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Impact of feeding practices and nutritional status among sample of children under two year in Abu-Gharibarea sub governorate Baghdad

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Abstract : Background : Improper complementary feeding practice is one of the main reasons for malnutrition for infants aged less than two years.
The objective : To study the nutritional status of under –two year and to assess whether infant feeding practices are associated with under nutrition.
Methodology : A cross –sectional study was conducted the period fromAugust^{8th}to December^{12th} (2015).A questionnaire is developed as a tool of data collection. Meaning validity of the study implement is determined through panel of experts .This study was undertaken in the health care centers of Abu-Gharibarea sub governorate Baghdad . The data were collected by interview the mother's of infants attending the Health care centers during the study period were eligible for participation in the study. Data are analyzed through the application of describtive statistical data analysis approach of frequency percent and P.V.
Results : The study included (153) infants, (52.94) % were males, and (47.06) % were females . Age distribution revealed the highest of female at age group were those from age 6-12 months (65.28) % . parity status distribution revealed that (56.52) % were multifarious of nutritional status acute . Delivery distribution reveled that (56.52)% were vaginal of nutritional status acute. Economic status distribution revealed that (47.83) % were medium of nutritional status acute . Residence distribution revealed that (60.87)% were rural of nutritional status acute. Education of mother distribution revealed that (39.13) % were primary and secondary of nutritional status acute . The study showed that that (62.96)% of males were supplementary nutritional (liquid only) , (73.9)% of complementary feeding without breast feeding were nutritional status (acute), (52.2)%were complementary feeding with breast feeding ,(87.0)% were breast feeding at delivery of nutritional status (acute).
Conclusion : From this study the infant feeding practices and nutritional status in health care centers in study area the greater of the infant were well. However , mothers should be promoted to use different kinds of nutrient.
Key words : infants supplementary feeding , nutritional status.

Introduction

Nourishment condition of infants appropriate feeding of infants to cause convenient build up the body and healthy is the necessary basic of human development .Infant- feeding practices forming a principal element of child interesting practices a part from socio-cultural ,economic and demographic factors. Studies have distinguished recent the relationship between malnourishment and child feeding practices .Required for learning mothers for preferment correct infant-feeding practices and other attributes of child care has also been

observed.[1]Adequate nourishment in the course of quick growth is essential to secures that infant both physically and mentally to the maximally like hood . In sufficient nourishment within the grave constitution years have consequences immediate and long time. [2] Through the first month of life , the food requires can be totally equalized with breast milk so it is favored milk for infant and best in their first year of life . Optimally appropriated to the food requires of the human infants which create it supremacy to infant formula and cow's milk .Soon consequences involve activity ,death ,under developed mental and physical evolution .While the long time consequences involve weakness of intellectual performance , reproductive performance , the ability to work and increasing the risk of chronic diseases . [3]Attitude in the sensation that short breast feeding insufficient supplemented paired with low-level ambience health and infectious disease are promptly direct causes , the source engaged causes are family poorness and lack of health care .Supplemented feeding repeatedly starts very early or very late and nutrition introduction often nutritionally insufficient and unsecure . [4] Poor feeding and diseases are the prevailing reasons of illness and mortality in infants one to cause the other and both are closely a shared with low economic status and lack culture .It is probable improvement infant feeding by two plain, offering and strengthen special breast milk approaches until the child completes six months of age and after this age ,introduction suitable supplementary feeds in addition to , and not as a substitute for breast milk. [5] Methodology A cross-sectional study was conducted during five months period of August to December (2015) . The study carried out in health care centers in abigrab area sub governorate Baghdad city .The study population All children in the age group (under 2 year) described who were attending the health care centers during the study period were eligible for participation in the study. The sample enrolled (153) mothers of children. Mothers of selected children who were willing to participate in the study were interviewed for collecting desired information. Mothers were asked to give their informed co sent for participate of child in the study. Data collection A structural questionnaire was validated and used for the study .It was administered on mothers of under 2 year old infants .Information on selected socio-demographic characteristics : age of infants , parity status, delivery, economic status, residence, education of mother, infant feeding practices : breast feeding at delivery, complementary feeding with and without breast feeding , reason for stop breast feeding . Another pometric parameters (weight and height) were also obtained on children included in the study ensuring reliability as far as possible . The weight and height measurements were converted into three summary indices of nutrition status : weight for age , height for age and weight for height . According to WHO criterion based on standard deviation units (termed as Z- scores), who were more than two standard deviation below the reference medium on the basis of weight for age , height for age and weight for height indices were considered respectively to be normal (-2 to +2) , medium (-3 to +3) and (acute <-3).

Table 1: distribution of studied simples according to age groups.

Age groups	**Gender**					
	Males		**Females**		**Total**	
	No	**%**	**No**	**%**	**No**	**%**
≤6 months	12	14.81	8	11.11	20	13.07
6-12 months	35	43.21	47	65.28	82	53.59
≥12months	34	41.98	17	23.61	51	33.33
Total	81	100.00	72	100.00	153	100.00

χ^2=7.720, df=2, p.v= 0.021

This table shows the highest percentage age of female at age group 6-12 months which from (65.28) from total study cases, and lowest percentage of females at age group ≤6 months which from (11.11) .

Table 2: distribution of nutritional status according to gender.

Gender	**Nutritional status**							
	Normal (-2to+2)		**Medium (-3to-2.01)**		**Acute (<-3)**		**Total**	
	No	%	No	%	No	%	No	%
males	55	52.88	14	53.85	12	52.17	81	52.94
females	49	47.12	12	46.15	11	47.83	72	47.06
Total	104	100.00	26	100.00	23	100.00	153	100.00

χ^2= .014 df=2, p.v= 993

This table shows the highest percentage of males their medium (-3to-2.01) of nutritional status which from(53.85) from total study cases .

Table 3: distribution of nutrition status according to socio-demographic characteristics.

Variables'		**Nutritional status**								
		Normal (-2to+2) (n=104)		**Medium (-3to-2.01) (n=26)**		**Acute (<-3) (n=23)**		**Total**		
		No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**P.V**
Parity status	Primiparous	31	29.81	10	38.46	10	43.48	51	33.33	0.376
	multiparous	73	70.19	16	61.54	13	56.52	102	66.67	
Delivery	Vaginal	58	55.77	18	69.23	13	56.52	89	58.17	0.454
	caesarian	46	44.23	8	30.77	10	43.48	64	41.83	
Economic status	good	26	25.00	6	23.08	2	8.70	34	22.22	0.039*
	medium	60	57.69	11	42.31	11	47.83	82	53.59	
	poor	18	17.31	9	34.62	10	43.48	37	24.18	
Residence	urban	58	55.77	13	50.00	9	39.13	80	52.29	0.340
	rural	46	44.23	13	50.00	14	60.87	73	47.71	
Education of mother	read and write	14	13.46	6	23.08	5	21.74	25	16.34	0.315
	primary	36	34.62	12	46.15	9	39.13	57	37.25	
	secondary	54	51.92	8	30.77	9	39.13	71	46.41	

This table shows the highest percentage of parity status (multiparous) which from (70.19) their normal (-2to+2) of nutritional status from total study cases, according the highest percentage of delivery (vaginal) which from (69.23) their medium(-3to-2.01) of nutritional status, economic status have significant (0.039) nutritional status of infants residence (rural) which from (60.87) have acute (<-3) of nutritional status and finally according to education of mother have secondary education level (51.92) their normal (-2to+2) of nutritional status .

Table 4: distribution of nutrition status according to breastfeeding at delivery and complementary with and without breastfeeding .

Variables'		**Nutritional status**								
		Normal (-2to+2)		**Medium (-3to-2.01)**		**Acute (<-3)**		**Total**		
		No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**P.V**
Breastfeeding at delivery	yes	89	85.6	25	96.2	20	87.0	134	87.6	0.314
	no	15	14.4	1	3.8	3	13.0	19	12.4	
	Total	104	100.0	26	100.0	23	100.0	153	100.0	
Complementary feeding with breastfeeding	yes	58	55.8	13	50.0	12	52.2	83	54.2	0.850
	no	46	44.2	13	50.0	11	47.8	70	45.8	
	Total	104	100.0	26	100.0	23	100.0	153	100.0	
Complementary feeding without breastfeeding	yes	45	43.3	12	46.2	17	73.9	74	48.4	0.0.28*
	no	59	56.7	14	53.8	6	26.1	79	51.6	
	Total	104	100.0	26	100.0	23	100.0	153	100.0	

This table shows the highest percentage of breast feeding at delivery which from (96.2), while Complementary without breastfeeding have significant (0.0.28) their medium (-3to-2.01) of nutritional status, complementary feeding without breastfeeding .

Table 5: distribution of gender according to reason for stop breast feeding

Variables		**Gender**						
		males		**females**		**Total**		**P.V**
		No	**%**	**No**	**%**	**No**	**%**	
Reason for stop breast feeding	Milk insufficiency	49	60.49	39	54.17	88	57.52	**0.429**
	medication	7	8.64	12	16.67	19	12.42	
	Inability for suckle	19	23.46	14	19.44	33	21.57	
	Doctor recommendation	6	7.41	7	9.72	13	8.50	

This table shows the highest percentage of males at reason for stop breast feeding their milk insufficiency which from(60.46) from total study cases.

Table 6: distribution of supplementary nutritional according to gender

	Gender							
		Males		**Females**		**Total**		**P.V**
		No.	**%**	**No.**	**%**	**No.**	**%**	
Supplementary nutritional	Liquid only	51	62.96	44	61.11	95	62.09	**0.008***
	Vegetable source	19	23.46	7	9.72	26	16.99	
	Animal source	9	11.11	10	13.89	19	12.42	
	Liquid & animal source	2	2.47	11	15.28	13	8.50	
	Total	81	100.00	72	100.00	153	100.00	

This table shows the highest percentage of liquid only which from (26.96) and this statistically have highly significant association of supplementary nutritional with gender.

Table 7: distribution of nutritional status according to utensils used in feeding .

utensil	**Nutritional status**							
	Mild (-2to+2)		**Moderate (-3to-2.01)**		**Acute (<-3)**		**Total**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**
bottle	51	49.04	10	38.46	9	39.13	70	45.75
cup	26	25.00	6	23.08	6	26.09	38	24.84
dish	27	25.96	10	38.46	8	34.78	45	29.41
Total	104	100.00	26	100.00	23	100.00	153	100.00

χ^2=2.186 df= 4 p=0.702

This table shows the highest percentage of bottle which from (49.04) their mild (-2to+2) of nutritional status from total study cases

Discussion

The display study comprised 153(81 males and 72 females)≤ 6 months to ≥ 12 months. Of the infants ,(13.07%) were aged ≤ 6 months, (53.59%) were aged 6-12 months and (33.33%)were aged ≥ 12 months (

Table 1) . In Bangladesh city, sultana S. Hogue A. saleh F. (2014) found that(52.7%)were aged 0-6 months ,and(47.3%) were aged 6-23 months .[4]These findings similar to distribution of the age groups our study .In Tanzania city , JOHNG. SAFARI et al (2013) showed that (8.7%) were within the range of normal of nutrition status, while there was a higher percentage (6.1%) underweight among female than male infants (4.2%) children .[6] There results disagree with our study. In Nigeri city, T.O ALAMU et al (2011) showed that (13.0 %) and (4.30 %) of the males were medium and acute respectively while (11.80 %) and (11.8 %) and of females were medium and acute respectively of nutritional status of infants . [3] There results disagree with our study. In Mauritius, AshmikaMotee et al (2013) the socio- demographic characteristics found to impact infants of nutritional status practices are type of parity status , delivery , economic status , residence and education of mother . [7]This findingssimilar with our study .In india , Dinesh Kumar et al (2006) found that infants of medium economic status were more likelihood to be medium of nutritional status than those poor economic status and study revealed more increase on spread of malnutrition infants in case of uneducated mothers . [1] This study similar with our study.Kimiywe J. and Chege P.M. (2015) found that the study noted significant relationship between complementary feeding practices and nutrient status and showed that had low levels of income. [8] This study similar with our study. Yasmeenthan and Nelofar Khan (2012) showed that (80.8) normal of nutrition status according to breast feeding at delivery. [5] This finding similar to distribution of the our study .While distribution of the medium and acute nutrition status according to breast feeding at delivery not similar this study .This study was revealed the exclusive breast feeding not exist significant link of complementary feeding . According to study Dinesh Kumar et all (2006).[1]India , Debadeep Kalita and Madhur Borah (2014) showed that the high percentage of mothers initiating breast feeding within 1 hour of birth of the child and exclusive breast feeding for six or more month. [9] This findings similar to our study. In Bangladesh , TAMANNA BEOUM et al (2013)showed that complementary feeding was introduced before 6 month in one third babies and amount was inadequate in same number of children . [10] There results disagree with our study.Prerna Singhal et al (2015) found that (15.0%) mothers started breast feeding within(1 hr) of birth , (29.8%) started complementary feeding at 6 month , while (38.3%) exclusively breast feeding for six month duration . [11] There results disagree with our study. FarzanaSaleh et al (2014) displayed study , this study revealed that the complementary feeding given by (89%) of the breast feeding and (39%) of complementary without breast feeding mothers to their infant were in sufficiency in a capacity imports. [12] These findings promote our study.In Mauritius , Ashmika Motee et al (2013) found that (33.95 %) milk insufficiency , (7.7%) medication , (14.7%) in ability for suckle and (2.1%) doctor's recommendation . [7] These results are disagree with our study .In Bangladesh city ,Sharmin Sultana (2014) showed that (47.6%) of the study infant consumed animal source and liquid animal source, while liquid only and vegetable source not consumed daily. Another result (34%) of mother used bottles for feeding their infants. [4] These results are disagree with our study. As a result of shared to meet contamination and intervention accompanied by succeeding breast feeding

Conclusion Foundation on the results, infant feeding practices and nutritional status in health care centers in a bigrab area Baghdad city the greater of the infant were well. The outcomes propose that mothers should be learned about the significance of introduce of different nutrition, and understanding should be generated inside of then about of introducing bottle. Feeding mother should too be encouraged for general learning as the standard of learning effects the feeding practices and nutritional status. Whereas malnourishment the most within male infants compared to female infants in the study area . Others study is required to inquiry the results in of malnourishment among male infants.

Recommendation This study recommends the requires for further animation into infants feeding and care practice in other area . Also suitable consultation will assist to further achieve and observance of well nourishing condition of infants to intend health care at area study.

References

1. Dinesh Kumar , N.K. Coel ,Poonam C.Mittal and purnima Misra .Influence of infant – feeding practices on Nutritional status of under – five children .India Journal of pediatrics , Volume 73- May, 2006.
2. WHO. Indicators for assessing infants and young child feeding practices : conclusions of a consensus meeting held 6-8 November 2007 in Washington D.C., USA.

3. T.O ALAMU, S.E.ATA WODI and J.NEDOKPAYI. nutritional status of infants attending infants Welfare clinic of Ahmadu Bello University, health service samarau. Pelagia Research library . Advances in Applied Science Research , 2011, 2 (4) :58- 64.
4. Sultana S. Houqe A. Saleh F infant and young child- feeding practices and their Nutrition status in a National Nutrition programme Area in Bangladesh : A cross – sectional study. Hum Nuir Food Sci 2(2) : 1028 (2014).
5. Yasmen Khan and Nelo far Khan . Nutrition status of Children (0-24 month) In Jammu Kashmir and LadaKhRegions . International Journal of Scientific and Research publication , Volume 2, Issue 6, Jume 2012.
6. JOHNG SAFARI, STELLAC. KLMAMBO and JAMS E. LWELAMIRA. Feeding practices and nutritional status of infant in Morogoro Municipality , Tanzania . Tanzania Journal of Health Research Volume 15, Number 3, July (2013).
7. Ashmika Motee , Deerajen Ramasawmy , PrityPugo- Gumsam and Rajesh Jeewon . An Assessment of the Breast feeding practices and Infant feeding Pallern among mothers in Mauritius .Journal of Nutrition and Metabolism volume 2013 (2013).
8. Kimiywe and Chege .J APPI.Biosci. Complementary feeding practices and nutritional status of children 6-23 months in Kituicounty , Kenya. (2015) 85 : 7881-7890.
9. Depadeep Kalita ,Madhur Borah. Current practices on infants feeding in rural areas of Assam, India : a community based cross sectional study. 2014; 24-25.
10. TAMANNA BEOUM , SKAZIMUL HOQUE, SOOFIA KATOON and AZANTA RANI SHAH . Infant feeding practice of Mother attending Pediatric out Patients Department in A Tertiary Care Center BANGLADESH CHILD HEALTH 2013; Vol 37(3) 138-141.
11. Prerna Singhal ,Seema Jain , S.K. Garg , H. Chopra , et al . Infant and Young Children Feeding Practices with Special Reference to Complementary Feeding In an Urban Area of Meerut .10SR Journal Of Humanities And Social Science Volume 20, Issue 2 , Ver 11 (Feb. 2015), PP-22-26
12. Farzana , Ferdous Ara, Md. Asirw Hoque, and Md. Safiul Alam Complementary Feeding Practices among Mothers in selected Slums of Dhaka city :A Descriptive study . J Health PopulNutr. 2014 Mar ;32(1) ;89-9.

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