Infant Feeding and Weaning Practice of Mothers in Hail

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Abstract: Purpose of this research is to aim to contribute to greater awareness, better understanding on Indicators for assessing infant and young child feeding practice and highlighting the update set of indicators, make the infant and young child feeding practice more applicable of grate use for all family member. Design of this research study the infant feeding and weaning food practice among mothers in Hail to address the indicators for assessing this practice. Method adopted was 85 Questionnaire was set to collect information from mother's child [Birth-23month] in hail. Majority of the study population [36.5 %] were in the age group of 26-30 years, with education up-to university level [75.3%] and nearly 57.6 % were employed. 52 % of the mother at Hail starts breast feeding immediately after birth while 61.2% weaned their babies at 4 to <6 months age. 62.4 % preferred semi solids like mashed fruits or potatoes as the first weaning foods. 72 % mothers were giving fruit/fruit juice daily to their infants while vegetables were given only by 67 % mothers.

Keyword: Breastfeeding, Weaning food, Indicators, Infant health

1. Introduction

It's natural... It's unsightly... It's normal... It's dangerous, to breastfeed or not? For millions of women around the world, this personal decision is influenced by numerous social, cultural, and health factors. Infant Feeding Practices is the first book to delve into these factors from a global perspective, revealing striking similarities and differences from country to country. Dispatches from Asia, Australia, Africa, the U.K., and the U.S. explore as wide a gamut of main issues affecting feeding practices as traditional beliefs about colostrums, "breast is best" campaigns, partner attitudes, workplace culture, direct government intervention, and the pressure to be a "good mother."

Infant feeding practices in every society occur in accordance with the social and culture norms of the society. In all societies and culture, infant feeding practices, especially breast feeding, have rich symbolic content are shaped by local understanding of breastfeeding and can be a highly emotive debate issue.

Infant feeding practices within a given culture represent the ways in which women negotiate and incorporate dominate ideologies and intuitional and cultural norms with the realities of their embodied experience, personal circumstances and social support system.

Infant feeding practices entail more than breast feeding. This may involve artificial feeding and other supplementary foods.

In most societies, the use of breast milk is taken seriously as crucial to infant wellbeing. However, ideas about breast feeding may vary in different cultures. One notable is the beliefs concerning colostrums.

According to the medical view, Colostrums is seen as beneficial since it contains anti-infective and immunological properties.

1.1 Anti-infective Factors

Human milk and colostrum contain antibodies and antiinfective factors that are not present in infant formulas. Secretory immunoglobulin A [sIgA] is the predominant immunoglobulin in human milk, and it plays a role in protecting the infant's immature gut from infection. However, research indicates that breast-feeding must be maintained until the infant is at least 3 months of age to obtain this benefit.

1.2 Formulas

Infants whose mothers are unwilling or unable to breastfeed are usually fed a formula based on cow's milk or a soy product. Many mothers may also choose to offer a combination of breast milk and formula feedings. Those infants who have special requirements receive specially designed products.

1.3 Human Milk

Human milk is unquestionably the food of choice for the infant. Its composition is designed to provide the necessary energy and nutrients in appropriate amounts. It contains specific and nonspecific immune factors that support and strengthen the immature immune system of the newborn and thus protect the body against infections.

Human milk also helps prevent diarrhea. Allergic reactions to human milk protein are rare. Moreover, the closeness of the mother and infant during breast-feeding facilitates attachment and bonding; and breast milk provides nutritional benefits [i.e., optimal nourishment in an easily digestible and bio-available form], decreases infant morbidity, provides maternal health benefits [e.g., lactation amenorrhea, maternal weight loss, some cancer protection], and has economic and environmental benefits [American Dietetic Association, 2005]. Population-based and meta-analysis studies indicate that breast-feeding benefits cognitive development, helps prevent childhood asthma, and may help prevent children from becoming overweight as a dose-dependent effect or because it mediates maternal control over feeding.

For these reasons the Healthy Children 2010 objectives propose to support breast-feeding among mothers of newborn infants [Healthy Children 2010 Objectives: Nourishment of Infants].

Weaning is referred to as complementary feeding is the process of gradually introducing solid food to an infant's diet. Everyone knows that foods prepare at home using fresh and appropriate ingredient is the best way to introduce babies to the world food.

Weaning is process by which food other than breast milk is introduced gradually into baby's diet first to complement the breast milk and then to good weaning practice involve selecting nutritious food and replace it with thicker feed using hygiene practices when preparing them. Majority of nutrition problems in rural areas are due to faulty weaning food.

1.4 Infant and young child feeding indicators

In 2008, WHO published the document Indicators for assessing infant and young child feeding practice, it presented fifteen indicators for assessing infant and young child feeding practices [2].

The updated set of indicators includes eight core and seven optional indicators. The core list includes new indicators for dietary diversity [a proxy for adequate micronutrient-density of foods and liquids other than breast milk], feeding frequency [a proxy for adequate energy intake from non-breast milk sources], and minimum acceptable diet among breastfed and non-breastfed children aged 6–23 months.

The list also includes previously used breastfeeding indicators, updated indicators for exclusive breastfeeding in infants aged less than 6 months and appropriate breastfeeding in children aged less than 24 months. Other dimensions of optimum feeding, such as responsive feeding and adequate texture of food, are not yet included as they require more complex measurement approaches.

In 2007, modifications were made to the definitions of two indicators as follows [2]:

Exclusive breastfeeding: the new definition of exclusive breastfeeding allows a child to receive Oral Rehydration Salts [ORS], in addition to drops and syrups [vitamins, minerals, medicines] as stipulated in the earlier definition. It is also recommended to report age-disaggregated data for this indicator.

The inclusion of ORS in the new definition of exclusive breastfeeding is based on the consideration that ORS is medicine to prevent and treat dehydration. Presentation of age-disaggregated data, in particular exclusive breastfeeding among infants 4–5 months of age, provides valuable information about the actual duration of exclusive breastfeeding. The indicator 'Exclusive breastfeeding [infants 4–5 months]' is an approximation of the proportion of infants who are exclusively breastfed for the full 6 months. This indicator responds to the global recommendation on the optimal duration of exclusive breastfeeding that was changed in 2001 [6].

1.5 Introductions of Solid, Semi Solid or Soft Foods

This indicator replaces the 'Timely complementary feeding rate'. Continued breastfeeding is no longer a criterion included in the definition of the new indicator and the age range of children for which the indicator is assessed has been reduced to 6–8 months [previously 6–9 months].

The previously used indicator 'Timely complementary feeding rate' was a combination of two key practices, i.e. continued breastfeeding and consumption of solid, semisolid or soft foods. It was therefore difficult to interpret. In the current set of indicators, 'Introduction of solid, semisolid or soft foods' and 'Continued breastfeeding at 1 year' and 'Continued breastfeeding at 2 years' are reported as separate indicators. The combined practice of continued breastfeeding and consumption of solid, semi-solid or soft foods is reflected in the area graph that can be constructed for each setting based on the data gathered to calculate the indicators.

1.6 Core indicators

1.6.1 Early initiation of breastfeeding

Early initiation of breastfeeding, within one hour of birth, protects the newborn from acquiring infection and reduces newborn mortality [7, 8]. It facilitates emotional bonding of the mother and the baby [9] and has a positive impact on duration of exclusive breastfeeding [10].

1.6.2 Exclusive breastfeeding under 6 months

Exclusive breastfeeding for 6 months confers many benefits to the infant and the mother. Chief among these is the protective effect against gastrointestinal infections, which is observed not only in developing but also in industrialized countries [11]. The risk of mortality due to diarrhea and other infections can increase many-fold in infants who are either partially breastfed or not breastfed at all [12].

1.6.2 (a) Exclusive breastfeeding [infants 4–5 months

As infants grow during the first six months, the likelihood that they are exclusively breastfed becomes less in many settings. Assessing exclusive breastfeeding in infants aged 4–5 months gives additional information on the duration of exclusive breastfeeding, and is an approximation of the proportion of infants who are exclusively breastfed for the full 6 months.

1.6.3 Continued breastfeeding at 1 year

Breast milk is an important source of energy and nutrients in children 6-23 months of age. Breast milk can provide one half or more of a child's energy needs between 6 and 12 months of age, and one third of energy needs between 12 and 24 months [15]. Breast milk is also a critical source of energy and nutrients during illness and reduces mortality among children who are malnourished [16, 17, 18]. Breast milk reduces the risk of a number of acute and chronic diseases in early childhood and has long-term benefits for cardio-vascular health [19]. In the context of HIV, early cessation of breastfeeding after 6 months is associated with increased serious morbidity, growth faltering and increased mortality [13].

1.6.4 Introduction of solid, semi-solid or soft foods

Proportion of infants 6-8 months of age who receive solid, semi-solid or soft-food around the age of 6 months, an infant's need for energy and nutrients starts to exceed what is provided by breast milk and complementary foods are necessary to meet energy and nutrient requirements. At about 6 months of age, an infant is also developmentally ready for other foods. If complementary foods are not introduced when a child has completed 6 months of age, or if they are given inappropriately, an infant's growth may falter [20].

1.6.5 Minimum dietary diversity: Proportion of children 6-23 months of age who receive foods

Dietary diversity is a proxy for adequate micronutrientdensity of foods. Dietary data from children 6-23 months of age in 10 developing country sites have shown that consumption of foods from at least 4 food groups on the previous day would mean that in most populations, the child had a high likelihood of consuming at least one animal-source food and at least one fruit or vegetable, in addition to a staple food [21, 22].

1.6.6 Minimum meal frequency

The number of meals that an infant or young child needs in a day depends on how much energy the child needs [and, if the child is breastfed, the amount of energy needs not met by breast milk], the amount that a child can eat at each meal, and the energy density of the food offered. When energy density of the meals is between 0.8-1 kcal/g, breastfed infants 6-8

months old need 2-3 meals per day, while breastfed children 9–23 months needs 3-4 meals per day, with 1-2additional snacks as desired [15]. Children who are not breastfed should be given 1-2 cups of milk1 and 1-2 extra meals per day [22].

1.6.7 Minimum acceptable diet

Proportion of children 6-23 months of age who receive a minimum acceptable diet (apart from breast milk), Because appropriate feeding of children 6-23 months is multidimensional, it is important to have a composite indicator that tracks the extent to which multiple dimensions of adequate child feeding are being met. The

minimum acceptable diet indicator combines standards of dietary diversity and feeding frequency by breastfeeding status. The numerator includes only those children who have received both the minimum dietary diversity and the minimum meal frequency for the child's breastfeeding status. The indicator thus provides a useful way to track progress at simultaneously improving

Optional Indicators

1.6.8 Children ever breastfed

Proportion of children born in the last 24 months who were ever breastfed. The proportion of children ever breastfed is a reflection of the 'culture' of breastfeeding and of care practices around childbirth

1.6.9 Continued breastfeeding at 2 years

Proportion of children 20-23 months of age who are fed breast milk.

1.6.10 Age-appropriate breastfeeding

Proportion of children 0-23 months of age who are appropriately breastfed.

1.6.11 Predominant breastfeeding under 6 months

Proportion of infants 0-5 months of age who are predominantly breastfed

1.6.12 Bottle feeding

Proportion of children 0-23 months of age who are fed with a bottle.

1.6.13 Duration of breastfeeding

Median duration of breastfeeding among children less than 36 months of age. when 50% of children between 0-35 months did not receive breast milk during the previous day.

2. Result and Discussion

 Table 1: Socio-demographic characteristics of the
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Character	Total			
Sample Size		85 (100)		
	20-25	24 (28.2)		
Age Groups (year)	26-30	31 (36.5)		
	31-35	17 (20.0)		
	\geq 36 years	13 (15.3)		
Education	school University	21 (24.7) 64 (75.3)		
	Employed	49 (57.6)		
Employment	Unemployed	36 (42.4)		

Table 1 Show the socio-demographic characteristic of the mother which indicated that majority of the respondent 36.5% their age between 26-30 year, 75.3% studying till

Volume 2 Issue 4, April 2013 www.ijsr.net

university level, and 57.6 of the research respondent are employed.

Table 2. Socio-demographic characteristics of the mitan	Table 2:	Socio-	demograp	hic cha	racteristics	of t	he Inf	fants
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Characteristics	Total	
Sample Size	85 (100)	
Age Groups (months)	0-6	20 (23.5)
	7-12	21 (24.7)
	13-	25 (29.4)
	18	
	19-	19 (22.4)
	24	
Vaccination	Yes	78 (91.8)
	No	7 (8.2)
Minor illnesses	Yes	6 (7.1)
	No	73
Type of feeds Breast Bottle Partial		(85.9)
breast/bottle		
		22 (25.9)
		25 (29.4)
		35 (41.2)

Table 2 Represents the Socio-demographic characteristics of the Infants. 51.8% of the infant their age between 13-24 month, 91.8% are vaccinated, 85.9% are not complain form any type of illness these due to vaccination they have.41.2% are partial breast/bottle these due to that most of the mother are employed.



Figure 1: Initiation of breast feeding

Figure 1 Show the first Indicators for assessing infant and young child feeding practices.52 % of the mother at Hail starts breast feeding immediately after birth so we have to encourage the other to do so.

Early initiation of breastfeeding, within one hour of birth, protects the newborn from acquiring infection and reduces newborn mortality [7&8].



Figure 2 Represents the time when mother at Hail weaned their babies.61.2% weaned at <6m. It is the suitable time to introduced weaning food at 6 month of live.

Around the age of 6 months, an infant's need for energy and nutrients starts to exceed what is provided by breast milk and complementary foods are necessary to meet energy and nutrient requirements. If complementary foods are not introduced when a child has completed 6 months of age, or if they are given inappropriately, an infant's growth may falter [20].



Figure 3: Type of Weaning Food

Figure 3 Show the food given during weaned of the infant. Weaning foods are necessary to meet energy and nutrient requirements beside breast milk. 62.4% of mothers on Hail started the right type of food during weaned their infants.



Figure 4: Habit of Fruits or Fruits Juice

International Journal of Science and Research (IJSR), India Online ISSN: 2319-7064

Figure 4 Respondents in the research have good habit by providing their infant with fruits and fruits juices. 72 % of the mothers at Hail practice good habits. At least one fruit is recommended /day.



Figure 5: Habit of Fresh Vegetable

Figure 5 Respondents in the research have good habit by providing their infant with fresh vegetable 66.7% of the mothers at Hail practice good habits. At least one vegetable is recommended /day.

3. Conclusion and Recommendation

3.1 Conclusion

Infant feeding and weaning food practice for women at Hail follow some indicator which set by WHO and need to encourage on other one.

3.2 Recommendation

- Encourage of breast feeding practice by all means till 24 months.
- Discourage using of bottle feeding to be nil in Hail women practice.

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Volume 2 Issue 4, April 2013 www.ijsr.net