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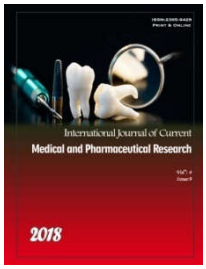

DURATION OF BREAST FEEDING PRACTICE AND THEIR INFLUENCING FACTORS IN AL HASA REGION OF SAUDI ARABIA; A PRIMARY HEALTH CARE (PHC) BASED STUDY: 2017

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ABSTRACT

Breast milk, as recommended by the World Health Organization, has enumerable benefits for the infant as it not only promotes the sensory and cognitive development of the infant but also protects the infants against infection and chronic diseases and provides most of the child's nutritional needs. So Breastfeeding behavior of the nursing mother has enormous effect on the health of the baby. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend that all mothers should breastfeed their babies exclusively for 6 months and then complement breastfeeding with foods up to the second year of life or later.in spite of these recommendation the practice of exclusive breastfeeding has remained poor in many developing and developed countries including Saudi Arabia due to various factors as revealed by various researches. This study therefore assessed the breastfeeding practices and associated factors among mothers of children less than two years of age in Al Ahsa District of Saudi Arabia A cross-sectional descriptive study was carried out among 955 mothers of children less than two years of age, Data was collected using validated semi-structured, interviewer-administered questionnaires and analyzed using SPSS Version 21. Of 955 mother-infant pairs sampled, the overall rate of Exclusive breastfeeding was found to be 35.07%. After an adjustment, using logistic regression model, mothers who are housewife (OR=2.17, 95% CI 1.12-3.23), living in Urban area (OR=1.8, 95% CI 1.04-3.5), mothers in the age group of 40 years (OR=2.03, 95%CI 1.23-3.86) middle income group mother (OR=2.12 95%CI 1.32-3.76),higher educated mother (OR=2.1, 95%CI 1.1-3.45), mother with graduate husband (OR=1.12 95%CI 0.9-2.50), those mothers who received information regarding the breastfeeding benefits from the attending gynecologist (OR=2.20 , 95% CI 1.56-3.85) showed significant association with the practice of exclusive breast feeding for six months. The breastfeeding practices of respondents were far low in this study. Adequate education of mothers and their partners as well as the reason of discontinuing breastfeeding remains to be addressed.

INTRODUCTION

Breast milk, as recommended by the World Health Organization, has enumerable benefits for the infant as it not only promotes the sensory and cognitive development of the infant but also protects the infants against infection and chronic diseases and provides most of the child's nutritional needs. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF)[1] recommend that all mothers should breastfeed their babies exclusively for 6 months and then complement breastfeeding with foods up to the second year of life or later. Duration of breastfeeding has significant effect on the health of the infants. There is a wealth of scientific evidence documenting reduced mortality rate,

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improved growth and decreased childhood infection among the children who have been on optimal breast feeding[2]. Breastfeeding for the suggested period also protect the children against later diseases such as insulin dependent diabetes mellitus, inflammatory bowel disease, and lymphoma[2].Apart from the health concerns there is scientific evidence that longer a child breastfeeds, the higher the child's IQ score and grades will be in later years[3].In spite of these well-known benefits of breastfeeding, the trends of breastfeeding is declining throughout the world[4]. This declining trend may be attributed to many influencing factors.

Influence of demographic and socioeconomic factors on breastfeeding has been widely studied by various researches conducted all over the world. Investigators have found a strong positive correlation between maternal age, education level, breastfeeding teaching programme and social support [5].Others factors which may influence the breastfeeding include the changing life style, perceived inconvenience, increased number of working mothers and more mothers leaving their homes to achieve higher education. The role of healthcare professional is very crucial in increasing the incidence and duration of breast-feeding with the information on breastfeeding from the prenatal period during routine check-up to the follow up in the pediatrics clinic .Negative attitudes and lack of knowledge on their part can be barrier to successful infant feeding.

Infant feeding in Saudi Arabia

The Ministry of Health, Saudi Arabia has established many MCH hospitals and embedded prenatal and post natal care services in the Primary Health Care programme with the objective of reducing infant mortality, morbidity and malnutrition. Since the inception of MCH programme in 1988 and childhood illnesses initiative (IMCI) in 1996 with exclusive and complementary breastfeeding as one of the main elements [6-7] , a series of programmes, seminars, workshops and conferences aimed at promoting breastfeeding practices have been organized in Saudi Arabia.

Despite all these efforts, the desirable practice of breastfeeding has not reached the hundred percent marks in most of the Arab countries including Saudi Arabia. A number of studies carried out in Saudi Arabia have shown that infant breastfeeding is declining and practice of breast feeding is less than optimum[8].In a similar study conducted recently in Al Hasa has found a significant reduction in breastfeeding and early weaning among the nursing mothers[9]. Mother's residence, education, and work status were found to have significant effects on feeding pattern at 4, 6 and 12 months of age in this study. Identifying the level of and factors influencing breastfeeding practices can help the Health authority to revise ongoing programme and to devise new strategies to promote breastfeeding by specifically focusing on these factors. This study is thus undertaken to identify the level of and factors influencing breastfeeding among nursing mothers of Al Hasa district of Saudi Arabia.

SUBJECTS AND METHODS

A cross sectional survey was conducted throughout Al Hasa region of Saudi Arabia in which all the nursing mothers accompanying infants attending the pediatric clinics at various Primary Health Care Centers were interviewed using open structured questionnaires. The population of the survey covered mothers with children 2 years of age or less and is estimated to be between 6-7 percent of the total Al Hasa population (1 million) which constitutes to be 60000 .To get the representative sample and with presumption that 14% of mothers are still breastfeeding the infant at the age of 12 months without any supplementation and with the worst acceptable level of 12% and 95% of confidence level we got a sample of 997. The respondents were not proportionate to the population of provinces and area of residence (Urban: Rural). 987 mothers of children aged 4-24 months, visiting at four antenatal and children clinics of three Health Sector PHCs of Al Ahsa and one community health center were randomly chosen.

A permission letter from Ministry of Health was sought before starting the study. All the participants either signed or thump impressions were taken on the letter of consent after obtaining the informed verbal consent.

Data Collection

The variables for this survey were identified through various literature review and the data collection tools were developed in English and Arabic language. The collection tool was pretested on 10 participants who were excluded from this study. The questionnaires of the collection tool consisted of both open and close questions .The number of questions will be 15 in number and required not more than 25 minutes for the participants to answer. The survey forms were filled by the interviewer specially trained for this. Information regarding demography, breastfeeding behavior, reason for discontinuing breastfeeding, duration of breastfeeding and factors influencing the breastfeeding were collected. A multiple choice format of the questionnaires was prepared for the convenience of participants and the interviewer and for the ease of scoring and data management. The questionnaires were validated by three specialist pediatricians working in the local tertiary care hospital. The data were categorized, analyzed and statistically interpreted by using SPSS version 21. A p value of <.05 was considered as statistically significant. The data were analyzed using logistic regression to determine the effect of various factors on the outcome variable and to control confounding. Most of the variables were fitted to the bivariate logistic regression.

RESULTS

A total of 997 mothers attending the under-five clinics at different Primary health care centers were distributed the questionnaires. Of these 997 mothers 955 returned the questionnaire after properly filling them thereby constituting ninety five percent of the study population. The mean age of the mothers was 30.39 Year with St.deviation +- 7.18 years (range 15-42 years).Almost 43% belonged to rural areas. Thirty four percent of the mothers were high school educated while the same number was graduate. Twelve percent, Sixteen percent and five percent were illiterate, middle school and postgraduate respectively. The majority of the mothers were house wife (612, 64%) While twenty four percent were working and eleven percent students. Almost eighty two percent of the husbands were employed while seven percent unemployed and three percent student. As far as the education of the husbands of these mothers are concerned forty percent of them were graduate while thirty one percent, nineteen percent and four percent were high school, middle school and [post graduate respectively. Only six percent were illiterate. More than seventy eight percent of the mother belonged to

middle income group while about sixteen and six percent of them were in low and high income group respectively.

Table 1 The demographic characteristics of the study population

Socio-demographic factor	N	Percentage
Geographical distribution		
Rural	429	45
urban	526	55
Age	30.39 Year with st.d +- 7.18 years (range 15-42 years)	
Education of the mother		
Illiterate	109	12
Primary	153	16
High school	325	34
Graduate	325	34
Post graduate	38	4
Employment Status of the mothers		
House wife	611	64p
Working	239	25
Student	105	11
Education of fathers		
Illiterate	58	6.06
Primary	181	18.84
High school	296	30.95
Graduate	384	40.20
Post graduate	38	3.95
Employment status of the fathers		
Unemployed	162	17
Working	764	80
Student	29	3
Economic Status		
Low income group	150	15.71
Middle income group	746	78.12
High income group	57	5.97

Almost sixty three percent (N=601) of the mothers did not breastfeed any of their children exclusively as defined by WHO and fell short of 6 months of compulsory breast feed while two percent (N=19) of them never breastfed their children. A majority of the mothers (72%) made their decision on breast feeding during their pregnancy while attending the gynecologist clinic while (20%) did it after delivery and only 8% before the pregnancy .Regarding the information on the benefit of breastfeeding thirty five percent of mother (N=334) stated that the attending gynecologist has shared the information while the same number of mother mentioned the attending pediatrician while the nursing staff, media (TV, Printmedia, signboardetc.), family members and relative combined contributed thirty percent in delivering the information on the benefit of breastfeeding.

Table 2 Breastfeeding behaviors of the participant mothers

Variable	No.	Percentage
Never breastfed to any child	19	2
Breast fed the child less than 6 months	601	62.93
Exclusively breast fed the child (according to the WHO definition)	335	35.07
Decision of breastfeeding		
Before pregnancy	76	8
During pregnancy while attending the prenatal clinic	688	72
After delivery	191	20
Benefit of Breastfeeding information		
Attending Gynecologist	334	35
Attending Pediatrician	334	35
The nursing staff	143	15
Media (TV, print media)	96	10
Relatives	48	5

Prevalence of exclusive breastfeeding for six month was significantly higher among urban population than the rural population 226(42.97%) Vs. 120(27.97%), P=.0002.Exclusive breastfeeding was significantly increased with the increasing age of the mothers; it was 23.53% in the age group of <20 years ,29.17% in the age group of 21-30 years , 40.84% in the age group of 31-40 Years and 46.61% among the mothers of age group of > 40 years (p=0.001). The prevalence of exclusive breast feeding was significantly more common among the housewives than the working mother 265(43.37%) Vs90 (37.66%), p=0.002.Mothers whose husband were employed (39.41$ Vs 31.25, p=0.001) and having tertiary education breastfed their babies exclusively more than those mothers whose husband was unemployed or were having lower education. The same was true with mothers with higher education (40.1%Vs29.72%, p=0.003). The prevalence of exclusively breastfeeding was significantly more among the mothers who got the information about benefit of Breastfeeding from attending gynecologist(21.86% and 28.88 Vs 8.92% m 2.50% and 3.0%) and attending pediatrician as compared to the nursing staffs and the media. Almost 40% of the middle income group mothers breastfed their children exclusively as compared to high income group and the low income group mothers who breastfed exclusively to their children in 35% and 24 % respectively p=-006. After an adjustment, using logistic regression model, mothers who are housewife (OR=2.17, 95% CI 1.12-3.23), living in Urban area (OR=1.8, 95% CI 1.04-3.5), mothers in the age group of 40 years (OR=2.03, 95%CI 1.23-3.86) middle income group mother (OR=2.12 95%CI 1.32-3.76),higher educated mother (OR=2.1, 95%CI 1.1-3.45), mother with graduate husband (OR=1.12 95%CI 0.9-2.50), those mothers who received information regarding the breastfeeding benefits from the attending gynecologist (OR=2.20 , 95% CI 1.56-3.85) showed significant association with the practice of exclusive breast feeding for six months.

Table 3 Bivariate and multivariate analysis of factors associated with exclusive breastfeeding practices among mothers

Variables	Exclusive breastfeeding		Total	Odds ratio
	Yes	No		
Age				
<20 years	12 (23.53)	39(76.47%)	51	OR=2.03, 95%CI 1.23-3.86
21-30 years	140(29.17%)	340(70.83%)	480	
31-40years	125(40.84%)	181(59.16%)	306	
>40 years	55(46.61%)	63(53.39%)	118	
		P =0.001		
Geographic distribution				
Rural	120(27.97%)	309(72.03)	429	OR=1.8, 95% CI 1.04-3.5
Urban	226(42.97%)	300(57.03)	526	
		P=.0002		
Mothers Occupation				
House wife	265(43.37%)	346(56.63%)	611	OR=2.17, 95% CI 1.12-3.23
Working	90 (37.66%)	149(62.34%)	239	
Student	38 (36.19%)	67 (63.81%)	105	
		P=0.002		
Husbands occupation				
Unemployed	20 (31.25%)	44 (68.75)	64	
Employed	307 (39.41%)	472 (60.59%)	779	
Student	25 (22.32%)	87 (77.68%)	112	
		P=0.001		
Education				
Illiterate	33(29.72%)	78 (70.28%)	111	OR=2.1, 95%CI 1.1-3.45
Primary education	51 (33.77%)	100(66.23%)	151	
Secondary Education	110 (33.95%)	214(66.05%)	324	
Tertiary education	148 (40.1%)	221(59.9%)	369	
		P=0.003		
Husbands education				
illiterate	13(22.41%)	45(77.59%)	58	OR=1.12 95%CI 0.9-2.50
Primary	75 (41.44%)	106(58.56%)	181	
Secondary	106(34.93%)	190(65.07%)	296	
Tertiary	160(38.02%)	260(61.98%)	420	
		P=0.002		
Benefit of Breastfeeding				OR=2.20 , 95%

information			CI 1.56-3.85
Attending Gynecologist	218 (22.82%)		
Attending Pediatrician	288 (30.16%)	737(77.18%)	
The nursing staff	89 (9.32%)	667(69.84%)	
Media (TV, print media)	25 (2.61%)	866(90.68%)	
Relatives	30 (3.140%)	930(97.39%)	
		925(96.86%)	
		P=0.004	
Economic Status			
Low income group	36 (24%)	115(76%)	OR=2.12 95%CI
Middle income group	298(40%)	448(60%)	1.32-3.76
High income group	20(35%)	38(65%)	
		P=0.006	

When asked about the reason as why the mothers stopped breastfeeding to their youngest child, almost thirty six percent (N=336) mentioned the doctor's advice on their medical condition which included four percent of nipple problem, while twenty five percent (N=240) blamed the less milk production. However twenty nine percent (N=277) of the mothers had to stop breast feeding due to their job engagement and ten percent (N=95) due to cosmetic reason.

Table 4 Reason for discontinuing the breastfeeding

Variables	Number	Percentage
On doctors' advice due to medical condition	343	36
Less milk production	240	25
Job engagement	277	29
Cosmetic reason	95	10

DISCUSSION

Exclusive breast feeding is considered protective effect against child as well as maternal morbidity and mortality. Despite the beneficial effect of exclusive breast feeding, the decline in this practice has been reported in many developing countries. This study was an attempt to determine the prevalence and associated factors of breast feeding practice. This study also tried to find out the influence of medical profession if any on the breast feeding habit of the mothers in Al ahsa region of Saudi Arabia. The prevalence of initiation of breast feeding in this study was almost ninety three percent (N=925). High percentage of initiation of breast feeding has also been reported in studies conducted in south east Ethiopia[11] (93.3%) and China[12] (98%) but the same was not true in Hong Kong[13](66.7%) and Vietnam[14] study (where the initiation of breast feeding was substantially low.

However the crude prevalence of exclusive breast feeding till six months (according to WHO definition of exclusive breastfeeding) was only about thirty four percent (N=335) which is lower than Ethiopia[15] (60.1%), Bangladesh[16] (36%), India[17] (61.5%), Nigeria[18](56.1%), Iran(46.5) and china[20](44.9) but is higher than in a similar study in Saudi Arabia's Taif[21](19%) and Tabuk Districts[22](31.4%), Jordan[23](1%), Mauritius[24] (17.9%) and Hong Kong[13] (13.4%). The possible explanation for the variation in Exclusive breastfeeding practice found in different studies may be the different methods used for computing exclusive breastfeeding or due to cross cultural differences.

The prevalence of exclusive breast feeding was significantly higher among the urban mothers than the rural mothers (41.39% Vs. 29.33%, p=0.001). Similar results were found in Nigeria[25] (Urban 41.9% Vs Rural 30.8%,p=0.002) , China[20] (29.4 % urban vs. 39.8 % rural, p=0.001), Vietnam[14] (7.15 Urban Vs 0.9 % Rural, p=0.002) and Congo[26] (44.2% Urban and 14.3% Rural, p=0.03)This might be due to more awareness regarding the benefits of exclusive breast feeding among the urban mothers. However there is a need for further studies to explore whether it is knowledge, cultural factors, or simply myths which caused this difference. In our study the main reason for discontinuation of breastfeeding reported by the mothers was doctor's advice on their medical condition (36%) which included nipple problem (4%) followed by the less milk production (20%) and job engagement (29%).However a significant number of them (10%0 denied breastfeeding to their children due to the fear of disfigurement of the breast (cosmetic reason). Various factors have been cited in various studies suggesting the reasons of why after a very good initiation of breastfeeding; mothers could not continue the exclusive breastfeeding till the duration as suggested by WHO in the definition of exclusive breastfeeding. In Bangladesh study [16] inadequate secretion of milk (64%) was the main factor for discontinuation followed by the illness of mother (23%) and the same was true with one Indian study[27] where more than seventy percent of mothers discontinued breastfeeding either due to insufficient milk production or no milk production. Mauritius study[24] found that the earlier introduction of water (30.1%) was the main factor followed by resumption of work (27.3%) and insufficient milk production (22.6%). Medical complication was reported by only (3.9%) of the mothers. However in one study in Canada[28], the mothers reported inconvenience or fatigue associated with breastfeeding (22.6%), concerns about milk supply (21.6%) and return to work (20%) as the main reason of discontinuing the breastfeeding.

Mothers in the age group of 40 years (OR=2.03, 95%CI 1.23-3.86) middle income group mother (OR=2.12 95%CI 1.32-3.76), higher educated mother (OR=2.1, 95%CI 1.1-3.45), mother with graduate husband (OR=1.12 95%CI 0.9-2.50), those mothers who received information regarding the breastfeeding benefits from the attending gynecologist (OR=2.20 , 95% CI 1.56-3.85) showed significant association with the practice of exclusive breast feeding for six months. This is in accordance with findings from other studies in China[20], India,[27] Vietnam[14], Nigeria[18] and Hong Kong.[13]

References

1. Bhavana Singh2010, Knowledge, Attitude and Practice of Breast Feeding –A case study [online] Available at:www.eurojournals.com/ejsr_40_3_09.pdf
2. Ian Booth, 2001, Does the duration of breast feeding matter? BMJ[online] Available at: http://findarticles.com/p/articles/mi_m0999/is_7287_322/ai_72789122/
3. Priscilla Young Colletto, 1998, LEAVEN, Vol. 34 No. 1, February-March 1998, pp. 3-5 [online] Available at: http://www.naturalchild.org/guest/priscilla_colletto.html
4. Dr. Micheline Beaudry, Global Child Health Society, *Baby-Friendly Hospital* initiative [online] Available at: http://www.gcsltdc.com/ch2000_2/pn_beaud.html
5. Solomon Sika-Bright, 2010, Socio-cultural factors influencing infant feeding practices of mothers attending welfare clinic in Cape Coast [online] Available at: http://www.ifra-nigeria.org/IMG/pdf/Sika.pdf
6. Deborah L. Kaplan and Kristina M. Graff, 2008,Marketing Breastfeeding—Reversing Corporate Influence on Infant Feeding Practices [online] Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2443254/
7. Mohamed H. Baldo, Tawfik A. Khoja, Yagob Y. Al-Mazrou and Mohamed O. Basulaiman,1998,

Augmenting hospital support of maternal and child health care, Saudi Arab [online] Available at: http://www.emro.who.int/Publications/EMHJ/0401/04.htm

8. Rasik Sharma, 2010, Decline in Breastfeeding in Saudi Arabia: A Matter of Concern, Top News, health [online] Available at:http://topnews.co.uk/215799-decline-breastfeeding-saudi-arabia-matter-concern
9. Abdel-Hady El-Gilany,2010,Infant feeding in Al-Hasa, Saudi Arabia, MEJFM, September 2010 - Volume 8, Issue 8 [online] Available at:http://www.mejfm.com/September2010/MEJFM_Vol8_Iss8.pdf
10. Dr. MahendraSheth, 2005, Desirable rate of exclusive breastfeeding, still a distant goal in most of the Arab world [online] Available at: http://www.unicef.org/media/media_27854.html
11. GezahegnTesfaye, AlemayehuBogale, and AgumasieSemahegn, "Complementary feeding practice of mothers and associated factors in HiwotFana specialized hospital, eastern Ethiopia," Pan African Medical Journal, vol. 18, 2014.
12. HaoyueGao, Qi Wang, Elizabeth Hormann, Wolfgang Stuetz, Caroline Stiller, Hans Konrad Biesalski, and Veronika Scherbaum, Breastfeeding practices on postnatal wards in urban and rural areas of the Deyang region, Sichuan province of China,I nt Breastfeed J. 2016; 11: 11.
13. EYL Leung, KYAAu, SSWCheng, SYKok, HKLui, WCW Wong, Practice of breastfeeding and factors that affect breastfeeding in Hong Kong, *Hong Kong Med J 2006; 12:432-6*
14. Huong Nguyen Thu,Bo Eriksson,Toan Tran Khanh,Max Petzold,Göran Bondjers,Chuc Nguyen Thi Kim,Liem Nguyen Thanh and Henry Ascher, Breastfeeding practices in urban and rural Vietnam,*BMC Public Health*201212:964
15. FikirAlebachew, NatnaelGirma, NatnaelTayeTessema ,The Prevalence of Exclusive Breast Feeding and Associated Factors Among Mothers of Less than Two Years Children in KurkurKebele, DessieTown ,Journal of Gynecology and Obstetrics 2016; 4(6): 72-80
16. Prakash Chandra Joshi, Mirak Raj Angdembe, Sumon Kumar Das, Shahnawaz Ahmed, Abu Syed Golam Faruque and Tahmeed Ahmed ,Prevalence of exclusive breastfeeding and associated factors among mothers in rural Bangladesh: a cross-sectional study *International Breastfeeding Journal*20149:7,https://doi.org/10.1186/1746-4358-9-7
17. Dr. Shreelekha V.C, Dr. Daisy Dharmaraj, Dr. Karthik.P , Dr. Venkatashravani, Dr. Pratheeba, Dr. DurgeshPandey, Dr.Sharmila, Dr. Nilofer, Dr. Janani Exclusive Breastfeeding and Weaning Practices - Prevalence and Determinants In Thiruvallur District Of Tamilnadu, *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 14, Issue 6 Ver. III (Jun. 2015), PP 34-38*
18. Oluwafolahan O. Sholeye , Olayinka A. Abosede , Albert A. Salako, Exclusive Breastfeeding and Its Associated Factors among Mothers in Sagamu, Southwest Nigeria, Journal of Health Science ,2015; 5(2): 25-31 doi:10.5923/j.health.20150502.01
19. Iran
20. Hong Qin ,Lin Zhang ,Lingling Zhang ,Wei Zhang ,Li Li[1],Xin Deng ,DanpingTian ,Jing Deng and Guoqing Hu ·Prevalence of Breastfeeding: Findings from the First Health Service Household Interview in Hunan Province, China, Int. J. Environ. Res. Public Health 2017, 14(2), 150; doi:10.3390/ijerph14020150
21. LailaShehata Dorgham, Samar K. Hafez, HebaE.Kamhawy and WisalB.Hassan, Assessment of Initiation of Breastfeeding, Prevalence of Exclusive Breast Feeding and Their Predictors in Taif, KSA, Life Science Journal 2014;11(1)http://www.lifesciencesite.com 1
22. Riyadh A Alzaheb,Factors Influencing Exclusive Breastfeeding in Tabuk, Saudi Arabia ,Clinical Medicine Insights: Pediatrics,Volume 11: 1–8
23. JamilaAbuidhail, JamilaAbuidhail, JamilaAbuidhail, Hanan Al-Modallal, Hanan Al-Modallal, Rania Yousif, Rania Yousif and NeamatAlmresi, Exclusive breast feeding (EBF) in Jordan: Prevalence, duration, practices, and barriers, Midwifery , Volume 30 , Issue 3, 331 - 337
24. AshmikaMotee, DeerajenRamasawmy, PrityPugo-Gunsam and Rajesh Jeewon,An Assessment of the Breastfeeding Practices and Infant Feeding Pattern among Mothers in Mauritius,Journal of Nutrition and Metabolism ,Volume 2013, Article ID 243852, 8 pages
25. Emmanuel OlorunlekeAdewuyi, Yun Zhao, Vishnu Khanal,AsaAuta,and Lydia BabatundeBulndi, Rural-urban differences on the rates and factors associated with early initiation of breastfeeding in Nigeria: further analysis of the Nigeria demographic and health survey, 2013,Int Breastfeed J. 2017; 12: 51.
26. Toni KasoleLubala*1, Olivier Mukuku1, AugustinMulangu Mutombo1, Nina Lubala1, Frank Nduu Nawej2, Paul Makan Mawaw3, Oscar Numbi Luboya1, Infant feeding practices in urban and rural southern Katanga communities in Democratic Republic of Congo The Journal of Medical Research 2016; 2(3): 65-70
27. PatilSapnaS, HasamnisAmeyaA,PathareRooma S, ParmarAarti, Rashid A K, Narayan K A,Prevalence Of Exclusive Breast Feeding And Its Correlates In An Urban Slum In Western India, LeJSME 2009: 3 (2): 14-18
28. Catherine R.L. Brown, Linda Dodds, Alexandra Legge, Janet Bryanton, Sonia Semenicm*Factors influencing the reasons why mothers stop breastfeeding,* Can J Public Health 2014; 105(3):e179-e185, Available from: https://www.researchgate.net/publication/265135911_Factors_influencing_the_reasons_why_mothers_stop_breastfeeding [accessed Sep 04 2018].

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