

## A STUDY ON KNOWLEDGE AND ATTITUDE REGARDING BREASTFEEDING AMONG MUSLIM ADOLESCENT FEMALE COLLEGE STUDENTS IN KASHMIR VALLEY

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### BACKGROUND

The breast feeding is a procedure of feeding of babies and young children with milk from a woman's breast directly or by expressing (pumping out) the milk from the breast of a women and bottle-feeding it. The mature breast milk begins to produce in breasts of a women around the third or fourth day after the birth of a child. The benefits of breast feeding are acknowledged globally and the newborn child have a natural instinct to latch on to the breast and start nursing immediately when placed on their mother's skin. The immediate skin-to-skin contact makes subsequent breast feeding significantly easier, reduces crying of a baby and warms the newborn. The inadequate knowledge, or unfavorable attitude of women towards breast feeding, affects future perception of women toward breastfeeding during adolescence.

**Aims And Objectives** The ideal food for the healthy growth and development of a newborn child is breast milk which is less expensive and decreases the risk of a number of diseases in both mothers and infants. The current study was conducted in Kashmir valley with the main objective to assess the knowledge and attitude of Muslim Adolescent Female College Students regarding breastfeeding.

**Material & Methods** The present cross-sectional study was conducted among teenage college going students (n = 400) in Kashmir valley. A well-designed pretested questionnaire was used to assess Knowledge and attitude of

female students. The data collected was analyzed using appropriate statistical tools like Descriptive statistics, Chi-square. The Statistical software SPSS (Version-25) was used for the analysis of data.

**Results** The study revealed that majority of the female students knew the benefits of breastfeeding irrespective of the stream of their study. It has been observed that students under study (science stream=13.5%, arts stream=17.5%) considered breast milk as unhygienic. Further, students (science stream=11.5%, arts stream=13.5%) believed that small breasts produce insufficient milk. The students under study (science stream=87.5%, Arts stream=91.5%) were more confident about their future breastfeeding. The majority of students (science stream=72.5%, did not know the preventive role of breastfeeding. In educational institutions of Kashmir at school level breastfeeding topic is not discussed in detail.

**Conclusion** The study revealed that majority of the college female students showed positive attitude towards breastfeeding and students from science stream had better knowledge and favorable attitude toward breastfeeding as compared to students from other arts streams of study.

**KEY-WORDS:-** Breastfeeding, Knowledge, Attitude; Adolescents, Kashmir, Statistics

## INTRODUCTION

Islam as long as 1400 years ago has encouraged breastfeeding, before any medical knowledge on health values and the benefits of breastfeeding was available. Recently, WHO has brought about breastfeeding a major component of the Global Nutrition Target 2025. Breastfeeding is defined as the practice of only giving an infant breast-milk for the first 6 months of life, having single largest potential impact on child mortality of any preventive intervention. Breast feeding serves as a child's first immunization and provides security to child from potentially life-threatening ailments such as respiratory infections and diarrheal disease. The exclusive breastfeeding of a women is a foundation stone of child survival and child health as it provides crucial, irreplaceable nutrition for a infants growth and development. Exclusive breastfeeding also has a protective effect against obesity and certain non-communicable diseases later in life." More than 14 centuries ago, before any medical knowledge on health values and the benefits of breastfeeding was available, Islam indorsed every mother to breastfed her children up to the age of two years if the lactation period was to be completed. Breastfeeding is clearly encouraged in the Quran and breast feeding by the mother to her new born infant is significantly beneficial as science had proven it, and it is mandatory as mentioned in the Quran. "Mothers shall breastfeed their children for two whole years, for those who wish to complete the term" (2:233). Allah blesses the child with the very first meal naturally when born. Precisely from the days when women gave birth Allah has created enough food and drink for the child for months in the mother's bosoms. Allah has made us aware that breast milk is the most health-giving food source for infants. It is prepared daily as per the infant's needs for growing and nourishment, while other milks and/or formulas remain the

same regardless of the infant's daily requirements. The first form of milk, colostrums described as liquid gold is yellowish in colour contains protein, minerals, and large number of antibodies. Colostrum also acts as a laxative. Breast milk is also comprised of enzymes which make breast milk easy to digest. These digestive enzymes also destroy any microorganisms in the stomach that may have pass in thereby providing extra protection against disease. Infant mortality rates (IMRs) among breast fed infants are 4 time lower than IMRs of artificially fed infants. In addition, breast feeding creates a strong bond between mother and child due to which child feels happiness and security. Breast feeding is also beneficial for the mother. The uterus of a breast feeding mother fully contracts to its original size, whereas the uterus of a mother who does not breast feed does not. Further, breast feeding women are less susceptible to breast cancer than those women who have never breast fed. In addition, the more a women breast feeds the less likely she is to get breast cancer. Breast feeding also acts as a contraceptive to some extent. (Hawwas, 1988) The child's right to be breastfed has been asserted by the Quran, the source of Islamic law and morality. Quranic verse 2:233 recommends a 2-year period of lactation. According to Islam a nursing mother is enabled to receive compensation from the father of the child for nursing the child. The father, though, has the option to appoint a paid or unpaid wet-nurse for the child, in which case the mother loses her right to be paid for nursing even if she volunteered to breastfeed. The Islamic sources revealed that mother's right to nurse a infant without compensation is prior to a father's right to engage a wet-nurse and it is reported that mother receives the reward of a good deed for every single drop of her breast milk she gives to her newborn child. Islamic edicts on lactation influenced Arabian medicine. Avicenna's view that children should be breastfed for 2 years was appreciatively quoted by European physicians in the 17th century. Avicenna also described that following is the mode in which feeding of infant is to be arranged, whenever possible mother's milk should be given by suckling. The general treatment mentioned in unani classical text, if signs of cold temperament arises are (1) Sheera maghze tukhme kaddu (2) Pomegranate juice (abe anar) (3) Syrup of nymphaea alba (sharbate nilofer). If signs of hot temperament arises, treatment are (1) Badiyan sabaz (2) Habe musil (3) Soup of wheat flour and (4) Galactogues are drugs which increase milk production such as withanie somnifera, Nigellia sativa (kalonji), asparagus racemose (satawar). The main Arabian medical texts have chapters on lactation, tests for quality of breast milk, and on diets and drugs for humanizing lactation. Research at Al-Azhar University is directed toward finding a contraceptive that will not inhabit lactation and is not going to affect the quality of breast milk. (Hefnawi, 1982; Omran, 1990). The breastfeeding is fully recommended to all infants in their first 6 months of life and breastfed infants have a better health status compared to infants familiarized with mixed feeding in their early life. Infact, breastfeeding not only gives benefits to the child, but also to the mother as well as it offers protective mechanism in lowering risk of gastrointestinal infection. Breast milk serves as a child's first immunization, providing protection from respiratory infections, diarrheal disease, and other potentially life-threatening ailments. It

has been found that exclusive breastfeeding has a protective effect against obesity and certain non-communicable diseases later in life (Jelliffe, 1987). It also stimulates bonding between the mother and the child. The religion Islam views childhood as a critical phase in molding an individual and parents have been entrusted by Allah to observe and fulfill the rights of the children in providing a favorable environment for them to grow and develop. A good quality healthcare and appropriate nutrition needs to be filled by the parents as they are among the child's rights and Islam emphasizes the importance of breastfeeding up to 2 years old as a way of furnishing good nutrition. It also provides key for mothers who are unable to breastfeed their child by adopting wet nurse. Parents are in charge of providing good health and nutrition for their children. Islam highly encourages breastfeeding because it provides medical profits for both mother and children. (Mokhtar et al, 2018). Some of the incomparable Advantages of Breastfeeding, that we probably know yet often, taken for granted are: (a) It takes the psychological and emotional bond between the mother and her child to a new level. (b) The essentials and nutrients required for the child correctly caters to the new born child and there are reports where a pair of twins is made to nurse from only one breast each, and the milk in particular breast substantially changes when that new born child falls ill. SubhanAllah! It has been noticed that nutritional composition in breast milk changes from birth to the time of weaning according to the infants needs. (c) Breast milk contains right percentage and amount of nutrients that is suitable for the baby compared to formula milk or mammalian milk that contains proteins that may be difficult to process. (d) Mother's milk is maintained at a temperature suitable to the baby and is sterile. (Jelliffe, 1987) The breastfeeding benefits of breastfeeding are accepted globally (Al-Binali2012, El Mouzan 2009, Al-Jassir et al; 2003). It has been reported that breastfeeding has a defensive job. (Jelliffe, 1987; Huffman 1990; Al-Hreashy et al, 2008; El Mouzan et al, 2009). In children, it reduces the risk of infections. In mothers, it prevents ovarian and breast cancers (Britton et al, 2007; CDC 2016). The decision by a woman to breastfeed her child after childbirth is influenced by many factors such as ethnicity, culture and education (Dudeja et al, 2014). Our health-related behavior and practices are based on what we learn in schools. So school education also has an important role to play in shaping the mind set of adolescent girls toward breast feeding (Dudeja et al, 2014). In the literature, we come across a number of studies related breast health and it was reported that parental education is also positively related with breastfeeding behavior (Brown and Davies, 2014; The Association of Maternal Intention to Breastfeed, 2008, Syed Sabahat et al., 2019, 2020). Breast feeding is a natural activity but it takes time to learn and with practice it gets easier for infant and breastfeeding women to master. The proper positions for breastfeeding enable an infant to latch on to the breast well and at ease. Further, there is no strain on the breast muscles and the risk of nipple injuries and pain is reduced. The finest breastfeeding position for a women can also change with the growth of a child and woman gains self-confidence with time. In fact, no single position of breast feeding works for everyone breast feeding women. While not every woman will find the same positions

comfortable or effective, some of the best breastfeeding positions include: (a) Cradle hold. (b) Cross-cradle hold. (c) Reclining or lying back. (d) Sitting baby. (e) Side-lying. (f) Clutch hold.

### GENERAL BEST BREASTFEEDING POSITIONS

While not every woman will find the same positions comfortable or effective, some of the best breastfeeding positions include:

(1). Cradle hold: This is the classic breastfeeding position, the baby feeds with its stomach against the woman's body. The breast feeder in this position holds the newborn baby with its stomach against her body and the baby is supported with the arm that is on the similar side as the breast from which the infant is nursing. To avoid the straining the neck of a baby, the baby's head is kept in line with the rest of his/her body and to make this hold more comfortable, one must use a nursing pillow or an armrest to support elbow. It is difficult for some women to master this position with a new born and as babies grow, they may become too large to support. (2). Cross-cradle hold: This position is usually the best latch for newborns and the hold similar



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To the cradle hold. In this breast feeding position woman supports the infant with the arm opposite to the breast the baby is feeding from the women. the breast feeder women holds the infant flush next to her stomach, with their back and neck aligned. This breast feeding position can be complicated to master at beginning but allows the breast feeder woman more control over the baby's latch and this position for babies who struggle with can be helpful. (3). Reclining or lying back: This breast feeding position is sometimes called biological nursing because it stimulates a baby's instinctive feeding reflexes, and allows the breast feeding woman to feed from a comfortable, supported position. This position may need some shifts in positioning; however the reclining position can also be very comfortable for women struggling with muscle pain or recovering from childbirth or operation. (4). sitting baby: This position works well when a baby is old enough to support their head. The babies who squirm when they feel restrained may also like this breast feeding position. The women who breast feed in this position must ensure the baby's neck and back are straight, aligned and nothing is covering the baby's nose. (5). Side-lying: This breast feeding position is an ideal position for women recovering from surgery, and for exhausted women feeding at night. This breast feeding position is preferred by women who co-sleep with the infant and some women find this position difficult to breast feed at first. In this position the women hold the baby close to her side, and support its back with her lower arm or a rolled up blanket or towel. The breast feeding women place the baby in such a way that its nose is close to her nipple. This position is not recommended by many organizations. The safest way of breast feeding in this position is to take away all pillows and blankets near the infant. The breast feeding women should avoid falling asleep before returning the baby to its crib. (6). Clutch hold: This position is ideal for women recovering from abdominal surgery or dealing with pain after childbirth and is also an excellent option for breast feeding women who want to nurse two babies simultaneously. This position breast feeding position is at times called the football hold as breast feeding woman holds the baby like a football and many women find this position helps babies get a deeper latch. The literature suggested that positioning is just one aspect of comfortable breastfeeding and there are other strategies that can make nursing more happy and effective for a women breast feeder: (a) Using pillows or rolled blankets for extra support: This approach can be especially supportive if holding the baby causes muscle strain to breast feeder. To reduce shoulder and neck tension, the breast feeder can put a pillow under the elbow that supports the baby. (b) Creating a comfortable breastfeeding area: It is observed that stocking one area of the house or room with snacks, water, a nursing pillow, a coverlet, burping supplies, a book or magazine, and other necessities can help breast feeding women to manage long breastfeeding sessions. (c) Relaxing the neck and shoulders: It is noticed that some breast feeder tense their neck and shoulder muscles to hold the weight of the baby. They try keenly relaxing these muscles or utilize a pillow for support. (d) Supporting the breast. The infants face may

be covered by the breast feeder depending on size or position of the breasts of women. To keep the baby's nose uncovered and make position more comfortable, the breast feeding women support the weight of the breast with a free hand. (e) Pumping after each breastfeeding session. The breast feeding women can pump breasts after each breastfeeding session to raise milk supply, build up a store of breast milk and empty the breasts. It is noticed few breast feeding women choose to save time by pumping on one breast while breastfeeding on the other to the child.

In India, graduation is pursued by the students usually at 18 years of age and this is the cut-off legal age for marriage. The girl respondents in current study were legally eligible for marriage. Thus, it becomes all the more relevant and important to gauge their views, beliefs, and attitudes toward breastfeeding, as they are soon-to-be-mother cohort. Hence, the current study was conducted with the following objectives.

(a). To assess the knowledge of female college going students towards breast feeding in Kashmir.

(b). To assess the attitude of female college going students towards breast feeding in Kashmir.

## **MATERIAL AND METHOD**

A survey online/offline was conducted during 2020-2021 in Kashmir valley in which a total of 400 females' undergraduate college going students of age group 18 - 24 years and ability to understand the semi-structured questionnaire were recruited and randomly selected from various colleges of Kashmir valley for the study. A verbal consent was obtained from all the students who agreed to participate in present study. The questionnaire for the present study was developed and validated based on information drawn from previous studies on the topic understudy. The data collected from 400 Muslim female respondents was analyzed statistically. The standard statistical tools like descriptive statistics, chi-square test and graphs were used for analyzing of data with the help of statistical software SPSS (version 25.0).

## **SAMPLE SIZE DETERMINATION**

The sample size for present study was computed using the formula given as (Cochran, 1977)

$$n = \frac{Z_{\alpha}^2 P(1 - P)}{d^2}$$

Here on the basis of previous studies, we chose  $p=0.5$ ,  $Z_{\alpha} = 1.96$  and  $d=0.05$ . That gives the sample size  $n \sim 384$  and for our study we decided to choose  $n = 400$ .

## **RESEARCH HYPOTHESIS**

**Hypothesis:** There will be no significant difference in Knowledge and Attitude regarding breastfeeding among adolescent female college going students in Kashmir Valley between rural and urban students. To test the hypothesis, we use chi-square test (with usual notations) given by

$$X^2 = \sum_{i=1}^2 \frac{(o_i - e_i)^2}{e_i}$$

where  $X^2 \sim \chi_1^2$ ,  $o_i$  and  $e_i$  represent observed and expected frequencies. We reject  $H_0$  if p-value is less than specified level of significance 0.05 or 0.01.

## RESULTS AND DISCUSSION

The data shown in Table 1, reveals that a total of 400 Muslim female (200 rural and 200 urban) college going students were selected for the present study. It has been observed that majority of the respondents were in the age group of 22-24 years (urban=58.5%, rural=54.0%), from middle class families

Table 1: Socio-demographic characteristics of female College going students understudy

S.No.	Variable	Category	Location		Chi-square	P-value
			Urban	Rural		
			Frequency (%)	Frequency (%)		
1.	Age (years)	19-21	83 (41.5)	92 (46.0)	0.823	>0.05
		22-24	117 (58.5)	108 (54.0)		
2.	Economic Status	Middle class	181 (90.5)	176 (88.0)	0.651	>0.05
		Lower class	19 (9.5)	24 (12.0)		
3.	Type of Family	Nuclear	151 (75.5)	141 (70.5)	1.268	>0.05
		Joint	49 (24.5)	59 (29.5)		
3.	Stream of study	Science	113 (56.5)	124 (62.0)	1.253	>0.05
		Arts	87 (43.5)	76 (38.0)		

The data presented in Table 2, reveals that in response to statement 1, related to awareness towards breast feeding among female students i.e., Breast milk and bottled milk are the same, majority of the respondents (urban=87.0%, rural=84.0%) did not agree, in response to statement 2, i.e., Babies who are bottle-fed have more illnesses than babies who are breastfed, majority of the respondents (urban=48.5%, rural=54.0%) agree, in response to statement 3, Breastfeeding helps bonding between mother and baby, majority of the respondents (urban=78.5%, rural=83.0%) agree, in response to statement 4, Breastfeeding prevents a woman from returning to her pre-pregnancy weight, majority of the respondents (urban=66.0%, rural=70.5%) agree, in response to statement 5, If breastfeeding, a woman cannot return to work, majority of the respondents (urban=64.5%, rural=56.0%) did not agree, in response to statement 6, Breastfeeding is unhygienic and can spread germs, majority of the respondents (urban=96%, rural=97.5%) did not agree, in response to statement 7, Small breasts will not produce enough milk, majority of the respondents (urban=69.5%, rural=78%) did not agree, in response to statement 8, Breastfeeding mothers have less

risk of breast and ovarian cancers, majority of the respondents (urban=84.5%, rural=77.5%) agree, in response to statement 9, Breast milk contains antibodies which protect a baby from infection and strengthen his/her immune system, majority of the respondents (urban=78.5%, rural=79.5%) agree, in response to statement 10, Most women make enough milk to breastfeed, majority of the respondents (urban=71.5%, rural=80.5%) agree, in response to statement 11, Women who breastfeed should avoid certain foods, majority of the respondents (urban=73.5%, rural=65.5%) agree, in response to statement 12, Breast milk provides all the nutrients a baby needs, majority of the respondents (urban=84%, rural=86.5%) agree, in response to statement 13, Exclusive breastfeeding is recommended for the first 6 months of a baby's life, majority of the respondents (urban=82%, rural=78%) agree, in response to statement 14, Breastfed babies have better mental development than babies fed bottled milk, majority of the respondents (urban=46.5%, rural=41%) did not agree. Statistically, it has been observed that there is non-significant difference between urban and rural respondents ( $p > 0.05$ ) in all statements, except in statement 10 and 13 ( $P > 0.05$ ). In Kashmir, in majority people follow Islamic tradition of living so there is not much difference in rural and urban respondents knowledge in the present IT environment.

**Table 2: Knowledge towards breast feeding among female college students in Kashmir**

S.No.	Statement	Location	Frequency			Chi-square	P-value
			Yes (%)	No (%)	No Idea (%)		
1.	<b>Breast milk and bottled milk are the same</b>	Urban	9 (4.5)	174 (87.0)	17 (8.5)	0.726	>0.05
		Rural	11 (5.5)	168 (84.0)	21 (10.5)		
2.	<b>Babies who are bottle-fed have more illnesses than babies who are breastfed</b>	Urban	97 (48.5)	73 (36.5)	28 (14.0)	1.920	>0.05
		Rural	108 (54.0)	72 (36.0)	20 (10.0)		
3.	<b>Breastfeeding helps bonding between mother and baby</b>	Urban	157 (78.5)	14 (7.0)	29 (14.5)	1.365	>0.05
		Rural	166 (83.0)	12 (6.0)	22 (11.0)		
4.	<b>Breastfeeding prevents a woman from returning to her pre-pregnancy weight</b>	Urban	132 (66.0)	37 (18.5)	31 (15.5)	0.934	>0.05
		Rural	141 (70.5)	32 (16.0)	27 (13.5)		
5.	<b>If breastfeeding,</b>	Urban	43 (41.5)	129 (64.5)	28 (14.0)	3.051	>0.05
		Rural	52 (26.0)	112 (56.0)	36 (18.0)		

	<b>a woman cannot return to work</b>						
6.	<b>Breastfeeding is unhygienic and can spread germs</b>	Urban	3 (1.5)	192 (96.0)	5 (2.5)	0.723	>0.05
		Rural	2 (1.0)	195 (97.5)	3 (1.5)		
7.	<b>Small breasts will not produce enough milk</b>	Urban	29 (14.5)	138 (69.5)	33 (16.5)	4.461	>0.05
		Rural	23 (11.5)	156 (78.0)	21 (10.5)		
8.	<b>Breastfeeding mothers have less risk of breast and ovarian cancers</b>	Urban	169 (84.5)	17 (8.5)	24 (12.5)	2.177	>0.05
		Rural	154 (77.5)	25 (12.5)	21 (10.5)		
9.	<b>Breast milk contains antibodies which protect a baby from infection and strengthen his/her immune system</b>	Urban	157 (78.5)	13 (6.5)	30 (15.0)	0.991	>0.05
		Rural	158 (79.5)	17 (8.5)	25 (12.5)		
10.	<b>Most women make enough milk to breastfeed</b>	Urban	143 (71.5)	33 (16.5)	26 (13.0)	6.813	<0.05
		Rural	161 (80.5)	27 (13.5)	12 (6.0)		
11.	<b>Women who breastfeed should avoid certain foods</b>	Urban	147 (73.5)	22 (11.0)	31 (15.5)	6.198	<0.05
		Rural	131 (65.5)	18 (9.0)	51 (25.5)		
12.	<b>Breast milk provides all the nutrients a baby needs</b>	Urban	168 (84.0)	15 (7.5)	17 (8.5)	1.601	>0.05
		Rural	173 (86.5)	9 (4.5)	18 (9.0)		
13.	<b>Exclusive breastfeeding is recommended for the first 6 months of a baby's life</b>	Urban	164 (82.0)	26 (13.0)	10 (5.0)	7.717	<0.05
		Rural	156 (78.0)	19 (9.5)	25 (12.5)		
14.	<b>Breastfed babies have</b>	Urban	48 (24.0)	93 (46.5)	59 (29.5)	5.386	>0.05
		Rural	69 (34.5)	82 (41.0)	49 (24.5)		

	<b>better mental development than babies fed bottled milk</b>						
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**Table 3: Attitude of female students towards breastfeeding in Kashmir valley**

S.No.	Statement	Location	Frequency			Chisquare	P-value
			Yes (%)	No (%)	No Idea (%)		
1.	<b>I think breastfeeding a baby would make me feel pleasant.</b>	Urban	168 (84.0)	7 (3.5)	25 (12.5)	1.308	>0.05
		Rural	175 (87.5)	4 (2.0)	21 (10.5)		
2.	<b>It is likely that most people who are important to me would want me to breastfeed if I were to have a baby.</b>	Urban	17 (8.5)	152 (76.0)	31 (15.5)	6.517	<0.05
		Rural	28 (14.0)	129 (64.5)	43 (21.5)		
3.	<b>I am confident enough of breastfeed.</b>	Urban	182 (91.0)	5 (2.5)	13 (6.5)	0.906	>0.05
		Rural	187 (93.5)	4 (2.0)	9 (4.5)		
4.	<b>I have personal control over breastfeed if I had a baby.</b>	Urban	165 (82.5)	7 (3.5)	28 (14.0)	1.242	>0.05
		Rural	173 (86.5)	5 (2.5)	22 (11.0)		

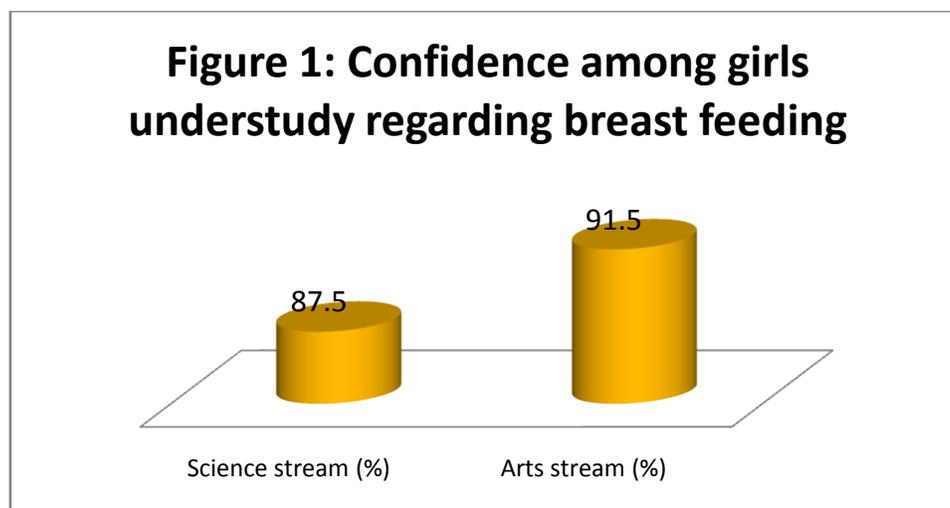
The data regarding attitude of respondents towards breastfeeding undertaken in Table 3, reveals that in response to statement 1, I think breastfeeding a baby would make me feel pleasant, majority of the respondents (urban= 84%, rural=87.5%) agreed, in response to statement 2, It is likely that most people who are important to me would want me to breastfeed if I were to have a baby, majority of the respondents (urban=76%, rural=64.5%) did not agree, in response to statement 3, I am confident enough of breastfeed, majority of the respondents (urban=91%, rural=93.5%) agreed, in response to statement 4, I have personal control over breastfeed if I had a baby, majority of the respondents (urban=82.5%, rural=86.5%) agreed. Statistically, it has been observed that there is non-significant difference in all statements ( $p > 0.05$ ), except statement 2 ( $P < 0.05$ ).

**Table 4: Perceived advantages of breastfeeding as told by the respondents under study**

S.No.	Statement	Location	Frequency	Chisquare	P-value
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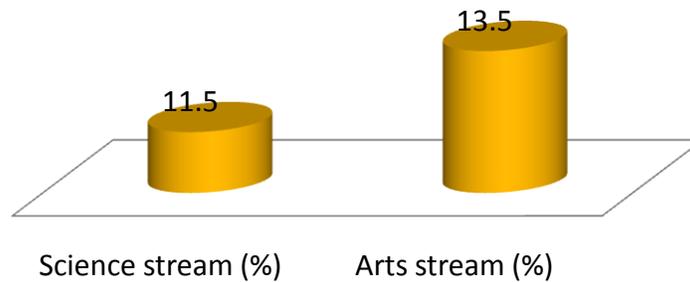
			Yes (%)	No (%)	No Idea (%)		
1.	<b>Bonding with one's baby</b>	Urban	179 (89.5)	16 (8.0)	5 (2.5)	2.362	>0.05
		Rural	184 (92.5)	9 (4.5)	7 (3.5)		
2.	<b>Providing health benefits for one's baby</b>	Urban	173 (86.5)	7 (3.5)	20 (10.0)	2.046	>0.05
		Rural	182 (81.0)	5 (2.5)	13 (6.5)		
3.	<b>A convenient method of infant feeding</b>	Urban	154 (71.0)	8 (4.0)	38 (19.0)	5.546	>0.05
		Rural	172 (86.0)	6 (3.0)	22 (11.0)		
4.	<b>Regaining one's figure</b>	Urban	139 (69.5)	27 (13.5)	34 (17.0)	3.164	>0.05
		Rural	147 (73.5)	16 (8.0)	37 (18.5)		
5.	<b>Helping to prevent breast cancer</b>	Urban	87 (43.5)	67 (33.5)	46 (23.0)	4.947	>0.05
		Rural	109 (54.5)	56 (28.0)	35 (17.5)		
6.	<b>Saving money</b>	Urban	71(35.1)	98(49.0)	31 (15.5)	0.788	>0.05
		Rural	78 (39.0)	96 (48.0)	26 (13.0)		
7.	<b>A natural method of infant feeding</b>	Urban	162 (81.0)	8 (4.0)	30 (15.0)	2.714	>0.05
		Rural	174 (87.0)	6 (3.0)	20 (10.0)		
8.	<b>A time-consuming method of infant feeding</b>	Urban	26 (13.0)	161 (80.5)	13 (6.5)	5.111	>0.05
		Rural	13 (6.5)	170 (85.0)	17 (8.5)		
9.	<b>A feeling of embarrassment</b>	Urban	23 (11.5)	144 (72.0)	33 (16.5)	2.146	>0.05
		Rural	16 (8.0)	156 (78.0)	28 (14.0)		
10.	<b>Limiting social activity</b>	Urban	69 (34.5)	117 (58.5)	14 (7.0)	6.825	<0.05
		Rural	49 (24.5)	126 (63.0)	25 (12.5)		
11.	<b>An uncomfortable and painful method of infant feeding</b>	Urban	42 (21.5)	121 (60.5)	37 (18.5)	6.593	<0.05
		Rural	31 (15.5)	145 (72.5)	24 (12.0)		

The data pertaining to perceived advantages of breastfeeding as told by the respondents existing in table 4 discloses that in response to statement 1, Bonding with one's baby, majority of the respondents (urban=89.5%, rural=92.5%) agreed, in response to statement 2, Providing health benefits for one's baby, majority of the respondents (urban=86.5%, rural=81%) agreed, in response to statement 3, A convenient method of infant feeding, majority of the respondents (urban=71%, rural=86%) agreed, in response to statement 4, Regaining one's figure, majority of the respondents (urban=69.5%, rural=73.5%) agreed, in response to statement 5, Helping to prevent breast cancer, majority of the respondents (urban=43.5%, rural=54.5%) agreed, in response to statement 6, Saving money, majority of the respondents (urban=49%, rural=48%) did not agree, in response to statement 7, A natural method of infant feeding, majority of the respondents (urban=81%, rural=87%) agreed, in response to statement 8, A time-consuming method of infant feeding, majority of the respondents (urban=80.5%, rural=85%) did not agree, in response to statement 9, A feeling of embarrassment, majority of the respondents (urban=72%, rural=78%) did not agree, in response to statement 10, Limiting social activity, majority of the respondents (urban=58.5%, rural=63%) did not agree, in response to statement 11, An uncomfortable and painful method of infant feeding, majority of the respondents (urban=60.5%, rural=72%) did not agree. It has been observed that statistically there is non-significant difference ( $p > 0.05$ ) in statement 1-9. Statistically, results show that there was non significant difference among rural and urban respondents ( $P > 0.05$ ) in all statements, except in statements 10 and 11 ( $p < 0.05$ ).



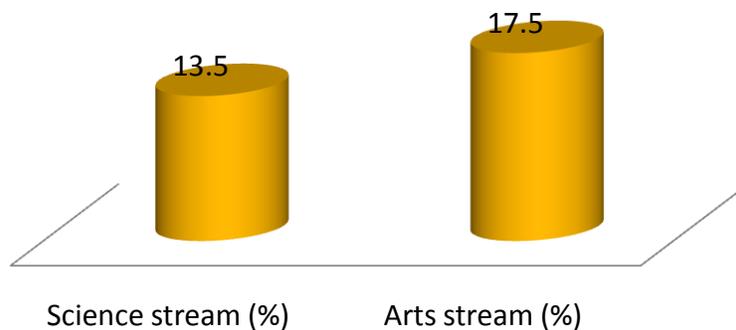
The data presented in Figure 1, revealed that adolescent girls under study revealed that they are confident that they can breast feed to their children's without any problem (science stream=87.5%, arts stream=91.5%).

**Figure 3: The quantity of milk produced is related with size of breasts of female**



The data presented in Figure 2, revealed that adolescent girls believed that quantity of milk produced is related with size of breast size of female (science stream=27.5%, arts stream=32.5%). Every women is different and breasts grow larger before and during breastfeeding journey. The breast size is irrelevant when it comes to quantity of milk produced by a woman, milk supply of a mother with large breasts is same as mother with small breasts.

**Figure 3: The breast milk may be unhygienic**



The data presented in Figure 3, revealed that very few adolescent girls believed that breast milk may not be hygienic so need care (science stream=13.5%, arts stream=17.5%). The bottle feeding takes more time than *breastfeeding* as there is no need to wash bottles or sterilize items before making up feeds for child. Breast milk also has infection-fighting properties that helps protect baby from illness. However, good hygiene is important so mother should be careful.

Education seeks to prepare the children as responsible members of the society for leading a productive life and for females, in every society, childbearing and childrearing are biologically and socially ascribed roles (social scripting) (Raj, 2013). One of the major component of child care is breastfeeding as it has implications on child survival. In fact, most societies would desire that their infants are breastfed and for this from an early age girl should be psychologically and attitudinally prepared. Inadequate knowledge, or unfavorable attitude, about breastfeeding at early stages may lead to its being disfavored by girls (Raj, 2013). The girls are usually informally sensitized about breastfeeding in their routine life (a) when they see their aunts breastfeeding (subjective norms) and (b) when after marriage they give birth to a baby and are counseled by significant others (i.e. family members, mothers, and sisters), peer groups about breastfeeding (Enhancing Education, 2016). One more formal mechanism of advocacy for breastfeeding is through health education by healthcare workers, community health workers, or doctors, when they come in contact with health services (Enhancing Education, 2016). The findings of our study suggest that science stream students had better knowledge and favorable attitude about breastfeeding than arts stream students. A good number of respondents were not sure about mothers returning to the pre-pregnancy weight after breastfeeding and they considered breastfeeding as unhygienic. They also harbored myths such as small breasts will not produce sufficient milk. Science students were more confident to have control over breastfeeding when they become mothers as compared to arts stream. Many respondents apprehended association of breastfeeding with a feeling of embarrassment, limitation of social activity, and feeling of pain (Thulier, 2009). The researchers found that knowledge gaps about breastfeeding among female students can be very well filled by the teachers. Later, this (breastfeeding topic) will eventually be reinforced by doctors or community health workers with whom women come into contact at health centers, to avail antenatal services when they become pregnant (Thulier, 2009). Decision to breastfed can be related to the constructs of the Belief, Attitude, Subjective Norms and Enabling Factors (BASNEF) model. Informal and formal ways, our beliefs, attitudes, and subjective norms can be modified via this model. Concurrently enabling factors can also be modified formally (school education and health system) and informally (family, society, and media) (Arefi et al; 2015, Hazavehei et al; 2010, Sarayloo et al; 2015, Sharifirad et al; 2011). The issues like embarrassment on breastfeeding in public, perceived inadequacy of small breasts to produce sufficient milk, and possible pain associated to breastfeeding were familiar barriers perceived by most of the female students under study.

These fears need to be dispelled through education. On the other hand, common perceived benefits were also reported, for example, it being economical, increased bonding with one's baby, health benefits of the baby, and prevention of breast and ovarian cancers. There is a need to reinforce their positive attitude by educating adolescents at different settings (schools, anganwadis, adolescent clinics, etc.) (Changing Behavior Through Reinforcement and Punishment 2012, Educational Leadership 2016, Clayton et al; 2010, Education for adolescent

girls in conflict 2016). The authors believe that imparting knowledge about breastfeeding early will help the girls become more confident regarding breastfeeding/childrearing in future.

## CONCLUSION

Graduate girl students from science stream were more sensitized, confident, and held favorable attitude in breastfeeding than arts stream students. Imparting knowledge about breastfeeding in science stream only in the senior secondary level will not adequately help the future mothers to gain knowledge and develop a positive attitude toward breastfeeding. This study indicates that the outlook/mind set/attitude of science stream students is favorably oriented toward breastfeeding. Scope of imparting knowledge about breastfeeding among adolescent students by the existing science syllabus has not been adequately harnessed and there is a definitive scope to utilize education opportunity to help the future mothers gain basic knowledge to develop a positive attitude toward breastfeeding.

## RECOMMENDATION

The authors propose that a specific breastfeeding chapter can be incorporated in the science books wherever possible at early stage so that every adolescent girl irrespective of the educational stream has a basic idea about breastfeeding. Thus, increasing knowledge and developing favorable attitude toward breastfeeding may increase exclusivity of breastfeeding rates among “Future Mothers.” in Kashmir.

## PRECAUTIONS TO BE NEEDED DURING BREASTFEEDING

The researchers suggested that certain precautions need to be taken while breastfeeding in order to avoid complications:

- (a) Hold baby correctly in order that the baby holds nipple correctly in his/her mouth which can help mother in feeding without causing her pain or discomfort.
- (b) In order to prevent sore nipples, it is recommended to feed baby frequently to prevent him/her from chewing the nipples there by causing soreness and pain.
- (c) Keep the nipples dry and airy, it is recommended not to use soap or ointment which will dry out skin and causes irritation.
- (d) It is necessary to eat balanced diet along, drink plenty of fluids along with proper rest in order to increase milk quality and quantity.
- (e) Feed baby after taking hot water bath can increase milk flow.
- (f) Clean nipples after every feed can prevent infections.
- (g) Check diapers before feeding baby and it has been seen that babies take milk comfortably while having dry diapers.
- (h) Feed child after 2-3 hours or when needed, don't wait for his/her cry in order to feed

Him/her.

- (i) Avoid eating foods having strong flavours or that can cause flatulence or other problems to baby.
- (j) The breastfeeding women should wear a supportive bra, even at night and make sure it fits well and is not too firm which can cause blocked milk ducts and increase the risk of breast infection among breast feeding women.
- (k) The breast feeding women should change nursing pads whenever they become damp, wet, or soiled and they should shower daily.

### **LIMITATION OF THE STUDY**

In our study sample size was 400 and it is expected with more sample we may get more information.

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