

Knowledge and Practices of Mothers towards Infant and Child Feeding in Omdurman - Salha area , Sudan

ISLAM A.IBRAHIM¹, ANASS M.ABBAS², MANAR G. SHALABI³, ABOZER Y. ELDERDERY², HATEM MOHAMED⁴, ASAAD MA.BABKER*

¹Clinical Nutrition department, National Ribat University, Khartoum, Sudan

²Clinical Laboratory Sciences Department, College of Applied Medical Sciences- Jouf University, KSA, Medical Laboratory Sciences Department- Nahda College, Khartoum, Sudan

³Clinical Laboratory Sciences Department, College of Applied Medical Sciences- Jouf University, KSA. Medical Laboratory Department- School of Medicine- Alyarmouk Medical College, Khartoum, Sudan

⁴Assistant Professor of Public Health, College of Nursing, Najran University, Najran, Kingdom of Saudi Arabia

⁵Department of Medical Laboratory Sciences, College of Health Sciences, Gulf Medical University, Ajman, United Arab Emirates.

*Corresponding Author: Asaad MA. Babker, Department of Medical Laboratory Sciences, College of Health Sciences, Gulf Medical University, Ajman, United Arab Emirates. azad.88@hotmail.com

ABSTRACT

Background & Aims: Breastfeeding rates differ in diverse countries. A limited information is known about breastfeeding and hurdles in mother practice in Sudan. This study aimed to assess mothers' knowledge and practices during infant and child feeding in the Salha area. **Methods:** This is an observational case detection community-based study. Out of 126 the total numbers of the study population 126 mothers were selected randomly. Data was collected using a questionnaire. The study was conducted during the period from April to December 2019. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 22.0. **Results:** The majority of mothers 67.5% were between 21-30 years, and only 9.5% aged 15-20 years. The highest percentages of mothers 42.9% had a university level of education and only 0.8% khalwa. The majority of mothers 90.5% were housewives and only 4.5% were laborers. Most of mothers 59.5% had awareness about the remunerations of breastfeeding, 42.9% of mothers have better understanding of exclusive breastfeeding, of them 40.1% practice it with the current infant, and 59.3% did not. The highest percentage of mothers 54% breastfeed the newborn when she felt the child was hungry, 25.4% by a certain schedule and 20.6% when the child cries. The majority 44.4% breastfed the child at unlimited frequency per day, 38.1% between 5-10 times per day and (17.5) between 2-4 times per day. **Conclusions:** The study recommends that mothers should be stimulated to practice exclusive breastfeeding and they need to be aware about its importance and its significant role in protection against infection.

Keywords: Breast feeding, Sudan, Mothers knowledge

INTRODUCTION

The nutrients in human milk are uniquely adapted to meet the growth needs of the infant, in forms more easily digested, absorbed and used. Breast-feeding supports early immunity for the baby helps the mother's uterus return quickly to normal size and assists in the important mother-child bonding process (Segeet al., 2018). About 9.5 million children died before they reached their fifth birthday in 2006, out of the total number two thirds had passed away in the first year of life. About 35% of children's death is associated with under-nutrition. It also results in causing disabilities and precluding children who survived from accomplishing their utmost developmental. It is projected that suboptimal breastfeeding, mainly in the first six months of children's life, resulted in the death of about 1.4 million children and resulted in about 10 % of disease burden in children less than five years old. Malnutrition contributes to more than half of all under-five childhood deaths throughout the developing world (Karim T, 2017).

Breastfeeding is recognized internationally as the optimal way to feed infants and infants should be exclusively breastfeed for the first six months of life and breastfeeding should be continued into the second year of life, and beyond (Prell C, 2016).

There are many factors that influence the decision to supplement human milk including socioeconomic, cultural factors, maternal work demands, commercial advertising

and family pressures (Kabir A, 2017). One of the important factor that determine the need and timing of complementary feeding are the biological factors such as desire, interest, growth rate, physical activity, appetite including infant size, sex, development, interest, desire, growth rate, and maternal lactation capacity also decide the timing and need of complementary feeding (Rollins N C, 2016). However, neither nor biological factors, cultural nor socioeconomic have received adequate systematic attention (Colombo L, 2018).

This is the first study to investigate the knowledge and practices of mothers towards Infant and Child Feeding, and their background information in the Salha area in Omdurman, Sudan. The aim of this study was to assess the awareness and breastfeeding practice of the mothers of Salha area, Sudan. The findings will be valuable for providing background information as well as nutrition guidance for protecting the health of the newly born infant residing in this area and other parts of Sudan.

MATERIALS AND METHOD

Study design and area: It is an observational case detection community-based study. The study was carried out in the Salha area in Omdurman.

Study population and sample size: The study populations were mothers who have infants and children attending the health center in the study area. Out of the

total numbers of the study population 126 mothers were selected randomly for the study. Sample size was calculated using the following equation:

$$N = (Z)^2 Pq / (d)^2.*$$

The mothers were intervined using specifically designed questionnaire to collect the primary data for this research.

Data collection: Questionnaire was designed to collect data from the selected sample. The questionnaire included questions about demographic and socio-economic characteristics of the respondent mothers and questions to obtain information was administered in the form of interviews by researchers.

Secondary data was collected using available related literature in the books, reports, researches as well as the data available on the internet.

Data analysis: The collected data were analyzed using Statistical Package for Social Sciences (SPSS). Analyzed data was presented in a form of table.

Duration of the study: The study was conducted between April to December 2019.

RESULTS

According to results in Table (1) the majority of mothers (67.5%) were in the age group (21-30 years), and only (9.5%) aged 15-20 years. The highest percentage of mothers (42.9%) had university level of education and only (0.8%) khalwa. The majority of mothers (90.5%) were housewives and only (4.5%) were laborers. Table 1 shows the highest percentage of fathers (49.2%) had university level of education and only (1.2%) were illiterates. The majority of fathers (54.8%) were self-employed and only (2.4%) were unemployed. Table (1) shows that the highest percentage of children 68.3% aged less than one year and 31.7% aged between 1-2 years. Males were 55.6% and females were 44.4% of the sample.

Table (2) shows that 42.9% of mothers have knowledge about exclusive breastfeeding, of them 54.8% perceived it as that "Baby must give only breast milk till age 6 month, 5.6% as " It can reduce infant mortality and morbidity" and 5.6% as " Baby must breastfed frequently during day and night". It should be noted that 24.1% of the mothers who have knowledge about exclusive breastfeeding did not know what it exactly means. Sources of mothers about exclusive breastfeeding included doctor 56.1%, mother 19.5%, sister 12.2% and dietitian 4.9%. As shown in Table (4) the majority of mothers 84.9% had knowledge about colostrum, of them, 51.4% obtained information from their mothers, 13.1% school curriculum, 10.3% from media, 10.3% dietitian, 8.4% midwife, and 6.5% from doctor.

Out of those mothers who had knowledge about exclusive breastfeeding 40.7% practices it with the current infant, and 59.3% did not, of the later 40.6% due to child

inability to lactate, 31.3% due to fever, 15.6% due to child's diarrhea and 12.5% mother's new pregnancy (Table 2).

Table (3) shows that 60.3% of mothers perceived breast feeding as that "Important for the infant", 31.7% as " It's important for me and the infant" and 4.8% as " Important for her". It should be noted that 3.2% of them did not know what it exactly meant. Sources of mothers' perception about breastfeeding included themselves 53.3%, their mothers 20.5%, their grandmothers 12.3%, doctors 10.7%, school curriculum 1.6%, their sisters 0.8% and their husbands 0.8%. Table (3) shows that 42.9% of mothers perceived colostrum as "the milk Secreted in 3 to 4 days after birth", 16.3% as " highly nutritive breast milk", 12.2% as "breast milk that contains more antibodies for child protection" and 4.1% as "the first milk available from mother's breast". It should be noted that 24.5% of them did not know what it exactly means. Sources of mothers' perception about colostrum include doctor 40.5%, their mothers 27%, dietitian 18.9%, school curriculum 5.4%, midwife 5.4%, and media 2.7%.

As shown in Table (4) less than half of mothers (46%) received advises about proper positioning for breastfeeding, of them, 41.4% received the advises from doctor, 27.6% from their mothers, 12.1% from midwife, 6.9% from nurse, 6.9% from their sisters, 3.4 from media and 1.7% from dietitian. Table (4) shows that (38.1%) of the mothers received advises about correct attachment of the baby during breastfeeding, of them, 41.7% received the advises from their mothers, 35.4% from doctor, 20.8% from midwife and 2.1% from nurse.

As shown in Table (4) the majority of the mothers 60.3% introduced complementary feeding for the current infant, 38.2% introduced it when the child reached 6 months, 30.3% at age above 6 months, 17.1% at age of 5 months and 14.5% at age less than 4 months. Numbers of complementary meals per day were three 38.2%, more than three 35.5%, two 21.1% and one 5.3%. Foods introduced include yogurt 22.4%, eggs 18.4%, potato 11.8%, family food 10.5%, juice, custard and milk 9.2%, vegetables 9.2%, rice 7.9%, formula milk 6.6% and meat 3.9%. The methods used include hand 56.6%, spoon 18.4%, all methods 10.5%, up 7.9% and bottle 6.6%.

Figure 1 shows that the majority of mothers 95.2% attended ANC, of them 5% did not attend at the antenatal care unit.

As shown in Figure 2 less than one third of mothers (26.2%) weaned the current infant, 48.5% when the child ate age 6-12 months, 45.5% at age 13-18 months, and 6.1% at age less than 6 months.

Figure 3 shows the causes behind weaning of the infant before 12 months were mother's new pregnancy.

Table (1) Demographic details of 126 participants from Sallah area including gender age and other parameters

Demographic details		Frequency	%
Age	15-20 years	12	9.5
	31-45 years	29	23.0
	21-30 years	85	67.5
Total		126	100.0

Level of education	Khalwa	1	0.8
	Illiterate	2	1.6
	Primary	29	23.0
	Secondary	40	31.7
	University	54	42.9
Total		126	100.0
Occupation	Laborer	5	4.0
	Employee	7	5.6
	Housewife	114	90.5
Total		126	100.0
Education of father	Illiterate	2	1.6
	Khalwa	4	3.2
	Primary	14	11.1
	Secondary	44	34.9
	University	62	49.2
Total		126	100.0
Occupation of father	Unemployed	3	2.4
	Laborer	8	6.3
	Employee	46	36.5
	Free employed	69	54.8
Total		126	100.0
Child's age	1-2 years	40	31.7
	< 1 year	86	68.3
Total		126	100.0
Gender of the child	Female	56	44.4
	Male	70	55.6
Total		126	100.0

Table (2) Knowledge of mothers about exclusive breastfeeding

Knowledge status		N	%
Knowledge about exclusive breastfeeding	Yes	54	42.9
	No	72	57.1
Total		126	100.0
Perception towards exclusive breastfeeding	Baby must breastfed frequently during day and night	3	5.6
	It can reduce infant mortality and morbidity	3	5.6
	Do not know	13	24.1
	Baby must give only breast milk till age 6 month	35	64.8
Total		54	100.0
Source of information	Dietitian	2	4.9
	Midwife	3	7.3
	Sister	5	12.2
	Mother	8	19.5
	Doctor	23	56.1
Total		41	100.0
Knowledge about colostrum	No	19	15.1
	Yes	107	84.9
Total		126	100.0
Source of knowledge	Doctor	7	6.5
	Midwife	9	8.4
	Dietitian	11	10.3
	Media	11	10.3
	Primary school curriculum	14	13.1
	Mother	55	51.4
Total		107	100.0

Table (3) Perception of mothers towards breastfeeding practice and colostrum

Perception status		No	%
Thoughts about breastfeeding	Do not know	4	3.2
	Important for me	6	4.8
	It's important for me and the infant	40	31.7
	Important for the infant	76	60.3
Total		126	100.0
Person influence decision about breastfeeding	Husband	1	0.8
	Sister	1	0.8
	Primary school curriculum	2	1.6
	Doctor	13	10.7
	Grandmother	15	12.3
	Mother	25	20.5
	Myself	65	53.3
Total		122	100.0
Perception about colostrum	First milk available from mother's breast	2	4.1
	Contains more antibodies for child protection	6	12.2
	Highly nutritive	8	16.3
	Don't know	12	24.5
	Secreted in 3 to 4 days after birth	21	42.9
Total		49	100.0
Source of information	Media	1	2.7
	Midwife	2	5.4
	Primary school curriculum	2	5.4
	Dietitians	7	18.9
	Mother	10	27.0
	Doctor	15	40.5
Total		37	100.0
Timing of newborn breastfeeding	When cries	26	20.6
	By certain schedule	32	25.4
	When I feel he/she hungry	68	54.0
Frequency of breastfeeding of the child per day	When cries	26	20.6
	By certain schedule	32	25.4
	When I feel he/she hungry	68	54.0
Total		126	100.0

Table (4) Reception of advises about proper positioning correct attachment of the baby during breastfeeding and complementary feeding to the current infant

Knowledge Status		No	%
Reception of any advises about proper positioning for breastfeeding	Yes	58	46.0
	No	68	54.0
Total		126	100.0
Source of information	Dietitian	1	1.7
	Media	2	3.4
	Sister	4	6.9
	Nurse	4	6.9
	Midwife	7	12.1
	Mother	16	27.6
	Doctor	24	41.4
Total		58	100.0
Reception of advises about how to attach baby correctly to breast during	Yes	48	38.1

breastfeeding	No	78	61.9
Total		126	100.0
Source of information	Nurse	1	2.1
	Midwife	10	20.8
	Doctor	17	35.4
	Mother	20	41.7
Total		48	100.0
Introduction of complementary feeding	No	50	39.7
	Yes	76	60.3
The age of the child when introduce complementary feeding	< 4 months	11	14.5
	5 months	13	17.1
	> 6 months	23	30.3
	6 months	29	38.2
Types of foods introduced	Meat	3	3.9
	Formula milk	5	6.6
	Rice	6	7.9
	Vegetables	7	9.2
	Juice, custard, milk	7	9.2
	Family food	8	10.5
	Potato	9	11.8
	Eggs	14	18.4
	Yogurt	17	22.4
	Total		76

Figure (1):

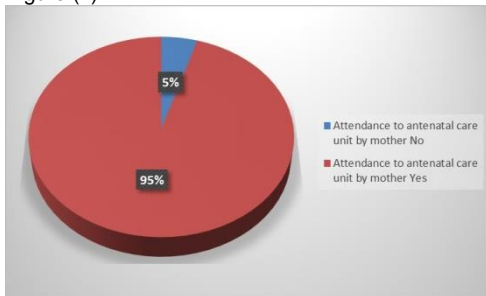
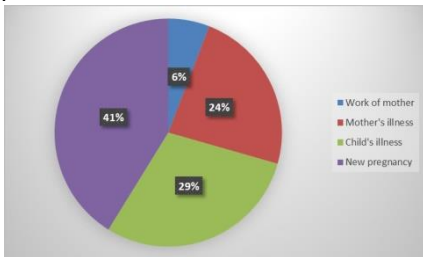


Figure (2):



Figure (3):



DISCUSSION

Some mothers in Sudan have poor knowledge of breastfeeding and infant feeding practices, the nutrition value of breast milk, in addition to their low socioeconomic states, education level, poor antenatal care attendance and public information system. For mothers to improve their child feeding practices it is very curial to understand the importance of breastfeed to supply children with the essential nutrition (Gyampoh S, 2104). In Sudan scattered studies had been carried out about infants feeding and weaning practices. Sudan has many different regions and child feeding practices are different from one region to another (S., 2014). Taking into consideration that the population of Omdurman came from different regions in Sudan. The study generally aimed to find out mothers' knowledge and practices during infant and child feeding in Salha area, and specifically to assess awareness of mothers and practices of breastfeeding.

Results showed that most of the mothers had knowledge about the benefits of breastfeeding, half obtained it from doctors the rest from dietitian, media, midwives, and to from school curriculum. This indicates relatively acceptable knowledge; however, 40% did not have knowledge while can be regarded as a warning signs that may lead to unhealthy practices by mothers when they practice breastfeeding to their infants. Mothers who had no knowledge about breastfeeding was due to their how educational level as about 54.7% had secondary and primary levels of education respectively, which were low levels that may make them attain low knowledge about breastfeeding (Nassanga P, 2018). In American a study carried out by Hackman, *et al.* notices that women with higher education were less likely to practice breastfeeding comparing with with their counter partners with lower education (Hackman N M, 2015). In contrary, another study from USA (Mueffelmann et al., 2015), stated that

breastfeeding intention is more linked with mothers who had higher education. This variance between the different parts of country can be elucidated by understanding that highly educated mothers are more likely to be working mothers in our culture and their positive attitude to use bottle feeding is widely use in a culture that offers slight support for breastfeeding in the work setting (Leung T F, 2003).

Concerning the awareness of mothers about breastfeeding, results of this study showed that the majority of mothers perceived breast feeding as important for the infant, a third as important for her and the infant. In addition, 42.9% of mothers had knowledge about exclusive breastfeeding. 54.8% perceived it as that the baby must be given only breast milk till age 6 month, there with eras reduce infant mortality and morbidity and other there as infant should be breastfed frequently during day and night. It should be noted that one –quarter of the mothers who heard knowledge about exclusive breastfeeding did not know what it exactly meant. In the United Kingdom Castro *et al* found that breastfeeding intention is strongly connected with previous breastfeeding experience among lactating mothers (Castro R T A, 2017).

The majority of mothers had knowledge about colostrum 38.1% of the mothers received advises about correct attachment of the baby during breastfeeding, less than half of mothers received advises about proper positioning for breastfeeding. These results indicate mother's awareness towards breastfeeding in terms of their perception about it and knowledge about exclusive breastfeeding and colostrum is good to some extent. However, when asked about the meaning of colostrum most of them did not know the exact timing and components of colostrum as well as the exact benefits to baby. In Brazil, Victora, *et al* reported that the family income and socioeconomic status are determined factors in the prevalence of breastfeeding soon after birth, and at third, six, nine and twelve months of age. Children from richest family background are more fortune to be breastfed from birth comparing with those from poorest families with a percentage of 89% and 97%, respectively (Victora C G, 2015), mainly at the age of three and six months (Khan R E A, 2016). Highest prevalence of breastfeeding are evident among poor children at the age of twelve months (Magarey A, 2016).

Regarding women's practices towards breastfeeding, results revealed that the highest percentage of mothers' breastfed the new born when he/she feels hungry, quarter by certain schedule and a fifth when the child cries. The majority breastfed the child at unlimited frequency per day, 38.1% around 5-10 time per day and 17.5 between 2-4 times per day. This indicates weak practices as those women who used certain schedule and giving the child organized breastfeeding times were less than those who depend on the state of the baby if she/he is hungry or not. Moreover, out of the mothers who had knowledge about exclusive breastfeeding, 40.1% practiced it with the current infant, and 59.3% did not, of the later most due to child inability to feed, a third due to fever, has due to child's diarrhea and or mother's new pregnancy. This in turn indicates weak practice and ignorance about the importance of exclusive breastfeeding for the baby's health

and growth (Safdar M, 2017). Thus, it could be concluded that women in this study had weak practices towards breastfeeding of their babies. Breastfeeding positive attitude is a substantial forecaster of infant feeding method; Van Wagenen *et al* reported that breastfeeding positive attitude is an important predictor of breastfeeding beginning and any breastfeeding at six weeks among Irish mothers (Van Wagenen S A, 2015).

Complimentary feeding was introduced by a majority of mothers at age 6 months' but lower introduced it either at ages lower more their 6 month. Also early weaning was practiced by the study sample where 48.5% weaned the child at age 6-12 months, and 13-18 months' and only two at an age less than 6 months. Early introduction of complementary foods before 6 months and early weaning regarded as main malpractices that characterized mothers' practices towards breastfeeding. Children need swanky of breastfeeding within the first 6 months after natal to ensure that they grow well and to avoid wide range of infectious diseases that can be transmitted to them through introduction of additional and family foods before reaching the age of six months due to weak immunity during this stage (Lenja A, 2016). In addition early weaning prevents the child to obtain wide range of essential nutrients and immune system components that are found only in breast milk (Victora C G, 2016). There are some factors that determine women's complementary breastfeeding practices including food availability and accessibility, environmental conditions, employment and local water conditions (Gladstone M J, 2109). A resource-poor settings can adversely affect and cause a major health problems to children under nutrition (Juma O A).

CONCLUSION

This study found that most of the mothers in Salha were housewife and have a good knowledge about breastfeeding, colostrum and the majority of mother had attended ANC during pregnancy and after delivery. Further, the study identify a small number of mothers had knowledge about exclusive breastfeeding, advises about proper positioning for breastfeeding and half of them used their hand when giving complementary feeding. Therefore, this study provides invaluable baseline data for health care workers and allied medical health professionals to enhance mothers' practice and knowledge of breastfeeding.

Recommendations: The main recommendation of the study is to boost the mother's awareness about the importance of practicing exclusive breastfeeding during the first six months of the infant life to better protect them against infection. A well trained health educator and dietitian are to educate pregnant and lactation women during the antenatal care unit visit. The ministry of health can play a major role by raising the awareness of lactating women about the importance of exclusive breastfeeding and duration and frequency. This can be achieved by a well-trained nutritionist with good communication skills to educate the new mothers about the correct breastfeeding position before delivery, providing the correct information about the ingredients of breast milk especially the colostrum and different benefits. Finally, the provision of information to mothers about complementary feeding with regard to when and how to provide it for children and

provision of information to mothers about complementary feeding with regard to when and how to provide it for children are needed under the supervision of the health authorities.

List of Abbreviations

AAP: American Academy of Pediatrics

ARVs: antiretroviral drugs

HIV: Human Immune Virus

IgA: Immunoglobulin

MOH: Ministry of Health

NUCIEF: United Nations Children Fund

PHC: Primary Health Care

PIF: powdered infant formula

WHO: World Health Organization

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REFERENCES

- CASTRO R T A, G. V., EHLERT U, O'CONNOR T G. 2017. Antenatal psychological and socioeconomic predictors of breastfeeding in a large community sample. *Early human development*, 11, 50-56.
- COLOMBO L, C. B., CONSONNI D, BETTINELLI M., AGOSTIV, MANGINO G, PLEVANI L 2018. Breastfeeding determinants in healthy term newborns. *Nutrients*, 10, 48.
- GLADSTONE M J, C. J., KANDAWASVIKA G, NTOZINI R, MAJO F D, TAVENGWA N V, MOULTON L H. 2109. Independent and combined effects of improved water, sanitation, and hygiene (WASH) and improved complementary feeding on early neurodevelopment among children born to HIV-negative mothers in rural Zimbabwe: Substudy of a cluster-randomized trial. *PLoS medicine* 16, e1002766.
- GYAMPOH S, O. G. E., ARYEETEY R N O 2104. Child feeding knowledge and practices among women participating in growth monitoring and promotion in Accra, Ghana. *BMC Pregnancy and Childbirth*, 14, 180.
- HACKMAN N M, S. E. W., BEILER J S, ROSE C M, PAUL I M. 2015 . Breastfeeding outcome comparison by parity. *Breastfeeding Medicine*, 10, 156-162.
- JUMA O A, E. Z. O., WHEATLEY H, RAFIQ M Y, SHEKALAGHE S, ALI A , ABDULLA S Prevalence and assessment of malnutrition among children attending the Reproductive and Child Health clinic at Bagamoyo District Hospital, Tanzania. *BMC public health* 16, 1094..
- KABIR A, M. M. R. L. 2017. Factors influencing feeding practices of extreme poor infants and young children in families of working mothers in Dhaka slums: A qualitative study. *PloS one* 12, e0172119.
- KARIM T, M. M., KHANDAKER G. 2017. Interventions to prevent respiratory diseases-Nutrition and the developing world. *Paediatric respiratory reviews*, 22, 31-7.
- KHAN R E A, R. M. A. 2016. Determinants of malnutrition in Indian children: new evidence from IDHS through CIAF. *Quality & Quantity*, 50, 299-316..
- LENJA A, D. T., YOHANNES B, YOHANNIS M 2016. Determinants of exclusive breastfeeding practice to infants aged less than six months in Offa district, Southern Ethiopia: a cross-sectional study. *International breastfeeding journal* 11, 32..
- LEUNG T F, T. W. H., HUNG E, FOK T F, WONG G. 2003. Sociodemographic and atopic factors affecting breastfeeding positive attitude (position) in Chinese mothers. *Journal of Paediatrics and Child Health*, 39, 460-464.
- MAGAREY A, K. F., SCOTT J A, MARKOW K, DANIELS L. . 2016. Feeding mode of Australian infants in the first 12 months of life: an assessment against national breastfeeding indicators. *Journal of Human Lactation* 32, NP95-NP104.
- MUEFFELMANN, R. E., RACINE, E. F., WARREN-FINDLOW, J. & COFFMAN, M. J. 2015. Perceived Infant Feeding Preferences of Significant Family Members and Mothers' Intentions to Exclusively Breastfeed. *J Hum Lact*, 31, 479-89.
- NASSANGA P, O. U. I., ONGENG D 2018. The status of nutritional knowledge, attitude and practices associated with complementary feeding in a post-conflict development phase setting: The case of Acholi sub-region of Uganda. on *Food Science & Nutriti*, 6, 2374-2385..
- PRELL C, K. B. 2016. Breastfeeding and complementary feeding: recommendations on infant nutrition. *Deutsches Ärzteblatt International*, 11, 435.
- ROLLINS N C, B. N., HAJEEBHOY N, HORTON S, LUTTER C K, ET AL. 2016. Why invest, and what it will take to improve breastfeeding practices? . *The Lancet*, 87, 491-504..
- S., M. S. G. 2014. Infants feeding and weaning practices among mothers in Northern Kordofan State, Sudan. *European Scientific Journal* 24.
- SAFDAR M, J. C., KOUSAR R, SHAHZADI C, GILANI S A 2017. The Assessment of Knowledge, Attitude and Practices of Exclusive Breast Feeding Among Lactating Mothers: A Case of Children Hospital of Lahore, Pakistan. *Saudi Journal of Medicine*, 2, 76-84..
- SEGE, R. D., SIEGEL, B. S., COUNCIL ON CHILD, A., NEGLECT, COMMITTEE ON PSYCHOSOCIAL ASPECTS OF, C. & FAMILY, H. 2018. Effective Discipline to Raise Healthy Children. *Pediatrics*, 142.
- VAN WAGENEN S A, M. B. M., NEIGER B L. 2015. Attitudes toward breastfeeding among an Internet panel of US males aged. *Maternal and child health journal*, 19, 21-44.
- VICTORA C G, B. R., BARROS A J, FRANCA G V, HORTON S, KRASEVEC J, ET AL. 2016. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. . *The Lancet* 387, 475-490.
- VICTORA C G, H. B. L., DE MOLA C L, QUEVEDO L, PINHEIRO R T, GIGANTE D P, BARROS F C. 2015. Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: a prospective birth cohort study from Brazil. *The Lancet Global Health*, 3, e199-e205