# Assessment of Feeding Patterns Children Under Two Years at PrimaryHealth Care Centers

تقييم أنماط رضاعة الأطفال دون السنتين في مراكز الرعاية الصحية الاولية

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#### الخلاصة

الهدف: تهدف الدراسة إلى تقييم انماط رضاعة الأطفال أقل من عامين في مراكز الرعاية الصحية الأولية.

المنهجية: دراسة وصفية نفذت في المراكز الصحية في مدينة النجف الأشرف للفترة من ١٠ شباط ولغاية ١٩ اذار ٢٠١٥ تم اختيار عينة البحث بالطريقة العشوائية لـ (٥٠) طفل من مراكز الرعاية الصحية الأولية. جمعت البيانات عن طريق استخدام استمارة الاستبيان، والذي تضمنت في الجزء الأول الخصائص الديموغرافية للاقتصادية. الجزء الثاني عن الخصائص الديموغرافية للأطفال، الجزء الثالث حول المعلومات عن الرضاعة الطبيعية و الاصطناعية ، الجزء الرابع حول معلومات الام عن الرضاعة الطبيعية و المستخدام الطرق الاحصائية (الوصفية، المرضاعة الطبيعية والمجزء الخامس حول أسباب رفض الأطفال للرضاعة الطبيعية وتم تحليل البيانات باستخدام الطرق الاحصائية (الوصفية، والتحليلية)

النتائج: اشارت نتائج الدراسة ان غالبية اعمار الأمهات (٢٥ -٣٣) وكانت نسبتها ٤٤٪. وأظهرت النتائج أن النساء التي تستخدم الرضاعة المختلطة كانت أعلى نسبة ٦٨٪ من الرضاعة الطبيعية ونسبتها ٣١٠٪. واظهرت النتائج عدم وجود علاقة بين عمر الأمومعلومات الام حول انماط رضاعة الاطفال.

الاستنتاج: استنتجت الدراسة أن أكثر من نصف العينة هم من أطفال الذين يستخدمون نمط الرضاعة المختلطة وتشير الدراسة ان عمر الأم ليس له علاقة مع المعلومات حول الرضاعة الطبيعية.

التوصيات: توصي الدراسة إلى عمل برنامج تثقيفي للأمهات عن الرضاعة الطبيعية وتوجيه الأمهات حول نظافة ادوات الرضاعة الاصطناعية ووصفة صحيحة للحليب ،الطفل حديث الولادة يجب ارضاعه طبيعيا على وجه الحصر خلال الاشهر الستة الاولى من حياته .

# **Abstract**

Objectives To assess feeding patterns for children under two years at primary health care center.

**Methodology** A Descriptive study is carried out at Al-Najaf AL-Ashraf City.fromFebruary 10<sup>th</sup> to May 19<sup>th</sup> 2015. Sample consisting of (50) children were selected randomly from thePrimary Health Care Centers. Data collected by usedquestionnaire, which includes the first parts was about demographic characteristics of mother(age, occupational, educational levels, residence area, socio economic). Second part about demographic characteristics of children ,Third part about information about normal and artificial feeding, Fourth part about information mother for breast feeding and fifth part about causes of reject of breastfeeding. Data was analyzed by using the application of descriptive and inferential statistical approaches.

**Results** The finding of the present study indicate that there are mother with age group is highly (25 -33) were 44%. women using the mixed of feeding were higher 68% than the normal breast feeding31.1%. No find any relationship between maternal age and has information about breastfeeding and feeding grounds for refusal of the child.

**Conclusion**present study concluded that more than half of the study are mixed feeding. The study indicates that are the mother age has relation with her information about breast feeding.

**Recommendation**Breastfeeding educational programs for mothers .Recommended mother about cleaning of equipment's artificial feeding and good formula of milk. infants should be breast fed exclusively for the first six months of life .

Key wards: Assessment, Feeding Pattern, Children Under Two Years, Primary Health Care Centers.

# **INTRODUCTION:**

Feedings should be initiated as soon after birth as possible, depending on the infant's ability to tolerate enteral nutrition ,the end of the 1st week of life, most healthy infants will be taking 60–90 mL/feeding and want 6–9 feedings/24 hr <sup>(1)</sup>.

Breastfeeding has a major role to play in optimizing public health. The Department of Health and Children, the Health Service Executive endorses the World Health Organization recommendation that infants should be breast fed exclusively for the first six months of life and thereafter continue to be breastfed in combination with suitably nutritious complementary foods (solids) until they are two years of age or older <sup>(2)</sup>.

Breastfeeding is a complete nutrition that is easy for the baby to digest, which promotes the child eating more often due to faster digestion. It also helps in the jaw development of the baby<sup>(3)</sup>. Describes breastfeeding as the 'normal way of providing infants with nutrients for healthy growth and development'. Exclusive breastfeeding, which has been shown to provide the greatest benefit for an infant, is recommended for the first six months of life with complementary feeding until two years of age <sup>(4)</sup>.

Breastfeeding is the 'natural' form of infant feeding for humans (mammals) providing the main source of nutrients within the first few months of life. Breast milk contains both macro and micro nutrients and a variety of bioactive substances known to support infant growth and development<sup>(5)</sup>. Some of the major factors that affect exclusivity and duration of breastfeeding include breast problems such as sore nipples or mother's perceptions that she is producing inadequate milk ,societal barriers such as employment and length of maternity leave <sup>(6)</sup>.

For the first 4-6 months of life the infant should be fed either by breast feeding or on a formula based on cows' milk modified to make its composition suitable for infants-that is, more like breast milk <sup>(7)</sup>.

The quantity of formula taken at a feeding varies among infants of the same age and within infants at different feedings, The desire for formula (or breast milk) is somewhat less during the first 2 week of life than during the following 5–6 month. After 6 month of age, formula (or breast milk) is rarely the sole source of the infant's nutrient intake. However, it remains an important source of many nutrients <sup>(1)</sup>.

Breastfeeding also plays an important part in mother—infant attachment. If the mother is encouraged during the antenatal period to expect to be able to breastfeed her baby and eventually to enjoy it, she is likely to accept early difficulties with patience and understanding (8)

The major change in feeding habits is the addition of solid foods to the infant diet .Physiologically and development, infants 4 to 6 months of age are in a transition period.During the second half of the year ,human milk or formula should optimally continue to be the primary source of nutrition, Fluoride supplementation should begin, depending on the infants intake of fluoride (in formula mixed with tap water or bottled water[containing fluoride] as appropriate). If breastfeeding is discontinued, a commercial iron-fortified formula should be substituted <sup>(9)</sup>.Compared to bottle fed or artificially fed infants, exclusively breastfed infants were at lower risk of infections, particularly gastrointestinal infections in the first few months of life<sup>(10)</sup>.

As the major source of nutrients in the first years of life, breast milk contains many components such as immunoglobulin, lactoferrin, oligosaccharides and anti-secretary peptides shown to be protective against infections and microorganisms<sup>(11)</sup>.

The World Health Organization recommends that infants be exclusively breastfed for the first six months, followed by breastfeeding along with complementary foods for up to two years of age or beyond. The major advantage of exclusive breastfeeding from 4 to 6 months includes reduced morbidity due to gastrointestinal infection <sup>(12)</sup>. However, many researchers are questioning if there is sufficient evidence to confidently recommend exclusive breastfeeding for 6 months for infants in developed countries due to the fact that breast milk may not meet the full energy requirements of the average infant at 6 months of age <sup>(13)</sup>.

# **OBJECTIVES**

To assess feeding patterns for children under two years at primary health care center.

# **METHODOLOGY:**

**Study Design:** A descriptive study is conducted at primary health care centers from February 10<sup>th</sup>toMay 19<sup>th</sup> 2015. To assessfeeding patterns for children under two years at primary health care centers in AL Najaf AL Ashraf City.

**Study Sample:** A purposive sample of (50) child, were chosen from primary health care centers in Al-Najaf Al-Ashraf City.

**The study Instrument:** A questionnaire was designed to identify feeding pattern for children under two years in primary healthcare centers. The final copy consists of the following parts: Part (1): Mother demographic characteristics, Part (2): Child demographic characteristics, part(3):Information about normal feeding, Part(4): Information about artificial feeding, Part(5):Information mother about breast feeding, Part(6):causes reject breast feeding.

**Data collection:** Questionnaire and interview techniques were used to collect data of study. **Statistical data analysis:** Descriptive statistical approach or methods (frequency percentage and inferential statistical methods of correlation approach.

# **RESULTS:**

Table (1): Mother and Child Demographic Characteristics

	Category	Frequency	Percentage %	
	<= 15	1	2.0	
Age of Mother	16 – 24	18	36.0	
(years)	25 – 33	22	44.0	
	34 Up	9	18.0	
	Housewife	33	66.0	
Occupational Levels	Employee	15	30.0	
	Free business	2	4.0	
Socio-economic	Enough	39	78.0	
status	Not enough	11	22.0	
T of Fo	Nuclear	20	40.0	
Type of Family	Extended	30	60.0	
Condon of shild	Female	24	48.0	
Gender of child	Male	26	52.0	
	1	16	32.0	
C	2	15	30.0	
Sequences of child	3	6	12.0	
in family & Number	4	5	10.0	
of children in family	5	4	8.0	
	>=6	4	8.0	
	<= 4month	2	4.0	
Age of Children	5 – 14month	30	60.0	
	15 month Up	18	36.0	
Tyme of Delivery	Normal	35	70.0	
Type of Delivery	Cesarean	15	30.0	
Types of Feeding	Natural Breast feeding	14	28.0	
	Mixed	31	62.0	
	Artificial (bottle feeding)	5	10.0	
Total	<u> </u>	50	100%	

Table (1)Show majority of the mothers (44%) were between (25-33) years. Concerning their occupation, most of the mothers (66%) were housewife. and (78%) of the mother shows enough socio-economic status. More than half of the children of the sample were male

(52%). Also (60%) of children in the study were at age group (5-14) month. And (32%) of the families have one child

Table (2)Correlation Between the Age of Mother and Mother Information About Important of Feeding Patterns.

Age of Mother		Mother information a	Total	Sig.	
		Yes No			10001
<= 15	No.	1	0	1	_
	%	2%	0.0%	2%	$X^2$ =1.456 C.C=0.168
16 – 24	No.	16	2	18	P-value=0. 692
	%	32%	4%	36%	Not Sig.
25 – 33	No.	19	3	22	
	%	38%	6%	44%	
34 Up	No.	9	0	9	-
	%	18%	0.0%	18%	_
	No.	45	5	50	
Total	%	90%	10%	100%	

Table (2) shows there are no significant between mother information about important of feeding pattern with mothers age at p-value > 0.05

Table (3) Correlation Between the Age of Mother and Causes of Reject Mother to Breast Feeding.

Age of Mother		Reasons why the mother's rej			
		Yes	No	Total	Sig.
<= 15	No.	0	1	1	
	%	0.0%	2%	2%	$X^2 = 0.168$
16 – 24	No.	2	16	18	C.C=0.138
	%	4%	32%	36%	P-value=0. 982 Not Sig.
25 – 33	No.	2	20	22	140t Sig.
	%	4%	40%	44%	
34 Up	No.	1	8	9	
	%	2%	16%	18%	
	No.	5	45	50	
Total	%	10%	90%	100%	

Table (3) shows there are no significant between age of mother and Reasons why the mother's reject to breastfeed a child with at p-value> 0.05

Table (4) Correlation Between the Age of Mother and The Reasons for Rejection of the Child-Feeding.

Age of Mother		The reasons for rejection			
		Yes	No	Total	Sig.
<= 15	No.	0	1	1	
	%	0.0%	2%	2%	$X^2=1.299$
16 – 24	No.	0	18	18	C.C=0.159
	%	0.0%	36%	36%	P-value=0. 729 Not Sig.
25 – 33	No.	1	21	22	140t Sig.
	%	2%	42%	44%	
34 Up	No.	0	9	9	
	%	0.0%	18%	18%	
	No.	1	49	50	
Total	%	2%	98%	100%	

Table (4) shows there are no significant between age of mother and The reasons for rejection of the child-feeding with at p- value> 0.05

Table (5) Correlation Between the Type of Feeding and Mother Information.

Types of Fe	adina	Mother information feedi	Total	Sig.	
Types of Fe	cung	Yes No			Total
Natural	No.	14	0	14	
	%	28%	0.0%	28%	$X^2 = 3.405$
Mixed	No.	26	5	31	C.C=0.253 P-value=0. 182 Not Sig.
	%	52%	10%	62%	
Artificial	No.	5	0	5	
	%	10%	0.0%	10%	
	No.	45	5	50	
Total	%	90%	10%	100%	

Table (5) shows there are no significant between type of feeding and mother information with at p- value> 0.05

Table (6)Correlation Between the Type of Feeding and Causes of Reject Mother to Breast Feeding.

Types of Feeding		causes of reject mother to		Sig.	
		Yes No			Total
Natural	No.	2	12	14	]
	%	4%	24%	28%	$X^2 = 0.845$
Mixed	No.	3	28	31	C.C=0.129
	%	6%	56%	62%	P-value=0.655 Not Sig.
Artificial	No.	0	5	5	
	%	0.0%	10%	10%	
	No.	5	45	50	
Total	%	10%	90%	100%	

Table (6) shows there are no significant between type of feeding and causes of reject mother to breastfeeding with at p- value > 0.05.

**Table (7) Correlation Between the Different Studied Variables** 

Statistical studied variables parameters	normal feeding status	artificial feeding status	about important	causes of reject mother to breastfeeding	The reasons for
normal feeding	1	.039	064-	021-	.046
status		.831	.670	.887	.762
artificial feeding	.039	1	185-	058-	a •
status	.831		.279	.737	.000
Mother	064-	185-	1	.111	.048
information about important of feeding	.670	.279		.442	.743
Causes of reject	021-	058-	.111	1	.429**
motherto breastfeeding.	.887	.737	.442		.002
The reasons for	.046	a •	.048	.429**	1
rejection of the child-feeding	.762	.000	.743	.002	

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table (7) shows there was significant correlation at p-value < 0.01 between the artificial feeding status, causes of rejection mother to breast feeding and the reasons for rejection the child feeding at p-value (0.000, 0.002) respectively, and there was significant correlation

between the reasons for rejection of the child feeding and artificial feeding status, causes reject of mother to breast feeding at p-value (0.000, 0.002) respectively).

# **DISCUSSION:**

The finding of the study sample show that majority of the mothers (44%) were between (25-33) years. Concerning their occupation, most of the mothers (66%) were housewife.and(78%) of themother shows enough socio-economic status.

In this study,more than half of the children of the sample were male (52%). Also (60%) of children in the study were at age group (5-14) month. And (32%) of the families have one child. This result was in agreement with another study which concluded that natural guidance is needed during dietary transition in early childhood<sup>(14)</sup>. Present study found that natural feeding (28%) was used less than mixed feeding, while that women using the mixed feeding were (62%). This study is supported by previous study that emphasized on Nutrition, growth and complementary feeding of the breastfed infant<sup>(15)</sup>.

The study finding shows there are no significant between mother information about importance of feeding pattern and type of feeding; and no significance between age and reasons why the mother's reject to breastfeed a child; at p- value> 0.05. And this study shows there are no significance between type of feeding and mother information; causes of reject mother to breastfeeding with at p- value> 0.05.

The study finding shows there was significant correlation at p-value < 0.01 between the artificial feeding status, causes of rejection mother to breast feeding and the reasons for rejection the child feeding at p-value (0.000, 0.002) respectively. And there was significant correlation between the reasons for rejection of the child feeding and artificial feeding status, causes reject of mother to breast feeding at p-value  $(0.000,\,0.002)$  respectively). Breast milk consists of basic nutrients containing proteins, vitamins and carbohydrate. However, presence of minerals fulfills micronutrient needs and maternal antibodies improves the immune system inhibiting infantile infections like gastrointestinal, respiratory and skin infections and increases physical and neurological growth of the baby<sup>(16)</sup>. Breast milk is the optimal form of nutrition in infancy. Breastfeeding protects an infant from a wide array of infectious and noninfectious diseases. With very few exceptions, in the healthy term infant, breast milk alone (with vitamin D supplementation) meets all of the nutritional requirements up to six months of life  $^{(17)}$ .

# **CONCLUSION:**

This study concluded that more than half of the study are mixed feeding. The study indicates that are the mother age has relation with her information about breast feeding

# **RECOMMENDATION:**

Based on the study results and conclusion, the study recommended the following:

- **1.** Breastfeeding educational programs for mothers to increase their knowledge and interest in breast feeding as vital nutrition for their children .
- **2.** Mother should be recommended about cleaning of equipment used in artificial feeding and good formula of milk.
- 3. Infants should be breast fed exclusively for the first six months of life.

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