



Infant and Young Child Feeding Knowledge and Practices among Lactating Mothers Attending an Urban Health Care Facility in Dhaka, Bangladesh

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1. Abstract

Introduction: The first 1,000 days of a child's life are critical for growth and development as proper nutrition during this period plays a significant role in health outcomes in future. In Bangladesh, though breastfeeding rates are relatively high, challenges persist in achieving optimal Infant and Young Child Feeding (IYCF) practices. Concerning stunting and wasting rates with lack of data in urban areas like Dhaka highlights the need for understanding the influencing factors of IYCF adherence. This study examines IYCF knowledge and practices among lactating mothers of children aged 0-6 months attending an urban MNCH facility in Dhaka.

Method: A cross-sectional, quantitative study was conducted at two Maternal Neonatal and Child Health (MNCH) facilities in Dhaka City from November 24 to December 11, 2024. The participants included 342 lactating mothers of infants aged 0-6 months, selected through convenience sampling. Data were collected via a semi-structured questionnaire on socio-demographic factors, antenatal and postnatal care utilization, and IYCF knowledge, practices and barriers. Data analyses included descriptive statistics, chi-squared tests, and multivariable regression analysis.

Findings: The study found that overall IYCF knowledge among the mothers was quite well, specifically regarding early breastfeeding initiation (90.4%) and colostrum feeding (99.1%). Knowledge gaps existed in complementary feeding, proper breastfeeding techniques and understanding broader benefits of exclusive breastfeeding. Out of 342 mothers, 100% breastfed their child at least once, 62.6% initiated breastfeeding within 1 hour, 81.6% exclusively breastfed and 17.0% practiced mixed feeding. Barriers such as low milk secretion, post-C-section complications, and cultural factors were significant challenges to optimal IYCF practices.

Conclusion: The findings highlight the need for targeted interventions to improve optimal IYCF practices. Addressing barriers as well as strengthening of healthcare service are crucial for enhancing child nutrition in urban Bangladesh.

2. Introduction

The golden window, first 1000 days, of a child's life demands adequate nutrition, which significantly influences development and growth, as well as subsequent health-related outcomes (Likhar & Patil, 2022). Breastfeeding a child within this time, especially within 1 hour after birth, exclusively for 6 months, and continuing for 2 years or more can greatly help prevent malnutrition among children (World Health Organization [WHO], 2023). This is important because, in Bangladesh, the situation is still concerning, with 28% of children under 5 stunted and 10% wasted (Abdulla et al., 2023; M. I. Hossain et al., 2024). The World Health Organization has established Infant and Young Child Feeding (IYCF) guidelines, emphasizing that it provides essential nutrients necessary for an infant's health (WHO, 2023). As per the latest data, globally, the rate of exclusive breastfeeding (EBF) of infants under 6 months remains only 48% (United Nations Children's Fund [UNICEF] & WHO, 2023). South Asia, in particular, faces unique challenges related to IYCF practices, with countries such as Afghanistan and Pakistan, demonstrating inadequate adherence to recommended feeding practices (Tariqujjaman et al., 2022). Several factors like social and cultural, considerably shape feeding practices, influencing low nutrition status among young children. However, in Bangladesh, EBF rates are relatively high, with national prevalence of 53.4% where urban prevalence is 54.8% (National Institute of Population Research and Training [NIPORT] & ICF, 2024).

Despite the relatively high rates of breastfeeding in Bangladesh, challenges persist in successfully achieving all the indicators of IYCF. According to recommendations of WHO, on each Postnatal care (PNC) contact, mothers are to be counseled on EBF along with all the other indicators of IYCF (WHO, 2023). However, all the IYCF indicators are still not well practiced in Bangladesh. With high rates of wasting and stunting among under 5 children in Bangladesh, it is essential to identify the underlying factors that impact IYCF practices. The issue is crucial because suboptimal breastfeeding practices can contribute to a child's impaired physical and cognitive development contributing to poor intelligence quotient (IQ) as well as lower productivity in later life (Degefa, 2024; Hoche et al., 2018).

While there is considerable research on rates of breastfeeding and factors influencing feeding practices globally, there is a lack of comprehensive studies that examine how maternal knowledge,

practices, and health service utilization directly affect IYCF practices in urban Bangladesh. Most of the studies are based on rural areas and primarily focus on socio-economic factors and cultural norms (Hossain et al., 2018; Rahman et al., 2020). This leaves a gap in the IYCF knowledge and practice, and the factors associated among the lactating mothers. Additionally, existing research often emphasizes exclusive breastfeeding but provides limited data on other aspects of IYCF indicators, such as early initiation or practices related to prelacteal feeding, specifically in urban Bangladesh (Abdullah et al., 2018; M. A. Hossain et al., 2024). This study, therefore, focused on assessing the status of IYCF knowledge, practices and utilization of health and nutrition-related services among lactating mothers of children aged 0-6 months attending an urban maternal neonatal and child health (MNCH) care facility in Dhaka City, Bangladesh.

The rationale for this study lies in addressing the gap in understanding the factors like maternal knowledge, practices and health service utilization in shaping feeding practices for infants in an urban setting like Dhaka City, Bangladesh. By identifying the factors influencing IYCF adherence, this research can inform targeted interventions aimed at improving mothers' knowledge related to infant feeding practices in the urban context. Given the high burden of malnutrition in Bangladesh, the findings from this study will provide essential insights for policymakers, health practitioners, public health professionals and program developers, facilitating evidence-based strategies to improve child health outcomes in the long term.

2.1 Research Question

What are the knowledge and current practices of Infant and Young Child Feeding (IYCF) among lactating mothers of children aged 0-6 months attending an urban MNCH facility in Dhaka City, Bangladesh?

2.2 Objectives

2.2.1 General Objective

To assess the IYCF knowledge and practices among lactating mothers of children aged 0-6 months attending an urban MNCH facility in Dhaka City, Bangladesh.

2.2.2 Specific Objectives

1. To assess the knowledge and current practices of IYCF among the lactating mothers in an urban MNCH facility.
2. To identify the associated factors with IYCF practices among the lactating mothers urban MNCH facility.

2.3 Literature Review

Infant and Young Child Feeding (IYCF) practices play a crucial role in the optimal nutrition and development of infants. Several studies in different countries have explored the knowledge, practices, and barriers related to IYCF, including Bangladesh. This literature review synthesizes findings from global and regional studies to provide insights into maternal knowledge, feeding practices, and barriers associated with IYCF.

Maternal knowledge about the benefits and importance of early initiation of breastfeeding (EIBF) as well as exclusive breastfeeding (EBF) is vital for adhering to optimal IYCF practices. Globally, studies have shown that most mothers are aware of the importance of breastfeeding, but gaps exist in their knowledge about the benefits of EIBF. Studies revealed, though many mothers knew about the importance of breastfeeding, there was a significant lack of understanding regarding the critical window of initiating breastfeeding that is within the first hour after the birth of a newborn (Neves et al., 2022). According to the 2022 Bangladesh Demographic and Health Survey (BDHS), only 37% of mothers in Bangladesh practice EIBF which is far below the target set by WHO reach 70% by 2030 (UNICEF & WHO, 2021). However, optimal EIBF practice is a major concern, as studies consistently highlight its role in improving health outcomes of both mother and child, including the prevention of neonatal mortality and the promotion of optimal breastmilk production (Johar et al., 2021). The practice of EIBF ensures that newborns receive colostrum which is the first milk as it boosts immunity and reduces infant mortality risk by half (Patil et al., 2020). However, regional studies suggest that EIBF rate in South Asia remains below the lower-middle-income country average of 45% (UNICEF & WHO, 2021).

The perception of insufficient breastmilk production is a common barrier to EIBF and exclusive breastfeeding, as evidenced by studies in various countries, including Bangladesh (Patil et al.,

2020). Many mothers, despite having adequate milk supply, believe they are unable to meet their baby's nutritional needs. This misconception often leads to the introduction of formula or supplementary foods at a very early age, undermining the practice of EBF. Infants accustomed to formula feeding are less inclined to latch onto the breast, reducing frequency of suckling and further inhibiting breast milk production (Jin et al., 2024). This cycle perpetuates decreasing exclusive breastfeeding rates.

One of the significant challenges in promoting EBF is the widespread practice of mixed milk feeding, which involves combining breast milk with formula or animal milk. According to the BDHS 2022, the national prevalence of mixed feeding in Bangladesh was reported at 21.8%, highlighting the persistence of this practice among mothers (NIPORT & ICF, 2024). A systematic review found that misconceptions about breastmilk sufficiency, as well as convenience and influence of culture, were among the primary drivers of mixed feeding practices (Patil et al., 2020).

Several sociodemographic characteristics including maternal age, education level, delivery mode and place have been identified in several studies as a key determinant of optimal breastfeeding practices. Multiple studies have consistently shown that these factors are associated with delayed initiation of breastfeeding which in turn reduce rates of EBF and increase practice of mixed feeding (Ahmmed & Manik, 2021; Buckland et al., 2020; Neves et al., 2020). A study found that mothers who gave birth via C-section were less likely to start breastfeeding within the first hour compared to mother giving birth via normal vaginal delivery and were more likely to introduce formula feeding (Johar et al., 2021). Moreover, sociocultural factors play an essential role in shaping breastfeeding practices. In many communities, cultural and religious practices influence infant feeding behaviors, often resulting in deviations from optimal breastfeeding practices. In many countries including certain religious communities of Pakistan, the practice of feeding a newborn with prelacteal feeds, such as honey or date, before initiating breastfeeding is common (Asim et al., 2020).

Breastfeeding is a critical determinant of infant health. The gap between knowledge and breastfeeding practices among mothers is significantly hindering optimal feeding practices, particularly early initiation of breastfeeding and exclusive breastfeeding. Thus, there is a clear need

for targeted interventions specific to context. These should include counseling to address misconceptions about milk sufficiency, breastfeeding-friendly protocols for cesarean deliveries, and culturally sensitive approaches to promote early initiation of breastfeeding. Therefore, further research is needed to explore the complex interplay of sociocultural, economic, and healthcare factors that influence infant feeding practices in Bangladesh.

2.4 Conceptual Framework

The conceptual framework (Figure 2.4.1) for this study is developed to examine the interconnectedness of factors like: socio-demographic characteristics, service utilization, maternal knowledge, practices, and barriers on Infant and Young Child Feeding (IYCF) as well as their influence on optimal IYCF practices among lactating mothers of children aged 0–6 months.



Figure 2.4.1: Conceptual Framework

3. Methodology

3.1 Study Design

The study employed a cross-sectional method with quantitative approach.

Site, pop, size, sampling strategy, collection, tools, man, stat, ethics

3.2 Study Settings

The study was conducted among women attending the Radda Maternal and Child Health and Family Planning (MCH-FP) Centre located in Mirpur, Dhaka, Bangladesh, from 24th November to 11th December 2024. Data collection took place in two of the centers of Radda MCH-FP, located in Mirpur-1 and Mirpur-10.

3.3 Study Population

The study population included lactating mothers aged more than 18 years having infants aged 0-6 months who attended one of two centres of Radda MCH-FP for taking services related to Postnatal Care (PNC) and Expanded Programme on Immunization (EPI). The inclusion criteria included lactating mothers of children aged 0-6 months visiting for 2nd or subsequent PNC services and who provided informed consent. The exclusion criteria included mothers of children with medical conditions like congenital anomaly, cleft palate, mothers attending any breastfeeding programs, as these can affect breastfeeding knowledge or practices, and mothers unwilling to participate or unable to provide consent.

3.4 Sample Size:

The sample was calculated using the formula, $n = \frac{z^2 pq}{d^2}$, with a 5% margin of error, 95% confidence interval, and 46.3% prevalence of EBF (under 6-month child) in Dhaka (NIPORT & ICF, 2024). Sample size = $\frac{(1.96)^2 \times 0.463 \times 0.537}{(0.05)^2} = 382$, Adjusted sample size = $\frac{382}{0.90} = 424.5$. This yielded a sample size of ~425 with a 10% non-response rate. However, due to reduced patient flow, time and resource constraints, only 342 mothers were interviewed.

3.5 Sampling Technique and Data Collection Procedure

A convenience sampling technique was followed for our study. Lactating mothers with children under 6 months of age who visited the MCH-FP facility in order to take PNC or EPI services were approached. Next, if the inclusion criteria were met, the study objectives and benefits were well explained and informed written consent was taken from willing participants. Then using Kobo Toolbox, data collection was done from the respondents through face-to-face interviews, where each of the four trained data enumerators administered a semi-structured questionnaire. Each of the interviews took approximately 30-40 minutes to complete.

3.6 Data Collection Tools

A semi-structured questionnaire was developed having several sections: information related to sociodemographic, antenatal care (ANC), postnatal care (PNC), delivery, general information of

child, knowledge, practices and barriers related to IYCF. The sociodemographic questions included socioeconomic and demographic information like maternal and paternal age, education level, occupation, religion, relationship status, type and size of family, monthly household income, and wealth quintile index. Next section included questions related to access and utilization of ANC and PNC service, specifically, information on number of visits, provider, and place of the services taken. The last portion included IYCF related information, where knowledge questions were developed drawing on the IYCF social and behavior change materials used in the urban MNCH, and were adapted from a previous similar study. Moreover, the barrier questions were developed newly, and questions related to practices of IYCF were adopted from WHO IYCF guideline (WHO & UNICEF, 2021).

Before the main data collection, a whole day training session was conducted on questionnaire administration. Moreover, a pretest was done in Korail Slum, Dhaka which revealed some requirements of adjustment in the questionnaire. Later, it was discussed internally, and accordingly, the questionnaire was updated.

3.7 Data Analysis

Quantitative data were entered into STATA 17.0 software to facilitate data cleaning, coding, and statistical analysis like descriptive and inferential statistics. Firstly, data were screened to identify any errors or incompleteness. Next, for the analysis, univariate analysis and descriptive statistics were conducted to summarize the socio-demographic data, including percentages and frequencies for categorical variables, calculating medians and standard deviations. For analyzing the knowledge part, there was a total of 81 knowledge questions, each scored as 1 for a correct answer and 0 for an incorrect one. The total scores were categorized into three levels of knowledge: poor (0–27), moderate (28–54), and good (55–81). Furthermore, chi-squared tests were used for preliminary analysis and multivariable regression analysis was utilized to determine the association between explanatory variables and outcome variables, accounting for possible confounding factors. The significance of each independent variable was assessed by examining the adjusted odds ratio (AOR), associated CI (95%) as well as corresponding p-value (<0.05).

3.8 Operational Definition

Prelacteal feeding: Introducing any type of food or drink right after birth or within the first three days to a newborn other than breast milk (Amele et al., 2019).

Ever Breastfed: Child of age 0–5 months who were breastfed at least once (WHO & UNICEF, 2021).

Early Initiation of Breastfeeding: Child of age 0–5 months who were put to the breast right within the first hour of birth (WHO & UNICEF, 2021).

Exclusive Breastfeeding (EBF): Introducing no drink or food other than breast milk (not even water) with the exception of oral rehydration solution (ORS) and/or medicines to a child of age 0–6 months (WHO, n.d.).

Mixed Milk Feeding: In addition to breast milk, if a child of age 0–5 months is fed any other source of milk like formula or animal milk (WHO & UNICEF, 2021).

3.9 Ethical Considerations

All the steps of this study were reviewed and received approval from the institutional review board (IRB) at BRAC James P Grant School of Public Health (BRAC JPGSPH). The consenting process involved obtaining informed written consent from the participants, by explaining the goals, benefits and risks associated, before collecting the data. Confidentiality was strictly maintained by anonymizing the data and using a secure database that only the authorized personnel could access.

4. Results

4.1. Background characteristics of the respondents

A total of 342 lactating mothers of children under 6 months were interviewed in this study. Among 342 children most were female (56.4%) with a mean age of 73.1 days (Table 4.1.1). The majority of mothers were aged 21–30 years (75.2%), had more than 12 years of education (40.1%), and were homemakers (79.2%). Fathers were predominantly aged 26 years or older (76.3%), with 52.3% having more than 12 years of education. Most families followed a nuclear family structure (70.8%), with four or more members (72.8%), and the median monthly family income was 50,000 BDT. A high proportion of caesarean sections (60.8%) were reported by the respondents, most of which occurred in health facilities (89.2%) and were assisted by medically trained providers (98.8%). Antenatal care was widely utilized, with 84.5% of mothers having four or more ANC

visits, but postnatal care was comparatively less frequent, as 29.2% of the respondents reported no PNC visits.

Table 4.1.1: Background characteristics of the respondents (n = 342).

Characteristics	N	Percentage
Age of child (in days)		
Mean	73.1	-
SD	36.3	-
Sex of child		
Male	149	43.6
Female	193	56.4
Age of mother (in years)		
18 – 20	39	11.4
21 – 25	136	39.8
26 – 30	121	35.4
> 30	46	13.5
Religion		
Islam	336	98.3
*Others	6	1.8
Marital status		
Married	341	99.7
Separated	1	0.3
Family type		
Nuclear	242	70.8
Joint	100	29.2
Family Size		
3	93	27.2
4	132	38.6
> 5	117	34.2
Maternal years of education		
≤ 5	57	16.7
6 – 12	148	43.3
> 12	137	40.1
Maternal occupation		
Home maker	271	79.2
**Employed	71	20.8
Age of father (in years)		
≤ 25	81	23.7
26 – 30	122	35.7
> 30	139	40.6
Paternal years of education		

≤ 5	52	15.2
6 – 12	111	32.5
> 12	179	52.3
Paternal occupation		
***Day labor and unemployed (skilled/unskilled)	38	11.1
****Service	204	59.7
Businessman	100	29.2
Monthly family income (in BDT)		
Q1	25,000	-
Median	50,000	-
Q3	80, 000	-
IQR	55, 000	-
Wealth index quintile		
Lowest	69	20.2
Second	68	19.9
Middle	69	20.2
Fourth	68	19.9
Highest	68	19.9
Type of delivery		
Normal vaginal delivery	134	39.2
Caesarean section	208	60.8
Assistance at delivery		
*****Medically trained provider	338	98.8
Non-medically trained provider	4	1.2
Place of delivery		
Health facility	305	89.2
At home	37	10.8
Antenatal care visits		
None	14	4.1
1 – 3	39	11.4
≥ 4	289	84.5
Postnatal care visits		
None	100	29.2
1 – 3	215	62.9
≥ 4	27	7.9

*Others: Hindu and Buddhist.

**Employed: Skilled day labor, Service holder, Businessman, Petty businessman, House maid, Handicrafts and Freelancer.

***Day labor and unemployed (skilled/unskilled): Skilled day labor, Rickshaw puller/van/ wheelbarrow/driver of baby taxi/boatman, Do not earn and Student.

****Service: Service holder, Professionals and Freelance.

*****Medically trained provider: MBBS doctor, Nurse/Midwife and Paramedic/MA/SACMO. (NIPORT & ICF, 2020)

4.2 Knowledge on IYCF among the lactating mothers

Table 4.2.1 represents maternal knowledge surrounding IYCF indicators. High level of knowledge was found regarding early initiation of breastfeeding (EIBF) within 1 hour of birth (90.4%). Knowledge regarding feeding colostrum soon after birth was also high at 99.1% with 84.5% of respondents reporting colostrum is beneficial for the baby. However, understanding of EIBF's broader benefits was limited, as fewer respondents knew about its importance in reducing maternal bleeding (5.0%) and improving milk supply (14.6%). Knowledge of exclusive breastfeeding (EBF) was also strong, with 94.4% correctly identifying the recommended 6-month duration, and 93.9% recognizing breastmilk as the sole appropriate feed for infants under 6 months. Benefits of EBF including illness protection of child (86.3%) and superior nutrient provision (71.4%) were well acknowledged, while only 9.9% of the respondents knew its importance in mothers' health. Regarding breastfeeding techniques, 99.4% understood the importance of emptying one breast before switching, but fewer were aware of proper attachment, such as ensuring the baby's mouth is wide open (35.1%) or lower lip turned outwards (30.4%). Knowledge of feeding on demand (44.7%) and signs of adequate milk intake (e.g., urinating 6-7 times daily, 58.0%) was moderate. Few mothers had the knowledge regarding expressed breastmilk feeding (60.5%) and even lower (21.4%) had the correct knowledge about its preservation duration at room temperature. Awareness of complementary feeding practices was robust. More than 80% of respondents knew the appropriate age (6 months) to introduce semi-solid foods, legumes, and vegetables. However, knowledge about introducing solid foods and snack foods was not much well (50.9% and 18.1% respectively). The management of diarrhea showed gaps. 59.4% of the respondents said oral rehydration solution (ORS) as an essential intervention, but only 10.5% of the respondents knew about zinc supplementation.

Table 4.2.1: IYCF knowledge among respondents.

Characteristics	N	Percentage
Early Initiation of Breastfeeding (EIBF)		
Knowledge of early initiation of breastfeeding within 1 hour after birth	309	90.4
Benefits of early initiation of feeding breastmilk		
Initiating breastfeeding within 1 hour can save the baby's life	121	35.4
Initiating breastfeeding within 1 hour can reduce the mother's bleeding	17	5.0
Initiating breastfeeding within 1 hour can improve breastmilk supply	50	14.6

Colostrum is good for the baby	289	84.5
Initiating breastfeeding within 1 hour is good for the child's health	115	33.6
Knowledge of colostrum feeding soon after birth	339	99.1
Benefits of colostrum feeding		
Protects against allergies and infections	156	45.6
Is a good source of nutrition	318	93.0
Helps to prevent jaundice	73	21.4
Helps in passing of first stools or meconium	11	3.2
Helps the intestine to mature	35	10.2
Good for the eyes	14	4.1
Exclusive Breastfeeding		
Appropriate feeding of ≤ 6 months child		
Breastmilk only	321	93.9
Breastmilk and water	1	0.3
Breastmilk and some other liquids	17	5.0
Duration for exclusive breastfeeding (not even water)		
6 months	323	94.4
Benefits of exclusive breastfeeding for infants and mothers		
Protects baby from illness	295	86.3
Helps baby grow and develop better	208	60.8
Provides a superior source of nutrients	244	71.4
Easy to digest	52	15.2
Provides adequate water for the baby in the first six months	24	7.0
Clean, always read, and the right temperature	10	2.9
Delays a new pregnancy	25	7.3
Stimulates breastmilk production	18	5.3
Saves money	7	2.1
Increased emotional bonding between mother and child	18	5.3
Good for the mother's health (decreases risk of breast & ovarian cancer)	34	9.9
Breastfeeding Techniques		
Proper positioning for breastfeeding		
Baby's ear, shoulder and hip is placed straight	224	65.5
Baby's face is facing breast with nose opposite to nipple	177	51.8
Baby's body is held close to mother	233	68.1
Baby's whole body is supported	236	69.0
Proper attachment for breastfeeding		
Chin is touching the breast	222	64.9
Mouth is wide open	120	35.1
Lower lip is turned outwards	104	30.4
More areola is visible than below the mouth	225	65.8
Switching breast while feeding		
A little from each breast	95	27.8
Empty one breast before switching to the other	245	99.4
Feeding times of the breastfed child		
Whenever the baby wants	153	44.7
When you see that the baby is hungry	106	31.0
When the baby cries	242	70.8
Every 1-2 hours	184	53.8
Signs that indicate child getting sufficient milk		
Baby urinates at least 6-7 times in 24 hours	192	58.0
Child is gaining weight and growing well	47	14.2

Child sleeps well	166	50.2
Child plays well	102	30.8
Child stops crying	195	58.9
Baby's belly get enlarged	68	20.5
Methods to follow if child gets insufficient milk		
Breastfeed often/more frequently	171	50.0
Ensure proper position and attachment so baby can withdraw all the milk	52	15.2
Take enough time at each breast to withdraw all the milk	89	26.0
Emptying one breast before switching to the other breast	75	21.9
Give other liquids/foods	15	4.4
Mother needs to drink more water	117	34.2
Mother needs to eat more food	165	48.3
Mother needs to eat special foods	109	31.9
Give infant formula	129	37.7
Mother needs to rest more	3	0.9
Need to take doctor's suggestion	16	4.7
Milk production capability of small breast mothers		
Yes	190	55.6
No	81	23.7
Milk production capability of not well-fed mothers		
Yes	58	17.0
No	264	77.2
Expressed breastmilk preservation knowledge		
Up to 4 hours at room temperature	28	21.4
Breastfeeding in Special Cases		
Knowledge of feeding water		
Giving <6 months child water in hot weather		
Yes	26	7.6
No	293	85.7
Giving <6 months child water to mouth after breastfeeding		
Yes	13	3.8
No	299	87.4
Breastfeeding During Pregnancy or Maternal Illness		
Stopping breastfeeding during pregnancy		
Yes	5	1.5
No	304	88.9
Stopping breastfeeding if the mother is ill		
Yes	10	2.9
No	290	84.8
Alternative feeding for baby when mother away		
Mother's expressed breastmilk (breastmilk previously taken out)	207	60.5
Formula	184	53.8
Cow milk	2	0.6
Knowledge of Complementary Feeding		
Age to introduce		
Water	6 months	304 88.9
Milk (cow, goat, powdered)	12 months	43 12.6
Other non-breastmilk liquids (e.g., sugar water, tea, fruit juice)	12 months	5 1.5
Semi-solid foods (e.g., porridge, mashed potato, ripe bananas, other mashed family foods)	6 months	276 80.7

Solid foods (e.g. bread, wheat)	6 months	174	50.9
Legumes (e.g. pulses, peas)	6 months	277	81.0
Green vegetables (e.g., spinach, cabbage)	6 months	265	77.5
Fruits (e.g., orange, mango, ripe papaya)	6 months	273	79.8
Meat	6 months	253	74.0
Fish	6 months	262	76.6
Eggs	6 months	265	77.5
Snack foods (e.g., chips, biscuits, candies)	12 months	62	18.1
Continuing breastfeeding in addition to complementary foods			
Up to 24 months or longer		234	68.4
Food needs for the growth of 13 months young child			
Bread/rice/khichuri		286	83.6
Meat		271	79.2
Fish		270	79.0
Eggs		286	83.6
Fruits		194	56.7
Vegetables		204	59.7
Milk		288	84.2
Oil		91	26.6
Management of Diarrhea in Child			
Actions for managing diarrhea in <6 months children			
Give ORS		203	59.4
Breastfeed more often		87	25.4
Zinc tablet		36	10.5
Need to take doctor's suggestion		65	19.0

The knowledge of infant and young child feeding (IYCF) practices was generally moderate, with 81.6% of respondents scoring in between (28-54) and 18.1% of respondents scored poor (0-27) (Table 4.2.3).

Table 4.2.3: Respondent's knowledge score for IYCF

Poor (0 – 27)	62	18.1
Moderate (28 – 54)	279	81.6
Good (55 – 81)	1	0.3
Total	342	100

4.3 IYCF practices among the lactating mothers

Figure 4.3.1 presents the assessment of IYCF practices among the respondents. All respondents (100%) reported the practice of ever breastfeeding. Early initiation of breastfeeding (EIBF), defined as starting breastfeeding within the first hour of birth, was observed in 62.6% of respondents. 81.6% respondents reported exclusive breastfeeding (EBF) in the previous 24 hours preceding the interview (according to WHO guideline). However, mixed milk feeding, which

involves feeding infant formula and/or animal milk along with breastmilk under 6 months, was noted among 17.0% of respondents. Among the study participants, 96.8% (n=331) reported practicing colostrum feeding for their newborns. Practice of prelacteal feeding was reported by 15.5% (n=53) of the respondents.

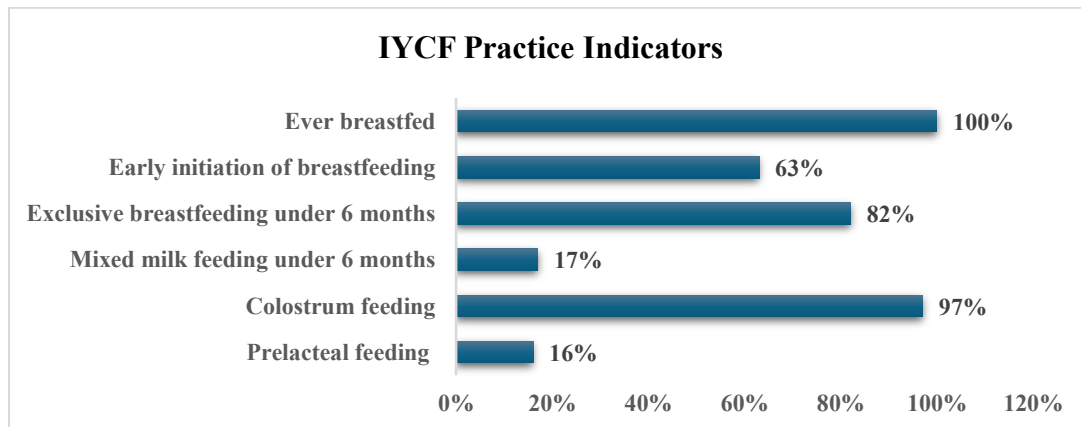


Figure 4.3.1 IYCF practices among the respondents.

Figure 4.3.1 shows findings of respondent's prelacteal feeding practices. Among those who practiced prelacteal feeding, the most commonly given prelacteal was honey (58.5%), followed by dates (20.8%) and formula milk (17.0%). A small percentage (3.8%) reported using other substances, Jam-Jam Water and Sugar Water, as prelacteal feeds.

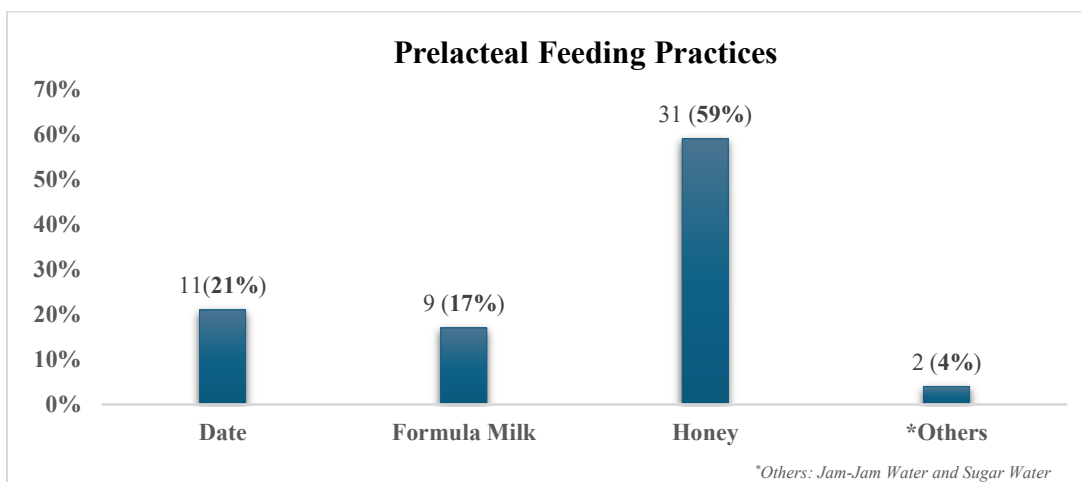


Figure 4.3.2 Prelacteal feeding practices among the respondents.

4.4 Association of background characteristics with IYCF practice indicators

Table 4.4.1 presents factors associated with IYCF practices. Background characteristics like maternal education, monthly family income, type of delivery, place of delivery, antenatal care (ANC), and postnatal care (PNC) were associated with EIBF. Mothers with ≤ 5 years of education were more likely to practice EIBF (66.7%) compared to those with >12 years (54.0%, $p=0.027$). Mothers belonging in lowest income group, with household income of <50000 BDT, had the highest EIBF rate (70.6%, $p=0.037$). Normal vaginal delivery and home delivery had notably higher rates of EIBF (85.8% and 89.2%, respectively, both $p<0.001$). Mothers who attended ≤ 4 ANC visits (73.3%, $p=0.018$) and no PNC visits (74.0%, $p=0.016$) demonstrated significantly higher EIBF rates. Maternal age and type of delivery were associated with EBF under 6 months. Mothers aged 21–25 years exhibited the highest EBF rates (89.0%, $p=0.004$). Normal vaginal delivery was also a strong predictor of EBF (90.3%, $p=0.001$). In case of mixed milk feeding, maternal age and type of delivery were the only associated factors. Younger mothers of age 18–20 years were more likely to use mixed milk feeding (33.3%, $p=0.002$), whereas those aged 21–25 years had the lowest rate (8.8%). Moreover, mixed feeding was practiced more by the mothers having delivery via cesarean section (22.1%, $p=0.002$) than mother's having delivery via normal vaginal delivery (9.0%).

Table 4.4.1: Association of background characteristics with early initiation of breastfeeding (EIBF), exclusive breastfeeding (EBF) and mixed milk feeding (MixMF) child under 6 months.

Characteristics	EIBF (No)	EIBF (Yes)	χ^2 (P value)	EBF (No)	EBF (Yes)	χ^2 (P value)	MixMF (No)	MixMF (Yes)	χ^2 (P value)
Sex of child									
Male	38.9	61.1	0.25 (0.615)	20.8	79.2	1.00 (0.318)	80.5	19.5	1.18 (0.278)
Female	36.3	63.7		16.6	83.4		85.0	15.0	
Age of mother (in years)									
18 – 20	35.9	64.1	1.81 (0.614)	35.9	64.1	13.37 (0.004)	66.7	33.3	14.92 (0.002)
21 – 25	34.6	65.4		11.0	89.0		91.2	8.8	
26 – 30	42.2	57.9		19.8	80.2		81.0	19.0	
> 30	34.8	65.2		21.7	78.3		78.3	21.7	
Family type									
Nuclear	35.5	64.5	1.26 (0.261)	17.8	82.2	0.23 (0.628)	83.9	16.1	0.42 (0.518)
Joint	42.0	58.0		20.0	80.0		81.0	19.0	
Family Size									

Characteristics	EIBF (No)	EIBF (Yes)	χ^2 (P value)	EBF (No)	EBF (Yes)	χ^2 (P value)	MixMF (No)	MixMF (Yes)	χ^2 (P value)
3	35.5	64.5	0.21 (0.898)	19.4	80.7	0.21 (0.898)	82.8	17.2	0.07 (0.967)
4	37.9	62.1		18.9	81.1		82.6	17.4	
> 5	38.5	61.5		17.1	82.9		83.8	16.2	
Maternal years of education									
≤ 5	33.3	66.7	7.24 (0.027)	26.3	73.7	3.24 (0.198)	77.2	22.8	1.70 (0.427)
6 – 12	31.1	68.9		18.2	81.8		83.8	16.2	
> 12	46.0	54.0		15.3	84.7		84.7	15.3	
Maternal occupation									
Home maker	36.2	63.8	0.89 (0.345)	18.8	81.2	0.14 (0.711)	82.3	17.7	0.53 (0.468)
**Employed	42.3	57.8		6.9	83.1		85.9	14.1	
Age of father (in years)									
≤ 25	35.8	64.2	0.23 (0.893)	22.2	77.8	1.96 (0.375)	81.5	18.5	2.02 (0.364)
26 – 30	36.9	63.1		14.8	85.3		86.9	13.1	
> 30	38.9	61.2		19.4	80.6		80.6	19.4	
Paternal years of education									
≤ 5	40.4	59.6	3.24 (0.198)	25.0	75.0	4.06 (0.131)	78.9	21.2	1.71 (0.426)
6 – 12	30.6	69.4		21.6	78.4		81.1	18.9	
> 12	40.8	59.2		14.5	85.5		85.5	14.5	
Paternal occupation									
Day labor and unemployed (skilled/unskilled)	29.0	71.1	1.45 (0.484)	23.7	76.3	4.65 (0.098)	76.3	23.7	3.89 (0.143)
***Service	39.2	60.8		14.7	85.3		86.3	13.7	
Businessman	37.0	63.0		24.0	76.0		79.0	21.0	
Monthly family income (in BDT)									
< 50000	29.5	70.6	6.58 (0.037)	19.9	80.1	0.67 (0.715)	82.9	17.1	0.37 (0.831)
50000 – 100000	44.1	55.9		19.8	80.2		81.1	18.9	
≥ 100000	41.5	58.5		15.4	84.6		84.6	15.4	
Type of delivery									
Normal vaginal delivery	14.2	85.8	50.85 (< 0.001)	9.7	90.3	11.15 (0.001)	91.0	9.0	10.02 (0.002)
Caesarean section	52.4	47.6		24.0	76.0		77.9	22.1	
Place of delivery									
Health facility	40.7	59.3	12.55 (< 0.001)	18.4	81.6	0.01 (0.934)	83.3	16.7	0.11 (0.737)
At home	10.8	89.2		18.9	81.1		81.1	18.9	
Antenatal care visits									
≤ 4	26.7	73.3	5.60 (0.018)	14.0	86.1	1.53 (0.217)	89.5	10.5	3.44 (0.064)
> 4	41.0	59.0		19.9	80.1		80.9	19.1	
Postnatal care visits									
None	26.0	74.0	8.22 (0.016)	17.0	83.0	0.40 (0.819)	86.0	14.0	1.23 (0.540)
1 – 3	42.8	57.2		18.6	81.4		82.3	17.7	
≥ 4	37.0	63.0		22.2	77.8		77.8	22.2	

Table 4.4.2 shows the analysis of multiple logistic regression by adjusting all cofounders. No significant associations were observed between early initiation of breastfeeding and maternal or

paternal characteristics such their age, education, and occupation (Table 4.4.2). However, delivery via caesarean section was significantly associated with 88% reduced odds of early breastfeeding initiation (AOR: 0.12, 95% CI: 0.06-0.24, $p<0.001$) holding other variables constant. There were no associations observed regarding the place of delivery or antenatal care visits. Mothers aged 21-25 were 5 times more likely to practice exclusive breastfeeding compared to their counterparts aged 18-20 years (AOR: 5.05, 95% CI: 1.83-13.97, $p=0.002$). Caesarean section was associated with 83% lower odds of exclusive breastfeeding (AOR: 0.17, 95% CI: 0.06-0.47, $p=0.001$). Having more than 4 antenatal care visits was associated with 70% lower odds of exclusive breastfeeding (AOR: 0.30, 95% CI: 0.12-0.74, $p=0.01$). No significant associations were observed with maternal education, paternal characteristics, or household income. Mothers aged 21-25 years had 84% lower odds of mixed milk feeding compared to those aged 18-20 (AOR: 0.16, p -value=0.001), while mothers who visited antenatal care more than 4 times were 4 times more likely to practice mixed milk feeding compared to those who visited antenatal care less than 4 times (AOR: 4.59, 95% CI: 1.66-12.74, $p=0.003$). Mothers having caesarean section delivery were 5 times more likely to practice mixed feeding compared to mothers having normal vaginal delivery (AOR: 5.93, 95% CI: 2.00-17.58, $p=0.001$). Mothers who gave birth to their child at home also practiced mixed feeding 5 times more than mothers who had their deliveries at facilities (AOR: 5.47, 95% CI: 1.25-23.89, $p=0.024$). However, no significant associations were observed between milk feeding child under 6 months and the sex of the child, maternal education, or family income.

Table 4.4.2: Logistic regression results for early initiation of breastfeeding (EIBF), exclusive breastfeeding (EBF) and mixed milk feeding (MixMF) children under 6 months.

Characteristics	EIBF		EBF		MixMF	
	Adjusted odds ratio (AOR) [95% CI]	P value	Adjusted odds ratio (AOR) [95% CI]	P value	Adjusted odds ratio (AOR) [95% CI]	P value
Sex of child						
Male	(Ref.)		(Ref.)		(Ref.)	
Female	1.07 [0.63, 1.82]	0.801	1.37 [0.73, 2.59]	0.329	0.69 [0.36, 1.34]	0.276
Age of mother (in years)						
18 - 20	(Ref.)		(Ref.)		(Ref.)	
21 - 25	1.54 [0.59, 4.03]	0.375	5.05 [1.83, 13.97]	0.002	0.16 [0.05, 0.46]	0.001
26 - 30	1.62 [0.56, 4.69]	0.371	2.31 [0.76, 7.08]	0.142	0.39 [0.12, 1.25]	0.115

> 30	3.00 [0.82, 10.92]	0.095	2.37 [0.57, 9.85]	0.234	0.38 [0.09, 1.65]	0.198
Family type						
Nuclear	(Ref.)		(Ref.)		(Ref.)	
Joint	0.54 [0.25, 1.17]	0.120	1.04 [0.42, 2.61]	0.926	0.98 [0.38, 2.50]	0.959
Family Size						
3	(Ref.)		(Ref.)		(Ref.)	
4	1.46 [0.74, 2.86]	0.275	1.12 [0.51, 2.47]	0.784	0.94 [0.41, 2.16]	0.890
> 5	1.50 [0.63, 3.60]	0.362	1.42 [0.50, 4.04]	0.507	0.76 [0.26, 2.25]	0.624
Maternal years of education						
≤ 5	(Ref.)		(Ref.)		(Ref.)	
6 – 12	1.58 [0.59, 4.25]	0.361	2.41 [0.85, 6.80]	0.096	0.40 [0.14, 1.20]	0.102
> 12	0.97 [0.27, 3.46]	0.964	2.58 [0.60, 11.16]	0.204	0.38 [0.08, 1.74]	0.212
Maternal occupation						
Home maker	(Ref.)		(Ref.)		(Ref.)	
**Employed	1.10 [0.54, 2.22]	0.792	0.81 [0.33, 1.99]	0.652	0.89 [0.34, 2.28]	0.802
Age of father (in years)						
≤ 25	(Ref.)		(Ref.)		(Ref.)	
26 – 30	0.87 [0.38, 1.98]	0.734	1.10 [0.44, 2.78]	0.836	0.92 [0.34, 2.46]	0.861
> 30	0.92 [0.37, 2.26]	0.850	1.16 [0.41, 3.22]	0.783	0.96 [0.33, 2.80]	0.937
Paternal years of education						
≤ 5	(Ref.)		(Ref.)		(Ref.)	
6 – 12	1.27 [0.49, 3.29]	0.627	0.91 [0.33, 2.51]	0.851	1.14 [0.39, 3.37]	0.808
> 12	1.36 [0.41, 4.53]	0.620	1.96 [0.49, 7.84]	0.343	0.66 [0.15, 2.81]	0.570
Paternal occupation						
Day labor and unemployed (skilled/unskilled)	(Ref.)		(Ref.)		(Ref.)	
***Service	0.60 [0.21, 1.67]	0.324	1.99 [0.72, 5.47]	0.184	0.39 [0.14, 1.11]	0.078
Businessman	0.76 [0.26, 2.20]	0.614	1.26 [0.45, 3.56]	0.662	0.53 [0.18, 1.57]	0.255
Monthly family income (in BDT)						
< 50000	(Ref.)		(Ref.)		(Ref.)	
50000 – 100000	0.66 [0.31, 1.37]	0.262	0.59 [0.24, 1.42]	0.237	1.81 [0.72, 4.52]	0.206
≥ 100000	0.85 [0.34, 2.10]	0.727	0.88 [0.27, 2.82]	0.829	1.39 [0.42, 4.59]	0.586
Type of delivery						

Normal vaginal delivery	(Ref.)		(Ref.)		(Ref.)	
Caesarean section	0.12 [0.06, 0.24]	< 0.001	0.17 [0.06, 0.47]	0.001	5.93 [2.00, 17.58]	0.001
Place of delivery						
Health facility	(Ref.)		(Ref.)		(Ref.)	
At home	1.55 [0.37, 6.52]	0.552	0.30 [0.08, 1.19]	0.088	5.47 [1.25, 23.89]	0.024
Antenatal care visits						
≤ 4	(Ref.)		(Ref.)		(Ref.)	
> 4	0.82 [0.40, 1.69]	0.588	0.30 [0.12, 0.74]	0.010	4.59 [1.66, 12.74]	0.003
Postnatal care visits						
None	(Ref.)		(Ref.)		(Ref.)	
1 to 3	1.10 [0.50, 2.42]	0.804	1.36 [0.54, 3.42]	0.509	0.97 [0.36, 2.61]	0.952
≥ 4	1.73 [0.51, 5.85]	0.379	2.20 [0.53, 9.19]	0.278	0.65 [0.15, 2.83]	0.564

4.5 Barriers of IYCF practices among the lactating mothers

Table 4.5.1 presents the barriers faced by the respondents to follow optimal IYCF practices. For early initiation of breastfeeding (EIBF), the most common challenges were perceived insufficient milk production (41.1%), low secretion of breastmilk (38.3%), and post-C-section maternal weakness (38.3%). Similarly, reduced lactation after C-sections (63.6%) was the predominant barrier to colostrum feeding. Prelacteal feeding was mainly influenced by family pressure (66.0%) and religious beliefs (30.2%). In case of exclusive breastfeeding (EBF) under 6 months, respondents reported barriers like perceived (46.3%) and (36.6%) insufficient milk production.

Table 4.5.1: IYCF barriers among respondents.

Characteristics	Number	Percentage
Barriers faced in early initiation (n=107)		
Could not produce enough milk (own perception)	44	41.1
Could not produce enough milk (according to doctor)	41	38.3
Weakness due to caesarean section (personal)	41	38.3
Reduced lactation after caesarean section (according to nurse)	11	10.3
Child was extremely sick	6	5.6
Barriers faced in feeding colostrum feeding (n=11)		
Could not produce enough milk (according to doctor)	2	18.2
Weakness due to caesarean section (personal)	2	18.2
Reduced lactation after caesarean section (according to nurse)	7	63.6
Reasons for feeding prelacteal (n=53)		
Influence of family members	35	66.0
Religious belief	16	30.2

Social influence	8	15.1
Institutional influence	4	7.5
Barriers faced in exclusive breastfeeding under 6 months (n=82)		
Could not produce enough milk (own perception)	38	46.3
Could not produce enough milk (according to doctor)	30	36.6
Reduced lactation after caesarean section (according to nurse)	6	7.3
Family and cultural influence	9	11.0

5. Discussion

The study explored the factors associated with IYCF knowledge and practice of lactating mothers of children aged less than 6-month attending an Urban Health Care Facility in Dhaka City, Bangladesh. The findings revealed a strong level of knowledge regarding most of the IYCF indicators including initiation of breastfeeding within 1 hour of birth, colostrum feeding soon after birth as well as recommended 6-month duration of exclusive breastfeeding. Practices like ever breastfeeding and exclusive feeding for children under six months were very high, while early initiation of breastfeeding showed comparatively lower prevalence with the majority reporting barriers of post-caesarean section weakness and perceived inadequate secretion of breastmilk.

In the current study, knowledge regarding early initiation of breastfeeding (EIBF) was very high (90.4%). However, there was a significant gap in knowledge about its benefits. Only 14.6% of respondents knew about EIBF can improve supply of breastmilk and only 35.4% knew about its importance in saving the baby's life. This result is similar to a study done in Gazipur, Bangladesh, where there was lack of knowledge regarding benefits of EIBF (42.51%). Again, the knowledge on colostrum feeding was good among the mothers. 84.5% of respondents knew that colostrum, the first milk of the mother, is good for a baby and 99% reported it should be fed soon after birth. This is in line with study conducted in India where 73.3% urban participants knew colostrum feeding is essential for child (Srivastava & Chaturvedi, 2021). In this study, knowledge of exclusive breastfeeding (EBF) in children under six months was high. EBF was widely recognized as beneficial among the respondents, with 94.4% of mothers aware of its recommended duration and 93.9% considered breastmilk to be only appropriate feeding of children under 6 months age. This is in line with another study conducted in Bangladesh where 94% mothers knew about EBF and its recommended duration (Ara et al., 2021). In the current study, findings revealed there was a knowledge gap in proper breastfeeding attachment and positioning. This result was in line with

a study done in Nepal, where only 5% of participants knew about appropriate attachment and positioning (Paudel et al., 2022). Awareness of complementary feeding practices was robust, with over 80% of mothers knowledgeable about introducing semi-solid foods at six months. Similar result was found in another study conducted in Bangladesh where knowledge of complementary feeding was 94% (Ara et al., 2021). In the current study, a critical component of infant nutrition which is management of diarrhea revealed significant gaps. While 59.4% of mothers recognized the importance of oral rehydration solution (ORS), only 10.5% were aware of zinc supplementation. These findings mirror findings in India where knowledge of zinc's role in diarrhea management remains low despite its inclusion in WHO guidelines (Sumathi et al., 2020).

In this study, all the participants (100%) reported that they breastfed their child at least once after birth. This data is consistent with the national Bangladesh Demographic and Health Survey (BDHS) report of 2022 which is 97.1% (NIPORT & ICF, 2024). This might be due to ingrained cultural and religious factors where women are encouraged to breastfeed their offspring (Farhadi, 2020). Early initiation of breastfeeding (EIBF) practice in current study was 62.6%. This result is much higher than the national BDHS report. According to report, the EIBF rate was only 37% in Bangladesh in 2022 (NIPORT & ICF, 2024). EIBF rate is suboptimal in other studies of South Asia which is mostly lower than 45% (Neves et al., 2022; Rifat et al., 2024). However, the current study finding aligns with the WHO global breastfeeding collective target of reaching 70% EIBF rate by 2030 (UNICEF & WHO, 2021). To progress more and reach the target of WHO, Initiatives like Baby-Friendly Hospital Initiative (BFHI) should be revitalized in order to timely initiate breastfeeding (Raihana et al., 2021). The current study reported that the likelihood of starting breastfeeding within 1 hour was 88% lower in women who had cesarean section delivery compared to who had normal vaginal delivery (AOR: 0.12, 95% CI: 0.06-0.24, $p < 0.001$). This finding is in line with studies conducted in LMIC contexts where EIBF rate was lower among deliveries via C-section compared to vaginal deliveries due to the complexity of the surgical procedure (Vaz et al., 2022). Furthermore, in this study, mothers giving delivery at home and with lower education levels of ≤ 5 years were more likely to practice EIBF, while higher maternal education was not significantly associated with EIBF. However, this finding contradicts with a study conducted in Bangladesh, where it shows a positive correlation between education and EIBF practices (Ahmed & Manik, 2021). In current study, the wealth index also played a role, with the fourth

quintile exhibiting the highest EIBF rates. This finding also contrasts as higher socioeconomic status often correlates with suboptimal breastfeeding practices due to increased access to formula milk (Neves et al., 2020). While 84.5% of mothers attended ≥ 4 ANC visits, this did not translate into higher EIBF rates and highlights potential gaps in the quality of disseminating EIBF knowledge during ANC visits. In this study, the practice of exclusive breastfeeding (EBF) in children under six months was high. 81.6% of mothers reported exclusive breastfeeding for the first six months. This prevalence is notably higher than the 53.4% reported in the national 2022 BDHS (NIPORT & ICF, 2024). The reason may be the current study included a specific population subgroup of urban mothers with better access to breastfeeding education as the MCH-FP centers had nutrition counselling service in PNC visits, which could differ from the nationally representative BDHS sample. Moreover, this study's finding revealed maternal age, particularly 21–25 years, was a strong positive predictor of EBF (89.0%, $p=0.004$; AOR: 5.05, 95% CI: 1.83–13.97, $p=0.002$). This finding is contradicting with global findings where younger mothers are less likely to practice EBF (Buckland et al., 2020). Normal vaginal delivery also strongly predicted EBF (90.3%, $p=0.001$), while cesarean sections significantly reduced the odds of EBF by 83% (AOR: 0.17, 95% CI: 0.06–0.47, $p=0.001$). This result is in line with studies conducted in other South Asian countries where cesarean sections significantly reduced the odds of EBF by 68% (Show et al., 2024). However, mothers with more than four antenatal care (ANC) visits showed 70% lower odds of EBF (AOR: 0.30, 95% CI: 0.12–0.74, $p=0.01$), a finding suggesting gaps in ANC counseling on breastfeeding. These results support evidence linking cesarean delivery to lower EBF rates and providing targeted lactation support, particularly through breastfeeding-friendly cesarean protocols. One of the deviations from exclusive breastfeeding (EBF) includes mixed milk feeding, which was reported by 17.0% of our study participants, a figure which is consistent with the 2022 BDHS report (21.8%) (NIPORT & ICF, 2024). In the current study, maternal age played a notable role in mixed milk feeding practices. Younger mothers aged 18–20 years were significantly more likely to use mixed feeding (33.3%, $p=0.002$), while those aged 21–25 years exhibited the lowest rates (8.8%). This trend suggests that younger mothers may lack the knowledge, experience, or support needed to adhere to EBF, necessitating tailored interventions for this population. Delivery mode also emerged as a key determinant of mixed milk feeding. Mothers who delivered via cesarean section were more likely to practice mixed feeding (AOR: 5.93, 95% CI: 2.00–17.58, $p=0.001$) and place of delivery at home (AOR: 5.47, 95% CI: 1.25–

23.89, $p=0.024$) which is in line with studies conducted in Pakistan (Asim et al., 2020). The current study found out 97% of the mothers fed colostrum to their child which is similar (100%) to other study conducted in Bangladesh (Ara et al., 2021). In our study, 53 out of 342 respondents (16%) fed prelacteal like honey or date before starting breastfeeding. Among these respondents, more than 21% identified this as a religious practice called “Tahneek”, which aligns with Islamic traditions, as 98.3% of the study participants were Muslim (Sosseh et al., 2023). Tahneek is a procedure where dates are rubbed in between finger, softened and put into the palate of a newborn’s mouth and sometimes honey as alternative is used (Asim et al., 2020; Çaksen, 2023; Zaidi, 2014). Interestingly, Tahneek has been reported in previous studies of Pakistan and Gambia where it has been reported as a practice which may protect newborns from neonatal hypoglycemia (Çaksen, 2023; Sosseh et al., 2023; Zaidi, 2014). However, this is a relatively novel finding in the context of breastfeeding practices in Bangladesh and requires further investigation with large sample size to better understand the practice of feeding date as a prelacteal.

Moreover, barrier like post C-section complication and weakness was one of the major hindrances to initiate breastfeeding a child within one hour of birth which was reported by almost 40% of the respondents. This finding is consistent with a systematic review where cesarean delivery has been associated with delayed breastfeeding initiation due to post operative challenges (Johar et al., 2021). Furthermore, sociocultural and religious factors such as the preference for feeding honey after baby’s birth further delayed the initiation of breastfeeding which was a barrier reported by current study respondents and other similar studies of Bangladesh (Jahan & Islam, 2024). In this study, barriers to exclusive breastfeeding were multifaceted, with perceived insufficient milk production (57.5%) being the most reported issue. This barrier is consistent with findings from other studies, where mothers often report concerns about milk supply, even though most women are physically capable of producing sufficient milk (Patil et al., 2020). These results highlight the need for targeted interventions to improve confidence in lactation adequacy among mothers.

However, there were several limitations and challenges in our study. The major limitation was the inability to reach the desired sample size, mostly due to resources and time constraints. As most of the mothers attended the facility for vaccinating their child, it was challenging to continue interviews and added challenges in achieving the targeted sample size. Also, it was partly affected

due to reduced patient flow because of the beginning of winter season in Bangladesh. Moreover, for the purpose of our study, self-reported data were collected from the interviewers so there may be subjects to recall biases. Furthermore, the study did not include any qualitative exploration, which could have provided deeper insights into the underlying factors influencing the findings. All these limitations may affect the generalizability and statistical power of the study which should be carefully dealt with in future research with alternative approaches.

6. Conclusion

This study provides valuable insights into IYCF knowledge, practices, barriers, and associated factors among lactating mothers attending urban MCH-FP facility in Dhaka, Bangladesh. Findings of the study revealed that although the urban mothers have well awareness about the indicators of IYCF. However, several physical challenges and social barriers hinder their ability to adhere to optimal IYCF practices. Addressing these barriers requires a comprehensive and multi-sectoral approach. Policy reforms like implementation of baby-friendly hospital initiatives and improvement of counseling sessions of antenatal and postnatal care are crucial. Training healthcare providers in proper breastfeeding counseling is essential to bridge the gaps in knowledge and practice. Moreover, equipping healthcare professionals with the skills to support mothers in post-cesarean conditions can significantly improve IYCF outcomes. In addition, counseling family members can help foster a supportive environment. It can play a vital role in debunking misconception and changing cultural norms. By addressing these barriers through coordinated efforts at the policy, healthcare and community levels, it is possible to enhance optimal breastfeeding practices which can contribute to better maternal and child health outcomes in urban Bangladesh.

7. References

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8. Annex

8.1 STATA Command

```
use      "C:\Users\Tasbiha      Tabassum\OneDrive\Desktop\Data      Analysis_SLP\1.      MAIN
RAW_15.12.24\SLP_Nutrition_V1V2_20241215.dta"
*****
*****PNC Solve*****
replace mc_132=2 if mc_132==0 & pid==40920
replace mc_133=0 if mc_133==2 & pid==46320
*****
replace waw_109=28 if waw_109==16 & pid==38920
replace waw_109=25 if waw_109==25 & pid==46320
*****
***** wealth index WB NNS panel data
***Remittance Solve***
replace wse_121=20000 if wse_121==2000
***Household Income Solve***
replace wse_122=150000 if wse_122==50000 & wse_121==100000
***Mobile Phone Solve***
replace wse_112d=1 if wse_112d==2
***Room No. Solve***
replace wse_116=3 if wse_116==385
replace wse_116=6 if wse_116==16
*****Asset
**rename*,lower
gen wwi_elec=wse_112a==1
gen wwi_soele=wse_112b==1
gen wwi_radio=wse_112c==1
gen wwi_tva= wse_112ca==1
gen wwi_moph=wse_112d==1
gen wwi_telph=wse_112da==1
gen wwi_comp=wse_112db==1
gen wwi_dvd=wse_112dc==1
gen wwi_elfan=wse_112e==1
gen wwi_khat=wse_112f==1
gen wwi_alm=wse_112g==1
gen wwi_ref=wse_112h==1
gen wwi_air=wse_112ha==1
gen wwi_tabl=wse_112i==1
gen wwi_wat=wse_112j==1
gen wwi_bic=wse_112k==1
gen wwi_moto=wse_112l==1
gen wwi_auto=wse_112la==1
gen wwi_ani=wse_112m==1
gen wwi_car=wse_112n==1
gen wwi_boat=wse_112o==1
gen wwi_ingi=wse_112p==1
gen wwi_rick=wse_112q==1
gen wwi_pow=wse_112r==1
gen wwi_watp=wse_112s==1
```

```

gen wwi_plow=wse_112t==1
gen wwi_ips=wse_112u==1
gen wwi_net=wse_112v==1
/// *Type of wall material*
tab wse_113
tab wse_113,nolabel
gen wwi_playw=wse_113==6
gen wwi_cardbod=wse_113==7
gen wwi_tin=wse_113==8
gen wwi_cement=wse_113==9
gen wwi_woodp=wse_113==11
*****Type of roof material*
tab wse_114
tab wse_114,nolabel
**replace wse_114=13 if wse_114t==""
gen wwi_woodplan=wse_114==4
gen wwi_tinroof=wse_114==6
gen wwi_cemeroof=wse_114==9
*****Type of floor material*
tab wse_115
tab wse_115,nolabel
gen wwi_earflo=wse_115==1
gen wwi_woodflo=wse_115==2
gen wwi_cermtflo=wse_115==4
gen wwi_bricflo=wse_115==5
gen wwi_mojflo=wse_115==6
*****Cooking fuel use in household*
tab wse_110
tab wse_110,nolabel
gen wwi_elecfu=wse_110==1
gen wwi_lpfu=wse_110==2 | wse_110==3
gen wwi_woodfu=wse_110==7
gen wwi_strawfu=wse_110==8
***** Drinking water- main source*
tab wwh_201
tab wwh_201,nolabel
tab wwh_201t
replace wwh_201=16 if wwh_201t=="Boiled Water"
replace wwh_201=16 if wwh_201t=="Filtered Water"
replace wwh_201=14 if wwh_201t=="WASA"
gen wwi_pipwe=wwh_201==1 | wwh_201==2 | wwh_201==3
gen wwi_shardw=wwh_201==4
gen wwi_hhw=wwh_201==5
gen wwi_watank=wwh_201==10
gen wwi_samtank=wwh_201==14
gen wwi_bott=wwh_201==15
gen wwi_filtter=wwh_201==16
tab wwh_205
tab wwh_205,nolabel
*****
tab wwh_205

```

```

gen wimp_sani=0 if ww_h_205==1 | ww_h_205==2
replace wimp_sani=1 if ww_h_205==4
tab wimp_sani
label var wimp_sani "Sanitation"
label define wimp_sani 0"Improved" 1"Not Improved"
label values wimp_sani wimp_sani
***Type of latrine*
gen wwi_pipswla=ww_h_205==1
gen wwi_septla=ww_h_205==2
gen wwi_ringsla= ww_h_205==4
*****Share latrine*
gen wwi_room=waw_110c/wse_116

factor wwi_*, pcf
rotate
predict wwealth
xtile wquint=wwealth , n(5)
la def wquint 1 lowest 2 second 3 middle 4 fourth 5 highest
la val wquint wquint
tab wquint
*****
***SES***
***Age of Child***
gen wageindays=(se_102-wci_102d),after(wci_103b)
sum wageindays
gen age_catc=0 if wageindays<31
replace age_catc=1 if wageindays>=31 & wageindays<91
replace age_catc=2 if wageindays>=91 & wageindays<151
replace age_catc=3 if wageindays>=151 & wageindays!=.
tab age_catc
lab var age_catc "Age of child (in months)"
la def age_catc 0 "0-1month" 1 "2-3months" 2 "4-5months" 3 ">5 months"
la val age_catc age_catc
tab age_catc
*****
***Sex of child***
tab wci_104
*****Mother's Age*****
tab wse_103a
sum wse_103a,d
gen age_catm=1 if wse_103a<=20
replace age_catm=2 if wse_103a>20 & wse_103a<26
replace age_catm=3 if wse_103a>25 & wse_103a<31
replace age_catm=4 if wse_103a>30 & wse_103a!=.
tab age_catm
lab var age_catm "Age of mother"
lab define age_catm 1"18-20yrs" 2"21-25yrs" 3"26-30yrs" 4">30yrs"
lab values age_catm age_catm
tab age_catm
*****
*****Religion*****

```

```

tab wse_118
tab wse_118, nolabel
gen rel_cat=1 if wse_118==1
replace rel_cat=2 if wse_118==2 | wse_118==4
tab rel_cat
lab var rel_cat "Religion"
lab define rel_cat 1"Islam" 2"Others"
lab values rel_cat rel_cat
tab rel_cat
*****
*****Marital status*****
tab waw_104
*****
*****Family type*****
tab waw_110d
*****
*****Fam Size*****
***Family Size Solve***
replace waw_110c=3 if waw_110c==2 & waw_101=="Farjana Yasmin Nabila" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Aleya Akhter" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Sumaiya Zahan" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Sanjida Akhter" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Elham salim Meem" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Nilufa Akter" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Fatema Yasmin" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Taniya Akter" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Shila Akhter" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Nurun Nahar" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Tajnin Afrin Tamanna" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Lamia Akter" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Taniya Khatun" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Lata Yasmin Shapna" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Sathi" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Fatema Farjana" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Sanzida" & se_105==10
replace waw_110c=3 if waw_110c==2 & waw_101=="Sharmin Jahan" & se_105==10
replace waw_110c=4 if waw_110c==2 & waw_101=="Mahmuda Akhter Imu" & se_105==10
replace waw_110c=4 if waw_110c==3 & waw_101=="Nipa Rahman" & se_105==10
replace waw_110c=4 if waw_110c==3 & waw_101=="Rajia Sultana" & se_105==10
replace waw_110c=4 if waw_110c==3 & waw_101=="Rafida Ishrat" & se_105==10
replace waw_110c=4 if waw_110c==3 & waw_101=="Nusrat Nubaya" & se_105==10
replace waw_110c=5 if waw_110c==4 & waw_101=="Ayesha Afrin" & se_105==10
tab waw_110c
*****
gen family_size=1 if waw_110c==3
replace family_size=2 if waw_110c==4
replace family_size=3 if waw_110c==5 | waw_110c>5
lab var family_size "Family size"
lab define family_size 1"3" 2"4" 3"≥ 5"
lab values family_size family_size
tab family_size

```

```

*****
*****Mother's Years of Education*****
tab waw_105
gen edu_catm=0 if waw_105==0
replace edu_catm=0 if waw_105==5
replace edu_catm=1 if waw_105==10
replace edu_catm=1 if waw_105==12
replace edu_catm=2 if edu_catm!=0 & edu_catm!=1
tab edu_catm
lab var edu_catm "Mother's Years of Education"
lab define edu_catm 0"<=5" 1"6 – 12" 2"> 12"
lab values edu_catm edu_catm
tab edu_catm
*****
*****Mother's Occupation*****
tab waw_106
tab waw_106,nolabel
gen occu_catm=1 if waw_106==19
replace occu_catm=2 if waw_106==8
replace occu_catm=2 if waw_106!=19 & waw_106!=8
tab occu_catm
lab var occu_catm "Occupation"
lab define occu_catm 1"Homemaker" 2"Employed"
lab values occu_catm occu_catm
tab occu_catm
*****
*****Husband*****
*****Father's Age*****
tab waw_109
sum waw_109,d
gen age_cath=0 if waw_109<26
replace age_cath=1 if waw_109>25 & waw_109<31
replace age_cath=2 if waw_109>30 & waw_109!=.
tab age_cath
lab var age_cath "Father's Age"
lab define age_cath 0"<=25" 1"26-30yrs" 2">30yrs"
lab values age_cath age_cath
tab age_cath
*****
*****Father's Education*****
tab waw_110a
gen edu_cath=0 if waw_110a==0
replace edu_cath=0 if waw_110a==5
replace edu_cath=1 if waw_110a==10
replace edu_cath=1 if waw_110a==12
replace edu_cath=2 if waw_110a>12
tab edu_cath
lab var edu_cath "Father's Years of Education"
lab define edu_cath 0"<=5" 1"6 – 12" 2"> 12"
lab values edu_cath edu_cath
tab edu_cath

```

```

*****
*****Father's Occupation*****
tab waw_110b
tab waw_110b, nolabel
gen occu_cath=1 if waw_110b==5
replace occu_cath=1 if waw_110b==6
replace occu_cath=1 if waw_110b==14
replace occu_cath=1 if waw_110b==20
replace occu_cath=1 if waw_110bt=="Foreign workers"
replace occu_cath=2 if waw_110b==8
replace occu_cath=2 if waw_110b==9
replace occu_cath=2 if waw_110bt=="Freelancer"
replace occu_cath=2 if waw_110bt=="Dentist"
replace occu_cath=3 if waw_110b==10
replace occu_cath=3 if waw_110b==11
replace occu_cath=3 if waw_110bt=="Owner of computer (printing,photocopy and stationary) shop"
tab occu_cath
lab var occu_cath "Occupational status of father"
lab define occu_cath 1"Day labor and unemployed (skilled/unskilled)" 2"Service" 3"Businessman"
lab values occu_cath occu_cath
tab occu_cath
*****
*****Income*****
tab wse_122
tabstat wse_122,stat(mean p50 sd p25 p75 iqr)
*****
*****Income*****
tab wse_122
replace wse_122=. if wse_122==88
*replace wse_122=. if wse_122==2400000
tabstat wse_122,stat(mean p50 sd p25 p75 iqr)
gen income_cat=0 if wse_122<50000
replace income_cat=1 if wse_122>=50000 & wse_122<100000
replace income_cat=2 if wse_122>=100000 & wse_122!=.
tab income_cat
lab var income_cat "Monthly income"
lab define income_cat 0"<50000Tk" 1"50000-100000Tk" 2">=100000Tk"
lab values income_cat income_cat
tab income_cat
*****
*****Type of delivery*****
tab mc_101a
tab mc_101a, nolabel
gen deli_type=1 if mc_101a==4
replace deli_type=0 if mc_101a==1
replace deli_type=0 if mc_101a==2
tab deli_type
lab var deli_type "Mode of delivery"
lab define deli_type 1"C-Section" 0"Normal or others"
lab values deli_type deli_type
tab deli_type

```

```

tab deli_type se_105,col nofreq
*****
*****Assistance at delivery*****
tab mc_102
tab mc_102,nolabel
gen assi_del=1 if mc_102==1
replace assi_del=1 if mc_102==2
replace assi_del=1 if mc_102==3
replace assi_del=2 if mc_102==9
replace assi_del=2 if mc_102==13
tab assi_del
lab var assi_del "Assistance at delivery"
lab define assi_del 1 "Medically trained provider" 2 "Non-medically trained provider"
lab values assi_del assi_del
tab assi_del
*****
*****Place of delivery*****
tab mc_103
tab mc_103,nolabel
gen plc_del=1 if mc_103==1
replace plc_del=1 if mc_103==2
replace plc_del=1 if mc_103==3
replace plc_del=1 if mc_103==4
replace plc_del=1 if mc_103==5
replace plc_del=1 if mc_103==6
replace plc_del=1 if mc_103==7
replace plc_del=1 if mc_103==8
replace plc_del=1 if mc_103==9
replace plc_del=1 if mc_103==10
replace plc_del=1 if mc_103==14
replace plc_del=2 if mc_103==13
tab plc_del
lab var plc_del "Place of delivery"
lab define plc_del 1 "Health facility" 2 "Home"
lab values plc_del plc_del
tab plc_del
*****
*****ANC Visits*****
tab mc_013
gen anc_cat1=1 if mc_012==2
replace anc_cat1=2 if mc_013>=1 & mc_013<4
replace anc_cat1=3 if mc_013>=4 & mc_013!=.
lab var anc_cat1 "ANC Visits"
lab define anc_cat1 1 "None" 2 "1-3" 3 ">= 4"
lab values anc_cat1 anc_cat1
tab anc_cat1
*****
**For analysis**
tab mc_013
gen anc_cat=1 if mc_013<5 | mc_012==2
replace anc_cat=2 if mc_013>4 & mc_013!=.

```

```

lab var anc_cat "ANC"
lab define anc_cat 1"<=4ANC" 2">4ANC"
lab values anc_cat anc_cat
tab anc_cat
*****
*****PNC Visits*****
br mc_131 mc_132
tab mc_132
gen pnc_cat=1 if mc_131 == 2
replace pnc_cat=2 if mc_132>=1 & mc_132<4
replace pnc_cat=3 if mc_132>=4 & mc_132!=.
replace pnc_cat=1 if mc_131==77
lab var pnc_cat "PNC Visits"
lab define pnc_cat 1"None" 2"1-3" 3">= 4"
lab values pnc_cat pnc_cat
tab pnc_cat
*****
*****IYCF*****
*****
***Semisolid Food Solve***
br wif_211a wif_211b wif_211c wif_211ca wif_211d wif_211e wif_211f wif_211g wif_211h wif_211i
wif_211j wif_211k wif_211l wif_211m wif_212
replace wif_211ca=13 if wif_211ca==16
replace wif_211ca=13 if wif_211ca==99
replace wif_211a=13 if wif_211a==6 & pid==43820
replace wif_211b=13 if wif_211b==8 & pid==43820
replace wif_211c=13 if wif_211c==6 & pid==43820
replace wif_211ca=13 if wif_211ca==6 & pid==43820
replace wif_211d=13 if wif_211d==6 & pid==43820
replace wif_211e=13 if wif_211e==6 & pid==43820
replace wif_211f=13 if wif_211f==6 & pid==43820
replace wif_211g=13 if wif_211g==6 & pid==43820
replace wif_211h=13 if wif_211h==6 & pid==43820
replace wif_211i=13 if wif_211i==6 & pid==43820
replace wif_211j=13 if wif_211j==6 & pid==43820
replace wif_211k=13 if wif_211k==6 & pid==43820
replace wif_211l=13 if wif_211l==6 & pid==43820
replace wif_211m=13 if wif_211m==6 & pid==43820
replace wif_211h=13 if wif_211h==131
replace wif_211l=13 if wif_211l==99
replace wif_211l=13 if wif_211l==16
replace wif_211a=13 if wif_211a==0 & pid==33920
replace wif_211b=13 if wif_211b==0 & pid==33920
replace wif_211c=13 if wif_211c==0 & pid==33920
replace wif_211ca=13 if wif_211ca==0 & pid==33920
replace wif_211d=13 if wif_211d==0 & pid==33920
replace wif_211e=13 if wif_211e==0 & pid==33920
replace wif_211f=13 if wif_211f==0 & pid==33920
replace wif_211g=13 if wif_211g==0 & pid==33920
replace wif_211h=13 if wif_211h==0 & pid==33920
replace wif_211i=13 if wif_211i==0 & pid==33920

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```

replace wif_211j=13 if wif_211j==0 & pid==33920
replace wif_211k=13 if wif_211k==0 & pid==33920
replace wif_211l=13 if wif_211l==0 & pid==33920
replace wif_211m=13 if wif_211m==0 & pid==33920
replace wif_212=13 if wif_212==0 & pid==33920
replace wif_211a=13 if wif_211a==0 & pid==33620
replace wif_211b=13 if wif_211b==0 & pid==33620
replace wif_211c=13 if wif_211c==0 & pid==33620
replace wif_211ca=13 if wif_211ca==0 & pid==33620
replace wif_211d=13 if wif_211d==0 & pid==33620
replace wif_211e=13 if wif_211e==0 & pid==33620
replace wif_211f=13 if wif_211f==0 & pid==33620
replace wif_211g=13 if wif_211g==0 & pid==33620
replace wif_211h=13 if wif_211h==0 & pid==33620
replace wif_211i=13 if wif_211i==0 & pid==33620
replace wif_211j=13 if wif_211j==0 & pid==33620
replace wif_211k=13 if wif_211k==0 & pid==33620
replace wif_211l=13 if wif_211l==0 & pid==33620
replace wif_211m=13 if wif_211m==0 & pid==33620
replace wif_212=13 if wif_212==0 & pid==33620
*****
***** IYCF Practice *****
*****Indicator 1: Ever breastfed (EvBF)*****
tab wif_202
*****
*****Indicator 2: Early initiation of breastfeeding (EIBF)*****
tab wif_203
gen eibf_comb=wif_203
tab eibf_comb
gen eibf=(eibf_comb==0 | eibf_comb==1)
gen eibf1=1 if wif_203==0
replace eibf1=1 if wif_203a<=1
replace eibf1=0 if eibf1!=1
tab eibf1,m
lab var eibf1 "Early initiation of breastfeeding"
la def eibf1 0 "No" 1 "Yes"
la val eibf1 eibf1
tab eibf1
*****
*****Indicator 3: Exclusive breastfeeding under 6 months (EBF)*****
tab wif_207aa
gen ebf_comb=wif_207aa
tab ebf_comb
gen ebf1=1 if ebf_comb==1
replace ebf1=0 if (wif_207ba == 1 | wif_207ca == 1 | wif_207da == 1 | wif_207ea == 1 | wif_207fa == 1 |
wif_207ga == 1 | wif_207gaa==1 | wif_207gba==1 | wif_207gca==1 | wif_207ia == 1 | wif_207ja == 1 |
wif_207la == 1 | wif_207ma == 1 )
lab var ebf1 "Exclusive breastfeeding under 6 months"
la def ebf1 0 "No" 1 "Yes"
la val ebf1 ebf1
tab ebf1

```

```

br wif_207ha wif_207la ebfl
*****
*****Indicator 4: Mixed milk feeding under 6 months (MixMF)*****
tab wif_207da
tab wif_207da, nolabel
tab wif_207la
tab wif_207la, nolabel
gen mixmfl=(wif_207da==1 | wif_207la==1)
tab mixmfl,m
tab mixmfl
lab var mixmfl "Mixed feeding with breastmilk plus formula and/or animal milk under 6 months (MixMF)"
la def mixmfl 0 "No" 1 "Yes"
la val mixmfl mixmfl
tab mixmfl
br wif_207da wif_207la mixmfl
*****
*****Additional Feeding Practicess*****
tab wif_204
tab wif_205
*****
***Prelacteal***
gen prelacteal_category = .
tostring prelacteal_category, generate(prelacteal_response) force
***Honey***
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Baby was hungry and crying"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Family, Sister"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Good for health, Family"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Father in law gave it, cultural practice."
replace prelacteal_response = "Honey" if wif_205ab=="Honey- Family- Religious"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Family, Baby will talk sweetly"
replace prelacteal_response = "Honey" if wif_205ab=="Honey-Family-Religious"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Baby will talk sweetly"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Jam Jam water, Sunnat Religion"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Family"
replace prelacteal_response = "Honey" if wif_205ab=="Honey-Family"
replace prelacteal_response = "Honey" if wif_205ab=="Family and culture"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, mother in law advised , cultural"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, date-family-religious"
replace prelacteal_response = "Honey" if wif_205ab=="Mother in law, Cultural practice"
replace prelacteal_response = "Honey" if wif_205ab=="Honey-family"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Family, Good for baby"
replace prelacteal_response = "Honey" if wif_205ab=="Family and cultural practice"
replace prelacteal_response = "Honey" if wif_205ab=="Formula Milk suggested by doctor, Honey for cold"
replace prelacteal_response = "Honey" if wif_205ab=="Mother in law, cultural practice"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Family, Religion"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Advised by mother in law"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Mother-in-law"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Mother-in-law, Baby will talk sweetly"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Baby will talk sweetly, Family"
replace prelacteal_response = "Honey" if wif_205ab=="Honey-family-religious"
replace prelacteal_response = "Honey" if wif_205ab=="Honey, Advised by her own mother"

```

Date

replace prelacteal_response = "Date" if wif_205ab=="Date, Personal, Religion, Sunnat"

replace prelacteal_response = "Date" if wif_205ab=="Date, Religion"

replace prelacteal_response = "Date" if wif_205ab=="Date, Religion, Family, Huzur"

replace prelacteal_response = "Date" if wif_205ab=="Date-Religious"

replace prelacteal_response = "Date" if wif_205ab=="Date, Tahneek, Personal "

replace prelacteal_response = "Date" if wif_205ab=="Honey, date-family-religious"

replace prelacteal_response = "Date" if wif_205ab=="Date-Family-Religious"

replace prelacteal_response = "Date" if wif_205ab=="Date, Family, Religion Sunnat"

replace prelacteal_response = "Date" if wif_205ab=="Date, Family (Mother)"

replace prelacteal_response = "Date" if wif_205ab=="Date, Religion "

replace prelacteal_response = "Date" if wif_205ab=="Date, Family, Religion, Sunnat"

Formula Milk

replace prelacteal_response = "Formula Milk" if wif_205ab=="Formula Milk suggested by doctor, Honey for cold"

replace prelacteal_response = "Formula Milk" if wif_205ab=="Formula Milk, Mother was sick due to C-section "

replace prelacteal_response = "Formula Milk" if wif_205ab=="Advised by Doctor, Reduced breastmilk flow"

replace prelacteal_response = "Formula Milk" if wif_205ab=="Formula milk, Mother was sick, Could not produce enough milk"

replace prelacteal_response = "Formula Milk" if wif_205ab=="First 3 days only formula milk"

replace prelacteal_response = "Formula Milk" if wif_205ab=="Doctor advised"

replace prelacteal_response = "Formula Milk" if wif_205ab=="Due to lack of breast milk"

replace prelacteal_response = "Formula Milk" if wif_205ab=="Personal"

Jam-Jam Water

replace prelacteal_response = "Others" if wif_205ab=="Honey, Jam Jam water, Sunnat Religion"

Sugar Water

replace prelacteal_response = "Others" if wif_205ab=="Sugar water, Baby gets hungry, Bowel movement easier"

tab prelacteal_response

replace prelacteal_response = substr(prelacteal_response, ".", "", .)

tab prelacteal_response

tab prelacteal_response se_105, column

tab prelacteal_response

*****Women's Knowledge on IYCF*****

*1

tab wik_601

gen eibf_know=wik_601

tab eibf_know

gen eibfk1=1 if wik_601==0

replace eibfk1=1 if wik_601a<=1

replace eibfk1=2 if wik_601==88

replace eibfk1=0 if eibfk1!=1 & eibfk1!=2

tab eibfk1,m

lab var eibfk1 "Early initiation of breastfeeding"

la def eibfk1 0 "No" 1 "Yes" 2 "Do not know"

la val eibfk1 eibfk1

tab eibfk1

*2

mrtab wik_6021 wik_6022 wik_6023 wik_6024 wik_6025 wik_60299 wik_60277
*3
tab wik_603
*4
mrtab wik_6041 wik_6042 wik_6043 wik_6044 wik_6045 wik_6046 wik_60499 wik_60477
*5
tab wik_605
*6
tab wik_606
*7
mrtab wik_6071 wik_6072 wik_6073 wik_6074 wik_6075 wik_6076 wik_6077 wik_6078 wik_6079
wik_60710 wik_60711 wik_60799 wik_60777
*8
mrtab wik_6081 wik_6082 wik_6083 wik_6084 wik_60899 wik_60877
*9
mrtab wik_6091 wik_6092 wik_6093 wik_6094 wik_60999 wik_60977
*10
tab wik_611
*11
mrtab wik_6121 wik_6122 wik_6123 wik_6124 wik_61299 wik_61277
*12
mrtab wik_6161 wik_6162 wik_6163 wik_6164 wik_6165 wik_6166 wik_61699 wik_61677
*13
mrtab wik_6151 wik_6152 wik_6153 wik_6154 wik_6155 wik_6156 wik_6157 wik_6158 wik_6159
wik_61510 wik_61599 wik_61577
*14
tab wik_613
*15
tab wik_614
*16
tab wik_610b
*17
tab wik_617
*18
tab wik_618
*19
tab wik_619
*20
tab wik_621
*21
mrtab wik_6201 wik_6202 wik_6203 wik_6204 wik_6205 wik_6206 wik_62099 wik_62077
*22
tab wik_622a
tab wik_622b
tab wik_622c
tab wik_622d
tab wik_622e
tab wik_622f
tab wik_622g
tab wik_622h
tab wik_622i

```

tab wik_622j
tab wik_622k
tab wik_622l
*23
gen wik_623cat2=1 if wik_623>=24 & wik_623!=77
replace wik_623cat2=2 if wik_623<24
replace wik_623cat2=2 if wik_623==77
tab wik_623cat2
lab define wik_623cat2 1"Upto 24months or longer" 2"Less than 24months or Don't Know"
lab values wik_623cat2 wik_623cat2
tab wik_623cat2
*24
mrtab wik_6251 wik_6252 wik_6253 wik_6254 wik_6255 wik_6256 wik_6257 wik_6258 wik_6259
wik_62577
*25
mrtab wik_6261 wik_6262 wik_6263 wik_6264 wik_6265 wik_6271 wik_62699 wik_62677
*****
*****Mother's Knowledge Score*****
tab wik_601
gen wik_601cor=1 if wik_601==1
replace wik_601cor=1 if wik_601==0
replace wik_601cor=0 if wik_601cor!=1
tab wik_601cor
*****
tab wik_602
gen wik_602all=1 if wik_6021==1 & wik_6022==1 & wik_6023==1 & wik_6024==1 & wik_6025==1
gen wik_602_4=1 if wik_6021==1 & wik_6022==1 & wik_6023==1 & wik_6024==1 & wik_6025==1
egen wik_602score=rsum(wik_6021 wik_6022 wik_6023 wik_6024 wik_6025),missing
tab wik_602score
gen wik_602corr=1 if wik_602score==5
replace wik_602corr=.2 if wik_602score==1
replace wik_602corr=.4 if wik_602score==2
replace wik_602corr=.6 if wik_602score==3
replace wik_602corr=.8 if wik_602score==4
replace wik_602corr=0 if wik_602score==0
tab wik_602corr
*****
tab wik_603
gen wik_603corr=1 if wik_603==2
replace wik_603corr=0 if wik_603corr!=1

tab wik_603corr
*****
tab wik_604
egen wik_604score=rsum(wik_6041 wik_6042 wik_6043 wik_6044 wik_6045),missing
tab wik_604score
gen wik_604corr=1 if wik_604score==5
replace wik_604corr=.2 if wik_604score==1
replace wik_604corr=.4 if wik_604score==2
replace wik_604corr=.6 if wik_604score==3
replace wik_604corr=.8 if wik_604score==4

```

```

replace wik_604corr=0 if wik_604score==0
tab wik_604corr
*****

tab wik_605
gen wik_605corr=1 if wik_605==1
replace wik_605corr=0 if wik_605corr!=1
tab wik_605corr
*****

tab wik_606
gen wik_606corr=1 if wik_606==6
replace wik_606corr=0 if wik_606corr!=1
tab wik_606corr
*****

tab wik_607
egen wik_607score=rsum(wik_6071 wik_6072 wik_6073 wik_6074 wik_6075 wik_6076 wik_6077
wik_6078 wik_6079 wik_60710 wik_60711),missing
tab wik_607score
gen wik_607corr=1 if wik_607score==11
replace wik_607corr=.09 if wik_607score==1
replace wik_607corr=.18 if wik_607score==2
replace wik_607corr=.27 if wik_607score==3
replace wik_607corr=.36 if wik_607score==4
replace wik_607corr=.45 if wik_607score==5
replace wik_607corr=.545 if wik_607score==6
replace wik_607corr=.636 if wik_607score==7
replace wik_607corr=.818 if wik_607score==9
replace wik_607corr=0 if wik_607score==0
tab wik_607corr
*****

tab wik_608
egen wik_608score=rsum(wik_6081 wik_6082 wik_6083 wik_6084),missing
tab wik_608score
gen wik_608corr=1 if wik_608score==4
replace wik_608corr=.25 if wik_608score==1
replace wik_608corr=.5 if wik_608score==2
replace wik_608corr=.75 if wik_608score==3
replace wik_608corr=0 if wik_608score==0
tab wik_608corr
*****

tab wik_609
egen wik_609score=rsum(wik_6091 wik_6092 wik_6093 wik_6094),missing
tab wik_609score
gen wik_609corr=1 if wik_609score==4
replace wik_609corr=.25 if wik_609score==1
replace wik_609corr=.5 if wik_609score==2
replace wik_609corr=.75 if wik_609score==3
replace wik_609corr=0 if wik_609score==0
tab wik_609corr
*****

tab wik_610b
gen wik_610bcorr=1 if wik_610b==4

```

```

replace wik_610bcorr=0 if wik_610bcorr!=1
tab wik_610bcorr
*****

tab wik_611
gen wik_611corr=1 if wik_611==2
replace wik_611corr=0 if wik_611corr!=1
tab wik_611corr
*****

tab wik_612
egen wik_612score=rsum(wik_6121 wik_6122 wik_6123),missing
tab wik_612score
gen wik_612corr=1 if wik_612score==3
replace wik_612corr=.333 if wik_612score==1
replace wik_612corr=.667 if wik_612score==2
replace wik_612corr=0 if wik_612score==0
tab wik_612corr
*****

tab wik_613
gen wik_613corr=1 if wik_613==1
replace wik_613corr=0 if wik_613corr!=1
tab wik_613corr
*****

tab wik_614
gen wik_614corr=1 if wik_614==1
replace wik_614corr=0 if wik_614corr!=1
tab wik_614corr
*****

tab wik_615
egen wik_615score=rsum(wik_6151 wik_6152 wik_6153 wik_6154 wik_6156 wik_6157
wik_61510),missing
tab wik_615score
gen wik_615corr=1 if wik_615score==7
replace wik_615corr=.143 if wik_615score==1
replace wik_615corr=.286 if wik_615score==2
replace wik_615corr=.429 if wik_615score==3
replace wik_615corr=.571 if wik_615score==4
replace wik_615corr=.714 if wik_615score==5
replace wik_615corr=0 if wik_615score==0
tab wik_615corr
*****

tab wik_616
egen wik_616score=rsum(wik_6161 wik_6162 wik_6163 wik_6164),missing
tab wik_616score
gen wik_616corr=1 if wik_616score==4
replace wik_616corr=.25 if wik_616score==1
replace wik_616corr=.5 if wik_616score==2
replace wik_616corr=.75 if wik_616score==3
replace wik_616corr=0 if wik_616score==0
tab wik_616corr
*****

tab wik_617

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```

gen wik_617corr=1 if wik_617==2
replace wik_617corr=0 if wik_617corr!=1
tab wik_617corr
*****

tab wik_618
gen wik_618corr=1 if wik_618==2
replace wik_618corr=0 if wik_618corr!=1
tab wik_618corr
*****

tab wik_619
gen wik_619corr=1 if wik_619==2
replace wik_619corr=0 if wik_619corr!=1
tab wik_619corr
*****

tab wik_6201
gen wik_6201corr=1 if wik_6201==1
replace wik_6201corr=0 if wik_6201corr!=1
tab wik_6201corr
*****

tab wik_621
gen wik_621corr=1 if wik_621==2
replace wik_621corr=0 if wik_621corr!=1
tab wik_621corr
*****

tab wik_622a
gen wik_622acorr=1 if wik_622a==6
replace wik_622acorr=0 if wik_622acorr!=1
tab wik_622acorr
*****

tab wik_622b
gen wik_622bcorr=1 if wik_622b==12
replace wik_622bcorr=0 if wik_622bcorr!=1
tab wik_622bcorr
*****

tab wik_622c
gen wik_622ccorr=1 if wik_622c==12
replace wik_622ccorr=0 if wik_622ccorr!=1
tab wik_622ccorr
*****

tab wik_622d
gen wik_622dcorr=1 if wik_622d==6
replace wik_622dcorr=0 if wik_622dcorr!=1
tab wik_622dcorr
*****

tab wik_622e
gen wik_622ecorr=1 if wik_622e==6
replace wik_622ecorr=0 if wik_622ecorr!=1
tab wik_622ecorr
*****

tab wik_622f
gen wik_622fcorr=1 if wik_622f==6

```

```

replace wik_622fcorr=0 if wik_622fcorr!=1
tab wik_622fcorr
*****

tab wik_622g
gen wik_622gcorr=1 if wik_622g==6
replace wik_622gcorr=0 if wik_622gcorr!=1
tab wik_622gcorr
*****

tab wik_622h
gen wik_622hcorr=1 if wik_622h==6
replace wik_622hcorr=0 if wik_622hcorr!=1
tab wik_622hcorr
*****

tab wik_622i
gen wik_622icorr=1 if wik_622i==6
replace wik_622icorr=0 if wik_622icorr!=1
tab wik_622icorr
*****

tab wik_622j
gen wik_622jcorr=1 if wik_622j==6
replace wik_622jcorr=0 if wik_622jcorr!=1
tab wik_622jcorr
*****

tab wik_622k
gen wik_622kcorr=1 if wik_622k==6
replace wik_622kcorr=0 if wik_622kcorr!=1
tab wik_622kcorr
*****

tab wik_622l
gen wik_622lcorr=1 if wik_622l==12
replace wik_622lcorr=0 if wik_622lcorr!=1
tab wik_622lcorr
*****

tab wik_623
gen wik_623corr=1 if wik_623>=24
replace wik_623corr=0 if wik_623corr!=1
tab wik_623corr
*****

tab wik_626
egen wik_626score=rsum(wik_6261 wik_6263 wik_6266),missing
tab wik_626score
gen wik_626corr=1 if wik_626score==3
replace wik_626corr=.333 if wik_626score==1
replace wik_626corr=.667 if wik_626score==2
replace wik_626corr=0 if wik_626score==0
tab wik_626corr
*****

tab wik_627
egen wik_627score=rsum(wik_6271 wik_6272),missing
tab wik_627score
gen wik_627corr=1 if wik_627score==2

```

```

replace wik_627corr=.5 if wik_627score==1
replace wik_627corr=0 if wik_627score==0
tab wik_627corr
*****

egen knowtotalscore=rsum(wik_601cor wik_602score wik_603corr wik_604score wik_605corr
wik_606corr wik_607score wik_608score wik_609score wik_610bcorr wik_611corr wik_612score
wik_613corr wik_614corr wik_615score wik_616score wik_617corr wik_618corr wik_619corr
wik_6201corr wik_621corr wik_622acorr wik_622bcorr wik_622ccorr wik_622dcorr wik_622ecorr
wik_622fcorr wik_622gcorr wik_622hcorr wik_622icorr wik_622jcorr wik_622kcorr wik_622lcorr
wik_623corr wik_626score),missing
gen know_cat1=0 if knowtotalscore<=27
replace know_cat1=1 if knowtotalscore>27 & knowtotalscore<55
replace know_cat1=2 if knowtotalscore>=55
tab know_cat1
lab var know_cat1 "Knowledge"
lab define know_cat1 0"Poor" 1"Moderate" 2"Good"
lab values know_cat1 know_cat1
tab know_cat1
*****
*****IYCF Barriers*****
*****Cleaning IYCF Barriers*****
****6 wif_203d****
replace wif_203d1=0 if wif_203d1==. & wif_203d=="Weakness due to C-section"
replace wif_203d2=0 if wif_203d2==. & wif_203d=="Weakness due to C-section"
replace wif_203d3=1 if wif_203d3==. & wif_203d=="Weakness due to C-section"
replace wif_203d4=0 if wif_203d4==. & wif_203d=="Weakness due to C-section"
replace wif_203d99=0 if wif_203d99==. & wif_203d=="Weakness due to C-section"
replace wif_203d77=0 if wif_203d77==. & wif_203d=="Weakness due to C-section"
*****
replace wif_203d1=1 if wif_203d1==. & wif_203d=="Could not produce enough milk (own perception)"
replace wif_203d2=0 if wif_203d2==. & wif_203d=="Could not produce enough milk (own perception)"
replace wif_203d3=0 if wif_203d3==. & wif_203d=="Could not produce enough milk (own perception)"
replace wif_203d4=0 if wif_203d4==. & wif_203d=="Could not produce enough milk (own perception)"
replace wif_203d99=0 if wif_203d99==. & wif_203d=="Could not produce enough milk (own
perception)"
replace wif_203d77=0 if wif_203d77==. & wif_203d=="Could not produce enough milk (own
perception)"
*****
replace wif_203d1=1 if wif_203d1==. & wif_203d=="Due to lack of breast milk"
replace wif_203d2=0 if wif_203d2==. & wif_203d=="Due to lack of breast milk"
replace wif_203d3=0 if wif_203d3==. & wif_203d=="Due to lack of breast milk"
replace wif_203d4=0 if wif_203d4==. & wif_203d=="Due to lack of breast milk"
replace wif_203d99=0 if wif_203d99==. & wif_203d=="Due to lack of breast milk"
replace wif_203d77=0 if wif_203d77==. & wif_203d=="Due to lack of breast milk"
*****
replace wif_203d1=0 if wif_203d1==. & wif_203d=="Pain"
replace wif_203d2=0 if wif_203d2==. & wif_203d=="Pain"
replace wif_203d3=1 if wif_203d3==. & wif_203d=="Pain"
replace wif_203d4=0 if wif_203d4==. & wif_203d=="Pain"
replace wif_203d99=0 if wif_203d99==. & wif_203d=="Pain"
replace wif_203d77=0 if wif_203d77==. & wif_203d=="Pain"

```

```

*****
replace wif_203d1=0 if wif_203d1=. & wif_203d=="Pain due to c-section"
replace wif_203d2=0 if wif_203d2=. & wif_203d=="Pain due to c-section"
replace wif_203d3=1 if wif_203d3=. & wif_203d=="Pain due to c-section"
replace wif_203d4=0 if wif_203d4=. & wif_203d=="Pain due to c-section"
replace wif_203d99=0 if wif_203d99=. & wif_203d=="Pain due to c-section"
replace wif_203d77=0 if wif_203d77=. & wif_203d=="Pain due to c-section"
*****
replace wif_203d1=0 if wif_203d1=. & wif_203d=="Pain for C-section"
replace wif_203d2=0 if wif_203d2=. & wif_203d=="Pain for C-section"
replace wif_203d3=1 if wif_203d3=. & wif_203d=="Pain for C-section"
replace wif_203d4=0 if wif_203d4=. & wif_203d=="Pain for C-section"
replace wif_203d99=0 if wif_203d99=. & wif_203d=="Pain for C-section"
replace wif_203d77=0 if wif_203d77=. & wif_203d=="Pain for C-section"
*****
***3 wif_205ac***
replace wif_205ac1=1 if wif_205ac1=. & wif_205ac=="Due to lack of breast milk"
replace wif_205ac2=0 if wif_205ac2=. & wif_205ac=="Due to lack of breast milk"
replace wif_205ac99=0 if wif_205ac99=. & wif_205ac=="Due to lack of breast milk"
replace wif_205ac77=0 if wif_205ac77=. & wif_205ac=="Due to lack of breast milk"
*****
replace wif_205ac1=0 if wif_205ac1=. & wif_205ac=="Hypoglycemia"
replace wif_205ac2=0 if wif_205ac2=. & wif_205ac=="Hypoglycemia"
replace wif_205ac99=1 if wif_205ac99=. & wif_205ac=="Hypoglycemia"
replace wif_205ac77=0 if wif_205ac77=. & wif_205ac=="Hypoglycemia"
*****
****5 wif_206a****
replace wif_206a1=1 if wif_206a1=. & wif_206a=="Could not prlduce enough milk (own perception),
Myself"
replace wif_206a2=0 if wif_206a2=. & wif_206a=="Could not prlduce enough milk (own perception),
Myself"
replace wif_206a3=0 if wif_206a3=. & wif_206a=="Could not prlduce enough milk (own perception),
Myself"
replace wif_206a99=0 if wif_206a99=. & wif_206a=="Could not prlduce enough milk (own perception),
Myself"
replace wif_206a77=0 if wif_206a77=. & wif_206a=="Could not prlduce enough milk (own perception),
Myself"
*****
replace wif_206a1=1 if wif_206a1=. & wif_206a=="Due to lack of breast milk"
replace wif_206a2=0 if wif_206a2=. & wif_206a=="Due to lack of breast milk"
replace wif_206a3=0 if wif_206a3=. & wif_206a=="Due to lack of breast milk"
replace wif_206a99=0 if wif_206a99=. & wif_206a=="Due to lack of breast milk"
replace wif_206a77=0 if wif_206a77=. & wif_206a=="Due to lack of breast milk"
*****
replace wif_206a1=0 if wif_206a1=. & wif_206a=="Formula Milk, Doctor"
replace wif_206a2=1 if wif_206a2=. & wif_206a=="Formula Milk, Doctor"
replace wif_206a3=0 if wif_206a3=. & wif_206a=="Formula Milk, Doctor"
replace wif_206a99=0 if wif_206a99=. & wif_206a=="Formula Milk, Doctor"
replace wif_206a77=0 if wif_206a77=. & wif_206a=="Formula Milk, Doctor"

replace wif_206a1=0 if wif_206a1=. & wif_206a=="Formula feeding, reduced lactation after c-section"

```

replace wif_206a2=0 if wif_206a2==. & wif_206a=="Formula feeding, reduced lactation after c-section"
replace wif_206a3=1 if wif_206a3==. & wif_206a=="Formula feeding, reduced lactation after c-section"
replace wif_206a99=0 if wif_206a99==. & wif_206a=="Formula feeding, reduced lactation after c-section"

replace wif_206a77=0 if wif_206a77==. & wif_206a=="Formula feeding, reduced lactation after c-section"

replace wif_206a1=0 if wif_206a1==. & wif_206a=="Fruit, Myself"
replace wif_206a2=0 if wif_206a2==. & wif_206a=="Fruit, Myself"
replace wif_206a3=0 if wif_206a3==. & wif_206a=="Fruit, Myself"
replace wif_206a99=1 if wif_206a99==. & wif_206a=="Fruit, Myself"
replace wif_206a77=0 if wif_206a77==. & wif_206a=="Fruit, Myself"

Barriers faced in early initiation

mrtab wif_203d1 wif_203d2 wif_203d3 wif_203d4 wif_203d99 wif_203d77

Barriers faced in feeding colostrum feeding

tab wif_204a

Reasons for feeding prelacteal

tab wif_205ab

Barriers faced in exclusively breastfeeding for the first 2 days after birth

mrtab wif_205ac1 wif_205ac2 wif_205ac99 wif_205ac77

Barriers faced in exclusive breastfeeding under 6 months

mrtab wif_206a1 wif_206a2 wif_206a3 wif_206a99 wif_206a77

Chi

tab wci_104 eibf1, row nofreq chi2
tab age_catm eibf1, row nofreq chi2
tab waw_110d eibf1, row nofreq chi2
tab family_size eibf1, row nofreq chi2
tab edu_catm eibf1, row nofreq chi2
tab occu_catm eibf1, row nofreq chi2
tab age_cath eibf1, row nofreq chi2
tab edu_cath eibf1, row nofreq chi2
tab occu_cath eibf1, row nofreq chi2
tab wquint eibf1, row nofreq chi2
tab income_cat eibf1, row nofreq chi2
tab deli_type eibf1, row nofreq chi2
tab plc_del eibf1, row nofreq chi2
tab anc_cat eibf1, row nofreq chi2
tab pnc_cat eibf1, row nofreq chi2

tab wci_104 ebf1, row nofreq chi2
tab age_catm ebf1, row nofreq chi2
tab waw_110d ebf1, row nofreq chi2
tab family_size ebf1, row nofreq chi2
tab edu_catm ebf1, row nofreq chi2
tab occu_catm ebf1, row nofreq chi2
tab age_cath ebf1, row nofreq chi2
tab edu_cath ebf1, row nofreq chi2

```

tab occu_cath ebf1, row nofreq chi2
tab wquint ebf1, row nofreq chi2
tab income_cat ebf1, row nofreq chi2
tab deli_type ebf1, row nofreq chi2
tab plc_del ebf1, row nofreq chi2
tab anc_cat ebf1, row nofreq chi2
tab pnc_cat ebf1, row nofreq chi2
*****

tab wci_104 mixmf1, row nofreq chi2
tab age_catm mixmf1, row nofreq chi2
tab waw_110d mixmf1, row nofreq chi2
tab family_size mixmf1, row nofreq chi2
tab edu_catm mixmf1, row nofreq chi2
tab occu_catm mixmf1, row nofreq chi2
tab age_cath mixmf1, row nofreq chi2
tab edu_cath mixmf1, row nofreq chi2
tab occu_cath mixmf1, row nofreq chi2
tab wquint mixmf1, row nofreq chi2
tab income_cat mixmf1, row nofreq chi2
tab deli_type mixmf1, row nofreq chi2
tab plc_del mixmf1, row nofreq chi2
tab anc_cat mixmf1, row nofreq chi2
tab pnc_cat mixmf1, row nofreq chi2
*****

*****Adjusted Model*****
*****

logistic eibf1 i.wci_104 i.age_catm i.waw_110d i.family_size i.edu_catm i.occu_catm i.age_cath
i.edu_cath i.occu_cath i.income_cat i.deli_type i.plc_del i.anc_cat i.pnc_cat
logistic ebf1 i.wci_104 i.age_catm i.waw_110d i.family_size i.edu_catm i.occu_catm i.age_cath i.edu_cath
i.occu_cath i.income_cat i.deli_type i.plc_del i.anc_cat i.pnc_cat
logistic mixmf1 i.wci_104 i.age_catm i.waw_110d i.family_size i.edu_catm i.occu_catm i.age_cath
i.edu_cath i.occu_cath i.income_cat i.deli_type i.plc_del i.anc_cat i.pnc_cat
*****
*****

```