



A COMMUNITY BASED CROSS-SECTIONAL STUDY ON FACTORS AFFECTING EARLY INITIATION OF BREAST FEEDING IN UPTO 2 YEARS OLD CHILD IN SLUM NEAR B.J. MEDICAL COLLEGE, AHMEDABAD

Community Medicine

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ABSTRACT

BACKGROUND: Early or timely initiation of breastfeeding is crucial in preventing newborn deaths and influences childhood nutrition however remains low in India. Early neonatal mortality is assumed to be less if breast feeding is started within first hour after birth. After so many efforts we cannot achieve early initiation of breast feeding to the maximum possible.

OBJECTIVE: 1) Assessment of early initiation of breast-feeding practice in community. 2) To identify mother related and newborn related factors affecting early initiation of breast-feeding.

METHOD: A community based cross-sectional study was conducted from slum located near B.J. Medical college, Ahmedabad by interviewing 200 mothers of child less than 2 years of age. Data collection was done using pre-tested semi-structured questionnaire and data analysis was done using Microsoft Excel 2019.

RESULT: out of 200 mothers 47.5% had initiated breast-feeding within first hour of child birth. 77.50% mothers had initiated breast feeding within 24 hours on child birth. 3 mothers had never given breast milk to their children.

CONCLUSION: Maternal age >30, delivery in private hospitals, LSCS were having significant association with low incidence of early initiation of breast feeding while gender of new born had no association with early initiation of breast feeding.

KEYWORDS

early initiation of breast-feeding (EIFB), mode of delivery, maternal literacy, gender of child

INTRODUCTION

Provision of breast milk to infants within first hour of birth is referred to as "early initiation of breastfeeding" and ensures that the infant receives the colostrum, or "first milk", which is rich in protective factors. Breastfeeding has many health benefits for both the mother and infant as it protects against diarrhoea and pneumonia, and may also have long-term health benefits like reducing the risk of overweight and obesity in childhood and adolescence ("Early initiation of breastfeeding to promote exclusive breastfeeding", 2019)

Nearly half of under-5 deaths are neonatal deaths, early initiation of breastfeeding is one of the strategies employed to reduce neonatal mortality employed globally (Dudeja et al., 2018)

In India, the rates of institutional deliveries are now more than 78.8% and number of cesarean sections is increasing at an alarming rate as it is increased from 8.5% in NFHS-3 (2005-06) to 17.2% in NFHS-4 (2015-16). so it is an important barrier to deal with (Dudeja et al., 2018)

Breast milk is a complete food for newborn, whatever is birth weight, sex, genetic conditions and health status of the baby as it fulfills the nutritional requirements of baby in sufficient quantity and proportions to meet the demand of growth and development of the baby. Since the baby friendly hospital and breast-feeding initiative have started, it has good impact on health status of newborn. Some bad cultural practices in certain communities to discard the colostrum and feeding babies some pre-lacteal feeds like honey, jaggery, ghee or water etc. is to be discouraged as it may contaminated with bacteria (Prasad & Ahamed, 2015)

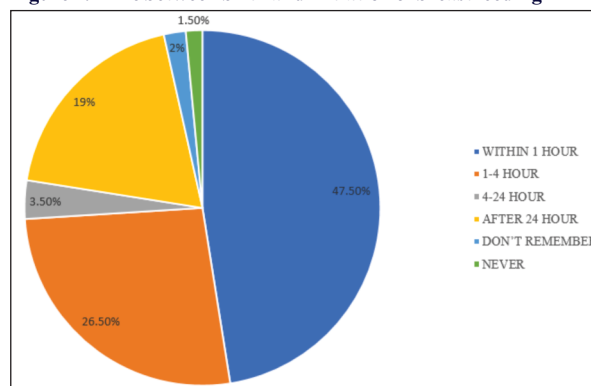
Almost half of the mothers want to give pre-lacteal feed to their newborn irrespective of their socioeconomic class and education. Despite the practice of pre-lacteal feed is discouraged by the nursing care providers, few families are too firm to give it secretly (Majra & Silan, 2016)

MATERIAL AND METHODOLOGY

Present study was a community based cross-sectional study conducted in urban slum near B.J. Medical college, Ahmedabad, Gujarat from August 2019 to October 2019. Data collection was done using pre-tested, semi-structured questionnaire by interviewing 200 mothers of child less than 2 years of age. Mothers whose child age is less than 2 years and are willing to give answers were included in the present study and rest were excluded from study. Data entry was done in Microsoft Excel 2019 and data analysis was done in Microsoft Excel 2019.

RESULT AND DISCUSSION

Figure 1: Time between birth and initiation of breast feeding



47.5% mothers initiated breast feeding within first hour of child birth. 26.50% mothers initiated it within first 1 to 4 hours of child birth and 3.50% mothers gave it within first 4 to 24 hours of child birth. Thus total 77.50% mothers initiated breast feeding within first day of life.

The rate of initiation of breast feeding was observed to be 75% of babies within one hour of birth in rural area of Pondicherry (Prasad & Ahamed, 2015) while 38.6% mothers initiated breast feeding within first hour of life in tribal area of Madhya Pradesh (Sharma et al., 2016) and in study from North Coastal Andhra Pradesh the rate of initiation of breast feeding within 1 hour of life was found to be 48.7% (Pamarthi & Palli, 2019) in other study from Western Nepal reported the rate of early initiation of breast feeding to be 42.2% (Khanal et al., 2015). The prevalence of early initiation of breast feeding among Bangladeshi mothers was 51.4% (Islam et al., 2019)

Table 1: Factors affecting early initiation of breast feeding

	EARLY INITIATION OF BREASTFEEDING		chi-square and p-value
	EARLY n (%)	DELAYED n (%)	
MOTHER'S AGE			
< 30 YEARS(N=151)	79(52.32%)	72(47.68%)	chi-square=5.737 p=0.0166 (significant at 0.05)
> 30 YEARS(N=49)	16(32.65%)	33(67.35%)	

MATERNAL LITERACY			
LITERATE(N=185)	89(48.11%)	96(51.89%)	chisquare=0.3658
ILLITERATE(N=15)	6(40%)	9(60%)	p- 0.545
GENDER			
MALE(N=103)	49(47.57%)	54(52.43%)	chisquare=0.0005
FEMALE(N=97)	46(47.42%)	51(52.58%)	p- 0.983047
SE CLASS			
LOWER CLASS(N=8)	4(50%)	4(50%)	chi-square=0.85
LOWER MIDDLE CLASS(N=63)	28(44.44%)	35(55.56%)	p- 0.9313
MIDDLE CLASS(N=79)	40(50.63%)	39(49.37%)	
UPPER MIDDLE CLASS(N=33)	16(48.48%)	17(51.52%)	
UPPER CLASS(N=17)	7(41.18%)	10(58.82%)	
BIRTH ORDER			
FIRST(N=76)	39(51.32%)	37(48.68%)	chi-square=0.71
>= TWO (N=124)	56(45.16%)	68(54.84%)	p- 0.3975
BIRTH WEIGHT			
< 2.5 Kg(N=22)	9(40.91%)	13(59.09%)	chi-square=0.43
> 2.5 Kg(N=178)	86(48.31%)	92(51.69%)	p- 0.511
MODE OF DELIVERY			
NORMAL(N=134)	86(64.18%)	48(35.82%)	chisquare=45.298
LSCS(N=66)	9(13.64%)	57(86.36%)	p-0.00001 (significant at 0.05)
PLACE OF BIRTH			
GOVERNMENT HOSPITAL(N=144)	76(52.78%)	68(47.22%)	chi-square=5.744
PRIVATE HOSPITAL(N=56)	19(33.93%)	37(66.07%)	p-0.0165 (significant at 0.05)

In present study maternal age less than 30 years if found to be positively associated significantly with EIFB. But in other study it was found that women belonging to age groups 35 - 39 and 45 - 49 reported highest percentage of initiation of breastfeeding within one hour, 32.5% respectively 32.7%. The youngest women, belonging to age group 15 - 19, reported lowest percentage of initiation of breastfeeding within the first hour, 25.3% (Sandor & Dalal, 2013) in study from Aceh Province, Indonesia it was observed that mothers between age 20-35 years had EIFB in 72.8% cases and 84.4% controls while it was observed that 27.2% mothers aged <20 or > 35 in case group and 15.6% in control group had initiated it within 1 hour of life (Berkat & Sutan, 2014)

Present study shows that 48.11% literate mothers initiated breast feeding early while 40% illiterate mothers started breast feeding within 1 hour. EIFB was reported highest among middleclass mother (50.63%) and lowest among upper class mothers (41.18%).

Present study shows almost equal rates of initiation of breast feeding among male (47.57%) & females (47.42%) newborn. There was not any significant sex difference observed in study from Nepal also it was 52.3% among male neonates and 47.7% among female neonates (Khanal et al., 2015). Also there was not any significant difference observed in study from North Coastal Andhra Pradesh where 56.5% male infants were given EIBF but only 41% female infants were given EIBF (Pamarthi & Palli, 2019).

In present study it was observed that infant with birth order 1 had higher rates of EIBF which was 51.32% while it was 45.16% among infant with birth order 2 or more.

In present study it was observed that infant with birth weight less than 2.5 kg had lower rates of EIBF which was 40.91% while it was 48.31% among infant having birth weight more than 2.5 kg but the difference was not statistically significant, while significant difference was observed in study from Nepal with p-value < 0.001.

In present study the rate of EIBF among infant born by Normal delivery was 64.18% while it was much lower among infant born by C-section which was 13.64%, the difference was statistically significant

with chi-square=45.298 and p value-0.00001. Other study from Ajmer showed similar results where rate of EIFB among infant born by Normal delivery was 65.2% whereas it was 14% among infants born by C-section (Badaya et al., 2018)

In present study the rate of EIBF among infant born in Government Hospital was 52.78% while it was lower among infant born in Private Hospital which was 33.93%, the difference was statistically significant with chi-square=5.744 and p value-0.0165.

CONCLUSION

It was concluded that maternal age >30 years at time of child birth has lower rates of EIFB, delivery by C-section and place of delivery also associated with lower rates of EIFB.

Gender of infant has not any effect on rate of initiation of EIFB, low birth weight of baby, maternal literacy, socioeconomic class, birth order of baby has not any effect on EIFB.

Recomondation

As C-section deliveries are increasing day to day we should motivate mothers having C-section to provide breast feeding within 1 hour of child birth.

We should sensitize private practitioner regarding benefits of EIFB and train staff to provide necessity assistance regarding EIFB.

Limitations

In the present study data was collected from community and thus chances of recall bias were there. To limit this data from delivery place is to be taken.

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