the mothers with pre degree education.

Contraceptive use also depends on the occupation and parity of the mother. In our study office going and professional mothers used more (6.25 times) contraceptives. Also most mothers who used these contraceptive methods were primipara (70%).



Knowledge regarding various contraceptive methods depended on previous antenatal counseling on contraception and also on their educational level. Condoms and Copper-T were the most known contraceptives (85% and 76% mothers respectively knew that condoms and Copper-T can be used as a contraceptive method). Knowledge of Depo-Provera as a contraceptive was 28% whereas only 8% mothers knew about Implants.

Most of the breast feeding mothers used natural family planning methods such as sexual abstinence during breast feeding (98% at 1st month and 39% at 12th month).

Practice of contraception was low in the study group (31%) and the most commonly used contraception was condom (12% at 7th month) and Copper-T (12% at 1 year). Depo-Provera was practiced by 5% of the mothers; oral contraceptives were used by 2% mothers whereas none of the mothers used Implants.

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