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RESEARCH ARTICLE

THE BREAST MILK SECREATION AND ITS ASSOCIATES AMONG POSTNATAL MOTHERS UNDERGONE LSCS AT MGMCRI PUDUCHERRY.

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Abstract

The breast milk is very healthy and full of nutrition, it provides the primary source of nutrition for newborns before they are able to digest more diverse food. The breast milk also contains balanced nutrients that are require for brain development, growth and a healthy immune system that act against viruses, bacteria, and parasites, since an infant's immune system is not fully developed until the age of 2 yrs.
Due to some reasons, few lactating mothers unable to give breast milk to their infant when there is an inadequate milk secretions. Consuming almond oil during lactation promotes milk secretions, as helps in synthesis of Vitamin-B, and also helps in emulsification of globules.
Aim: This study was aimed to assess the breast milk secretion and to find the demographic variables association with secretion at immediate postnatal period among postnatal mothers undergone LSCS at MGMCRI Puducherry.
Methodology: In this cross sectional survey, 60 mothers Undergone LSCS were selected using simple random sampling technique-lottery method .
Results: The present study findings revealed the frequency distribution of breast milk secretion among 60 mothers 91.7% (55) mothers had fair milk secretion (UNICEF score 27-39) 8.3% (5) mothers had Good milk secretion (UNICEF score 40-52).

Introduction:-

The breast milk is very healthy and full of nutrition, it provides the primary source of nutrition for newborns before they are able to digest more diverse food. The breast milk also contains balanced nutrients that are require for brain development, growth and a healthy immune system that act against viruses, bacteria, and parasites, since an infant's immune system is not fully developed until the age of 2 yrs.

Breast Feeding should commence as soon as possible after giving birth and every 1 to 3 hours per 24 hours (8-12 times / 24 hours) Babies should be breast fed exclusively for the 6 months.

Breast milk has important ingredients that are not found in any infant formula, to build baby's immune system. Breast milk changes from feed to feed to suit each baby's unique needs, making the perfect food to promote healthy

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growth and development. Breast milk is more easily digested than infant formula. Breastfed Babies are rarely constipated and are less likely to get diarrhoea. Breast milk has no waste products and leaves no carbon foot print. Breast fed babies are low risk of gastrointestinal illness, allergies, asthma, Diabetes, obesity, some childhood cancer, Respiratory tract infection, Urinary Tract infection, SIDS (cot death)

The uniqueness and precious nature of breast milk is enhanced by the fact that it is asset given by nature and has no price. The vital components for the infants in tropical countries are breast feeding and avoidance of infections as we know so many advantages of breast feeding it is easily digestible , protecting against infections. It is readily available; it contains lactoferin which hinders growth of E-coli. In studies shown that 80% of infants growing healthy who receiving breast feeds (Semin pennato, 2009).

A study has discovered that the action of a baby sucking actually changes how the mother's brain behaves. This results in a massive rush of the 'love hormone' oxytocin in women's brain. The release of the chemical in massive surges enhance a mothers feeling of trust, love and affection (Berkeley C., 2011)

The benefits of breast feeding for the health and wellbeing of the mother and baby are well documented, WHO recommends early initiation of breast feeding. A recent trial has shown that early initiation of breast feeding could reduce neonatal mortality by 22%. In developing countries alone early initiation of breast feeding could save as many as 1.45 million lives each year by reducing deaths mainly due to diarrhoeal disorders and lower respiratory tract infection in children (Betty.R.S, 1998)

UNICEF reports that one in two babies worldwide are not breastfed within the recommended first two hours of birth, and not getting the nutrients they need increases their chance of death by a whopping 80%. This news—and the realization that something needs to change on a global level.

"Making babies wait too long for the first critical contact with their mother outside the womb decreases the newborn's chances of survival, limits milk supply and reduces the chances of exclusive breastfeeding," France Bégin, UNICEF Senior Nutrition Adviser, said in a news release. "If all babies are fed nothing but breast milk from the moment they are born until they are six months old, over 800,000 lives would be saved every year"

"Breast milk is a baby's first vaccine, the first and best protection they have against illness and disease," Bégin says. "With newborns accounting for nearly half of all deaths of children under five, early breastfeeding can make the difference between life and death."

Statement Of The Problem
The breast milk secretion and its associates among postnatal mothers undergone LSCS at MGMCRI Puducherry

Objectives:-

1. To assess the breast milk secretion among postnatal mothers.
2. To find out the association between the breast milk secretion and the selected demographic variables of postnatal mothers.

Methodology:-

Methodology:
In this cross sectional survey, 60 mothers Undergone LSCS were selected using simple random sampling technique-lottery method.

Criteria For Sample Selection
Inclusion Criteria:
Post-natal mothers underwent LSCS and admitted in postnatal ward giving breast feeding to their babies and willing to participate.

Exclusion Criteria:
Post-natal mothers whose babies is in NICU.

Development And Description Of Tool

The tool was developed based on review of literature, opinion from experts in the field of medical and nursing. The following steps were undertaken to prepare the final tool

The tool consists of two sections:

Part A: consists of demographic variables which include Age, Family income, Religion, Diet pattern, Educational status, Occupation, Gravida, and Para.

Part B: Unicef Based Breast Feeding Assessment Tool

Part –B Unicef Based Breast Feeding Assessment Tool

	Characteristics	Score 1	Score 2	Score 3	Score 4	Score 5
1	Urine Output (Wet Napies) 1st Day	No Napkin Change	1 Napkin	2 Napkin	3 Napkin	More Than 4 Napkin
	Urine Output (Wet Napies) 5th Day	1 - 2 Napkin Change	3 Napkin	4 Napkin	5 Napkin	More Than 5 Napkin
2	Appearance And Frequency Of Stools (1st Day)	Nil	5 Rupees Coin Size	1 Rupees Coin Size	2 Rupees Coin Size	10 Rupees Coin Size
	Appearance And Frequency Of Stools (5th Day)	Nil	1 Time	2 Time	3 Time	More Than 3 Times
3	Weight Loss	More Than 12 %	More Than 11%	More Than 10%	More Than 9%	Less Than 8 %
4	Number Of Feeds	Less Than 3 Times	3 – 4 Times	5 – 6 Times	7 – 8 Times	9 – 10 Times
5	Sucking Pattern During Feed	No Sucking	Noisy Feeding	Slow Sucking	Intermittent Sucking	Rapid Sucking
6	Length Of Feed	Less Than 5 Minutes	5 Minutes	10 Minutes	20 Minutes	30 Minutes
7	End Of The Feed	Baby Does Not Release Spontaneously	Intermittent Release	Immediate Release	Late Release	Baby Leaves Breast Spontaneously
8	Offer Of 2nd Breast	Not Fed In 2nd Breast	Poor Sucking	Slow Sucking	Intermittent Sucking	According To Appetite Takes Good Sucking
9	Baby's Behaviour During And After Feed	Vigorous Cry	Irritable Cry	Intermittent Cry	Weak Cry	Baby Calm And Relaxed
10	Shape Of Nipple After Feeds	Altered	Flat	Inverted	Slightly Elongated	Same Shape, No Change
11	Mother's Report On Her Breasts And Nipples	Damaged / Sore Nipple	Engorgement	Mild Pain	Slight Discomfort	Comfortable
12	Sleep	Sleep with irritable cry	Intermittent sleep	After feed sleeps up to 1hour	After feed sleeps up to 2 hours	After feed sleeps up to 3 hours
13	Perceived Breast feeling of mother in feeding	Could not find any change	Unsatisfied breast fullness	Feeling breast fullness on either side	Feeling breast fullness	Feeling Breast fullness before feeding and empty after feeding

Score:
13-26: Poor
27-39: Fair
40-52: Good
53-65: Very Good.

Validity And Reliability
Validity is the most important simple methodological criteria for evaluating any measuring instrument. Validity reflects how accurately the measures yield information about the true or real variable being studied.

Reliability as "the consistency with which an instrument measures the attribute". An instrument is said to be reliable if its measures accurately reflect the true score of the attribute under investigation. Reliability coefficients higher than 0.70 are often considered satisfactory, but coefficients greater than 0.80 are far preferable. Polit et al. (2007)

Reliability Of The Tool
The researcher used to test retest method (Karl Pearson Reliability Formula) to assess the reliability of the tool. The overall reliability score obtained was r = 0.82.

Ethical Consideration
Ethical considerations are vital to any research study because of the influence on the researcher's ability to acquire and retain participants.

The sample selected for the present study was 60 post-natal women underwent LSCS was admitted in the post-natal ward of Mahatma Gandhi Medical College Research Institute & Hospital, Puducherry. The proposed study was conducted after the approval of the Institutional Human Ethical Committee. Permission were obtained from the concerned authorities.

Informed consent were obtained from the mothers. Subjects had given the right to withdraw from the study at any time they want and assurance was given to the study subjects and parents that, the privacy and anonymity of the individual will be maintained confidentially

Data Collection Procedure
The permission was obtained from institutional ethical committee and concerned authority to conduct the study. The study was carried out from 17/10/17 to 21/11/17. Post-natal mothers undergone LSCS and who fulfilled the inclusion criteria were selected by using simple random sampling technique – lottery method. After obtaining the signature in the consent form, data was collected to assess the demographic variables and secretion was assessed by using UNICEF based breast feeding assessment tool.

Results:-

Table 1:-Distribution Of Demographic Variables Of Postnatal Mothers Underwent Lscs

S.No	Demographic Variables		
		Frequency(n)	**Percentage (%)**
1.	**Age (in years)**		
	a) 18-25 years	31	51.6
	b) 25-35 years	27	45
	c) 35-45 years	2	3.3
2.	**Family income Per Month**		
	a) <Rs. 5000		
	b) Rs. 5001 to 10,000	14	23.3
	c) Rs. 10,001 to 15,000	29	48.3

	d) >Rs. 15,000	6 11	10 18.3
3.	**Religion** a) Hindu b) Christian c) Muslim d) Others	 53 2 5	 88.3 3.3 8.3
4.	**Diet Pattern** a) Vegetarian b) Non-Vegetarian	 2 58	 3.3 96.6
5.	**Educational Status** a) Non –Literate b) Primary School c) Higher secondary School d) Graduate	 0 14 15 31	 0 23.3 25 51.6
6.	**Occupation** a) Unemployed b) Daily Labour c) Self employed d) Employed	 57 0 1 2	 95 0 1.6 3.2
7.	**Gravida** a) Primi Gravida b) Multi Gravida	 18 42	 29.5 70
8.	**Para** a) Primi Para b) Multi para	 22 38	 36.6 63.3

Table 2:-Percentage distribution shows amount of breast milk secretion among post-natal mothers underwent LSCS in pre-test ($N = 60$)

Breast milk secretion	**UNICEF Score**	**Total**	
		Frequency(n)	**Percentage(%)**
	27-39:(Fair)	55	91.7
	40-52:(Good)	5	8.3

Association between the volume of breast feeding and selected demographic variables.

Table 5:-Association between the volume of breast feeding and selected demographic variables

Variables		N	KW/MW test	p-value
Age	18-27yrs	31	1.3005	0.5219
	28-36yrs	27		
	37-45yrs	2		
Family income per month	<5,000	14	3.2065	0.3609
	5001-10,000	29		
	10,001-15000	6		
	.15,000	11		
Religion	Hindu	53	3.3278	0.1894
	Christian	2		
	Muslim	5		
Diet Pattern	Veg.	2	0.1712	0.6791
	Non Veg.	58		
Educational Status	Primary	14	0.3889	0.8233
	Hr.sec.	15		
	Graduate and other	31		
Occupation	unemployed	57	2.4611	0.2921
	Self employed	1		
	Employed	2		
Gravida	Primi gravida	18	1.2506	0.2634
	Multi Gravida	42		
Para	Primi para	22	2.4472	0.1177
	Multi para	38		

Table 5 shows the association between the volume of breast feeding and the selected demographic variables.

There is no significant association between the volume of breast feeding and the selected demographic variables like age, family income per month, religion, diet pattern, educational status, occupation, gravida, and para.

Discussion:-

The frequency distribution of breast milk secretion among 60 mothers 91.7% (55) mothers had fair milk secretion (UNICEF score 27-39) 8.3% (5) mothers had Good milk secretion (UNICEF score 40-52). And there is no significant association between the volume of breast feeding and the selected demographic variables like age, family income per month, religion, diet pattern, educational status, occupation, gravida, and para. So breast milk secretion is unique experience which is not affected by any demographic variables.

Recommendation:

1. The study can be replicated with a larger sample for better generalization.
2. The study can be conducted to compare the amount of breast milk secretion among postnatal mothers in experimental group and control group in MGMC&RI at Puducherry.

References:-

1. Donna L.W., &Shannon E.P.(2011). Maternal Child Nursing Care .USA:Mosby, page number: 665-675.
2. Berkeley, C. (2009). A Handbook Of Midwifery For Nurses And Midwifery.Indore: N.R.Brothers ,Page number:328.
3. Betty, R.S. (2008). Textbook for Midwives. Britain: Markays of Chatham publications, page number :439-452.
4. Cunningham, Leveno., Bloom & Spong. (2010). Willam, Obstetrics & Gynaecology, NewYork: McGrawHil, page number: 374.
5. Paruldatta," Paediatric Nursing", 2nd edition, 2009, published by jitender, jaypeebrothers medical publishers (p) ltd, New Delhi.

6. Basavanthappa, B.T. (2002). Nursing Research .New Delhi: Jaypee Brothers page number:72-78.
7. Datta DC. Textbook of obstetrics. 5th ed, New central book agency publishers. 2004,P:149-50.
8. Sharma KS (2012): Nursinsg Research and Statistics´, 2nd edition, Haryana (INDIA), Elsevier Publication.Page no 155-156
9. Polit, D.F. and Beck, C.T. (2010) Essentials of Nursing Research: Appraising Evidence for Nursing Practice. 7th Edition, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia.
10. Susan L. Ward and Shelton M.Hisley (2010); Maternal Child Nursing care ,1st Edition, published by Jaypee brothers medical publishers (P) ltd.
11. Bunadette,P.H.(2011). Nursing research principles and methods. Philadelphia: Lippincott publishers. page number:453-456 .
12. Clements, J., Elyazeed, R.A & Rao .M.(2012). Early Initiation of breastfeeding and the risk of infant diarrhoea in rural Egypt, Paediatrics Journal , (volume:78),page number:621-627.
13. Semin Pennatol (2009), benefits of breast milk. http.//www. Executivehm.cm/current issue/articles asp.
14. UNICEF. Nursing Times.[online] 2007 Aug [cited 2013 oct 24]Available from: URL: http://www.unicef.org/jamaica/media_.htm.
15. Sui-Lan-Li (2013)Breastfeeding and Active Bonding Protects against Children's Internalizing Behavior Problems,Nutrients. 2014 Jan; 6(1): 76–89.Published online 2013 Dec 24.
16. Barbara and Kevinkunz (2011)Factors Associated With Exclusive Breastfeeding 2 to 4 Weeks Following Discharge From a Large, Urban, Academic Medical Center Striving for Baby-Friendly Designation, The Journal of perinatal Education, 2011 Winter; 20(1): 28-35
17. Zhang.Jie. (2011) Characteristics of Breastfeeding Discussions at the Initial Prenatal Visit, Obstetrics and GynaecologicalJournal. 2013 Dec; 122(6): 1263–1270.
18. MitraSavabiEsfahani et al (2015) Effect of acupressure on milk volume of breastfeeding mothers, Iran Journal Nursing Midwifery Res. 2015 Jan-Feb; 20(1): Pageno 7-11.