RESEARCH BULLETIN
Vol.03 Issue 02 (April - June)
Received 20 MAY 2023 , Revised 25 MAY 2023
Accepted 30 MAY 2023 , Publised 06 June 2023

RESEARCH BULLETIN
ISSN: (O) 1694-4860

Prevalence Of Exclusive Breastfeeding Practice And Its Barriers Among Under Six Month Old Babies In Raydah District, Amran , Yemen, 2019

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Abstract

Breastfeeding is an important public health strategy for improving child and maternal health conditions. The prevalence of exclusive breastfeeding (EBF) is sub-optimal in many low-income countries including Yemen. This study aims to determine the prevalence of exclusive breastfeeding and its barrieres among babies under six months in Riyadh district, Amran, Yemen, 2019. A health care facility based cross sectional study was conducted during October -November 2019. The sample size 380 participants were determined using probability proportional to the population of each health facility. An interviewer administered questionnaire was used to collect data. Odds ratio (OR) with 95%confidence interval (CI) was estimated using bivariate and multivariable logistic regression to identify predictors of EBF. The prevalence of exclusive breastfeeding was 24%. Mothers who had breast problem [OR 2.17(CI: 0.62 - 1.59)], little milk [OR 2.21(CI: 1.16 - 4.21)], sickness or on medication [OR 2.15(CI: 1.26 - 3.67)], work outside home [OR 1.95(CI: 1.14 - 3.32)], these factors were negatively significant associated with EBF. Health education and correction of false perceptions of mothers are recommended to promote EBF practices in the studied community..

Keyword Yemen; Mother; breast; milk; exclusive breastfeeding.

Introduction

Breastfeeding is the best method to introduce nourishment to the children to get all the nutrients that are needed for proper growth and development. World Health Organization (WHO) recommends early initiation of breastfeeding, exclusive breastfeeding (EBF), and well-timed introduction of complementary feeding and continued breastfeeding for up to two years or beyond .EBF means that infants obtain only breastmilk during the first six months without any added food or fluid, not even water [1] .The existence of immunoglobulin and anti-inflammatory properties protect both babies and mothers from many infections and diseases [2] Breastfeeding has many benefits for babies, mothers and families,So breastfeeding ensures baby growth, defends against common acute childhood infections ,so it decreases the rate of sudden baby death syndrome also promotes mental development and, prevents atopic diseases, obesity and diabetes mellitus . [3]. breastfeeding decreases neonatal deaths about 12- 36%, the necrotizing enterocolitis rate about 58%, provides protection for 50% of cases of diarrhea and a third of respiratory infections,otitis media are reduced in 0.67- 1.21%, and of asthma in 9%,also breastfeeding is associated with 26% reduction in the chance of overweight or obesity,and with 35% reduction in the chance of developing type 2 diabetes and 19% in childhood leukemia. Furthermore, breastfeeding is associated to better performance on intelligence tests in children and adolescents and to higher wages in adult life .Breastfeeding also offers benefits to the mother, such as decline in postpartum hemorrhage, reduced weight gain in pregnancy, strengthening of the mother-child bond and reduced risk of breast cancer [4] . Financial benefits for family through interventions to promote and support breastfeeding comes with a cost, this cost should be well-adjusted against reduced mortality and morbidity and increased productivity, which generate short and long-term financial benefits [5]

Early providing of breast milk substitutes or semi-solid foods and late introduction of appropriate semi-solid complementary foods represent risk factors related with fast increase in the prevalence of undernutrition among children between 6 and 24 months old [6] .

Breastfeeding is influenced by multiple environments, that is, individual, family/household, community, workplace, health systems, and policy [7]

Globally, the global EBF rate for infants aged below 6 months between the years 2000 and 2007 was 38%. Within the same time, only 23% of infants <6 months were breastfed exclusively in West and Central Africa while a slightly higher rate 26%was recorded in the Middle East and North Africa. EBF rates of 39%, 43% and 44% were observed in East Asia and the Pacific; and South Asia respectively [8]. WHO Member States have approved six global targets for nutrition, one these targets is to increase the rate of EBF in the first six

months to at least 50% by 2025 and another target is to stop the increase in baby overweight . Less than 40% of babies under 6 months of age are exclusively breastfed [8]. .Breast-feeding rates have not improved significantly over recent years and rates of EBF at six months that was below the 2025 target in most countries as in low- and middle-income countries with rates less than 40% EBF in the first six months [9] If breastfeeding was ascended up to near universal level (90–95%) so 823,000 deaths could have been saved in low and middle-income countries (LMICs) [10]. Despite the known positive outcome of breastfeeding on baby survival and health, the rate of exclusive breastfeeding globally is low. In 2015, about 37% babies under six months old were exclusively breastfed in LMICs [11].In the United States of America (USA) a prior study discovered that only 16.8% of babies had been exclusively breastfed for six months [12]. Further study conducted in Ethiopia has demonstrated a 24.8 and 82.9% prevalence of EBF practices among employed and unemployed mothers of index babies age 3–5 months respectively [13]. In SubSaharan Africa (SSA) where the practice of breastfeeding is common, EBF rates vary widely and range from 87.3% in Rwanda to 17% in Nigeria [14] . A cross-sectional study from Nigeria found that women who returned to work had a51•8% lower likelihood of practicing EBF than those who did not (P <0•05) [15] . In another study done in north India reported that baby behaviors as reasons for stopping EBF, including baby gaining insufficient weight, abdominal colic, suckling problems, and perceptions that babies were not satisfied by breastfeeding [16]. Study in Kenya provided observational data low breast milk women who believed they could produce enough breast milk were 3.9 times more likely to practice EBF than women who did not hold this belief [17]. Breastfeeding problems such as mastitis, breast engorgement, and cracked nipples and inverted nipples, can cause severe pain, which can cause problems with breastfeeding, so two cohort studies from Democratic Republic of Congo (DRC) and Nepal found a significant negative association between breastfeeding difficulties and possibility of EBF [3,18].Quantitative studies have displayed that EBF rates were effected by mother's education, age, and employment; baby's age, sex; access to healthcare; neighborhood of residence; and exposure to mass media or counselling [19,20].In Nepal descriptive cross-sectional study reveals that the 45% babies were exclusively breastfed for any duration while 11% were exclusively breastfed for six months[21]. Study in Bangladesh reported that 64% of mothers initiated breastfeeding within 1 h, 96.5% feeding colostrum, and 36.3% babies were EBF in the last 24 hourrs[22]. Lack of planning for EBF during pregnancy and babies delivered by cesarean section (CS) were negatively associated with EBF [22].

In the Middle Eastern countries :A study reported a mean rate of 24% of babies exclusively breastfed up to 4 months of baby life in a combination of Middle Eastern countries and Pakistan, having combined data drawn from Lebanon 7%, Yemen 15%, Pakistan 16%, Jordan 32%, and Iran 48%[23]. The rates of mixed feeding vary according the country with highest in Egypt (86%), followed by Kinkdom of Suadia Arbia (KSA) about 15%- 79%, Jordan 30% - 43%, and Lebanon 17% ,and the most common causes for mixed feeding were inadequate milk, return to work/school, the belief that mixed feeding is the ideal method [24].

In Yemen EBF is extremely uncommon and breastfeeding practices are varying significantly and generally suboptimal [22]. According to study conducted in Dula Health Center in Sanaa city, the capital of Yemen Republic during 2003, the prevalence of EBF was 16.9% [25] . Knowledge, attitude and practice (KAP) study was done in Sanaa city found the prevalence of exclusive breastfeeding was 39.9%[26]. Few studies about the prevalence of EBF and its bariers in Yemen especially in Amran governorate, therefore this present study aimed to determine the prevalence of EBF and its bariers in Riyadh district in Amran governorate during October-November, 2019, and to recommend interventions to improve practicing of breastfeeding among mother

Materials and Methods:

Study Design: A health care facilities (HCFs) based cross sectional study were con ducted during October- November 2019 in Riyadh districts at Amran governorate.

Study Population: Mothers who had a baby aged <6 months old and attend vaccination department in the three main HCFs in Riyadh district [Riyadh hospital, Defan health center and Hamadh health center] for their babies' routine immunization were included.

Study Setting: Riyadh is one of Amran governorate districts located 45 km far away from Sana'a city in the north. According to updated census 2004 the total population of the district is 77594 and female represent 37646. There are three main public HCFs in the district, one hospital [Riyadh hospital] and two health centers [Defan and Hamadh] which providing the routine immunization services. The Immunization department at three HCFs is opened daily across week days from 8.00 a.m. to 12.00 p.m. The average number of babies receiving an immunization service is (320), (74) and (24) per month at Riyadh hospital, Defan health center and Hamadh health center respectively.

Sample Size and Technique: The sample size were determined using probability proportional to size allocation method from a total targeted population [3356] with the following assumption: Expected frequency 50%, power 80%, a confidence limit of 5%, and a 95% confidence level, and 10% for non-response making the final sample size of 380

.The sample were distributed as 288 from Riyadh hospital, 68 from Defan center, and 24 from Hamedh center.

Operational Definitions: Exclusive breastfeeding is defined as the practice of feeding only breast milk (including expressed breast milk) and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicine.

The eligibility criteria for participants were: mothers aged 15-45 years, both prim-parous and multiparous, with babies aged between 0 and 6 months, who are currently breastfeeding this baby or had prior breastfeeding experience. Mothers who had never initiated breastfeeding were excluded.

Variables:

- Dependent variables: the practice of EBF.
- Independent variables:
- Demographic characteristics of mothers i.e. age, level of education, and employment status
- Demographic characteristics of father i.e. age, level of education,
- Demographic characteristics of baby i.e . age ,sex and baby order
- Family status i.e members of family, family income, place of delivery, number of deliveries and mode of delivery.

Data collection, procedures and quality control: Interviewer administered questionnaire was used to collect data (Annex 4). The questionnaire was prepared in English and then translated into Arabic language. The questionnaire was pre-tested and modifications were made as needed. Eleven health workers from the three HCFs were used as data collectors and supervisors (eight data collectors and three supervisors). The data collectors were given one days' training before the actual data collection . Face-to-face interviews were conducted to collect data on socio-demographic variables, obstetric characteristics, and EBF practices of mothers.

Data Management and Analysis: The data were entered, coded, and analyzed using Epi Info version 7.2. Descriptive analysis were conducted. The findings were presented using tables. Bivariate analysis were performed to identify the association of dependent and independent variables.. Bivariable logistic regressions were performed to examine the association between independent variables and EBF. In logistic regression models, odds ratios with 95% confidence intervals were calculated, and variables with p-values less than 0.05 were considered significantly associated with the dependent variable.3.

Results:

Descriptive analysis: The prevalence of exclusive breast feeding (EBF) among mothers who had babies under six month old in Riyadh districts was 24%.

Socio demographic characteristics of participants: The mean age of mothers in the study was (26.4 ± 5.4) Out of 380 mother 22% had secondary school.Most of mothers 96.8% found in occupational group of house wife and 43% of them had income <1500 Yemen Rial (YR) per day as illustrated in table1.

Table 1: Socio-demographic characteristics of participants who had babies < 6 months , Riyadh district, Amran, Yemen, 2019 (n = 380)

Characteristics	Variables	Frequency	Percent
Mother age in years	Mean ± SD	26.4 ± 5.4	
Mother education	Illiterate	119	31%
	Read and write	30	8%
	Elementary school	72	19%
	Preparatory school	63	17%
	Secondary School	83	22%
	University	13	3%
Mother work	Civil servant	7	1.8%
	Daily Laborer	2	0.5%
	Farmer	2	0.5%
	Housewife	368	96.8%
	Student	1	0.2%
Father education	Illiterate	26	7%
	Read and write	20	5%
	Elementary school	50	13%
	Preparatory school	69	18%
	Secondary School	155	41%
	University	60	16%
Members of family	<5	151	40%
	≥ 5	229	60%
Family income	< 1500 YR	163	43%
	1500-3000	91	24%
	>3000	126	33%

n: number of Participants; SD: Stander deviation; YR: Yemen Riel.

Mother-babies related characteristics of participants: The mean age of babies was (3.4 ± 1.7).More than half of them were males. Nearly 74% of mothers had more than one delivery. Half of the mother's deliveries were at home and 82% of mothers had normal vaginal delivery (NVD), more details were seen in table 2

Table 2. Mother-babies related characteristics , Riyadh district, Amran, Yemen, 2019 (n = 380)

Characteristics	Variables	Frequency	Percent
Baby age in months	0 - <2	84	22%
	2 - <4	107	28%
	4 - <6	189	50%
	Mean ± SD	3.4 ± 1.7	
Baby sex	Male	199	52%
	Female	181	48%
Baby order	First born	101	27%
	2—3	153	40%
	≥ 4	126	33%
Place of delivery	Home	194	51%
	Health facility	186	49%
Number of deliveries	1	99	26%
	≥2	281	74%
Mode of delivery	NVD	313	82%
	Vacuum	3	1%
	C/S	64	17%

NVD: normal vaginal delivery; C/S: Cesarean Section.

Mothers supplemented their breast milk with some addition of foods such as baby formula 41.9%), mixed grains (29.8%), water (13.8%), Mashed (11.8), cow's milk (2.4%) and porridge (0.3%)

The median time of initiation breast-feeding was 2 (Rang 0-168). According to times of breastfeeding per day, mean was (7.8 ±2.8).

According to factors affecting continuing EBF in the first six months of baby live. Most of mothers correctly answered that lack of energy/desire of mother and regular presence of bottle are not correct reasons to decrease EBF 96% , 84 % respectively .In addition 82% said there is no need to discontinue of EBF if there are problems in sucking/latching. As shown in table 3

Table 3. Barriers of EBF among mothers who had babies < 6 months, Riyadh district, Amran, Yemen, 2019 (n = 380)

Variables	Yes (%)	No (%)
Baby still hungry/not enough milk is justification for discontinuity of EBF	23	77
Problems in sucking/latching on you need to discontinue of EBF	18	82
Mother going to their work reduce EBF	34	66
EBF is restricted when mother sick or on medication	36	64
Regular presence of bottle decrease EBF	16	84
Lack of energy/desire of mother to discontinue EBF is true decision	4	96

Regardin breast feeding time of intiation after birth immediately was 47% as illustrateted in figure 1

Figure 1. Intiation time of EBF among mothers who had babies < 6 months, Riyadh district, Amran, Yemen, 2019 (n = 380)

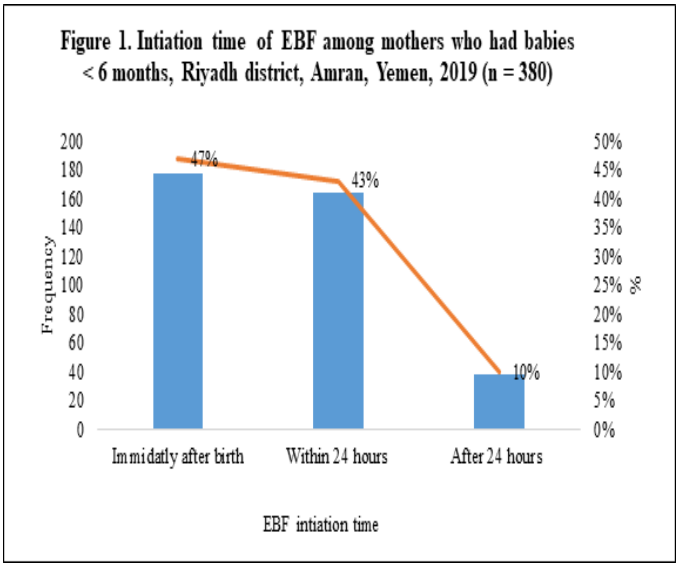

Figure 1:Intiation time of EBF among mothers who had babies < 6 months

Associated factors of Exclusive breast feeding:

3.2.1. Demographic characteristics with EBF; baby age was statically significant to decreased EBF [odds ratio OR 2.47 CI: 1.53- 3.99)],.The rest of socio-demographic variables e.g. Mother and father education level, delivered by C/S…etc, were not statically significant.

3.2.2. Barriers of breastfeeding with EBF; statistical significant found in mothers who had breast problem during breastfeeding [OR 2.17(CI: 0.62- 1.59)], mothers who accept

that when baby still hungry/not enough milk is justification for discontinuity of EBF [OR 2.21(CI: 1.16 - 4.21)], mothers who said EBF is restricted when mother sick or on medication [OR 2.15(CI: 1.26- 3.67)], mothers who accept that if there are problems in sucking/latching on you need to discontinue of EBF [OR 2.46 (CI: 1.17- 5.19)], ,and mothers who said their going to work outside home reduce EBF practices [OR 1.95(CI: 1.14- 3.32)]. Table 4.

Table 4. Bivariate logistic analysis for barriers of breastfeeding associated with EBF among mothers with babies age < 6 months, Raydah district, Amran, Yemen, 2019

Variables		Non EBF	EBF	OR [95% CI]	P value
Baby age	3 - < 6 m	198	44	2.47 (1.53- 3.99)	**0.0003**
	0 -< 3 m	89	49		
Breast problem	Yes	145	47	0.99 (0.62-1.59)	**< 0.001**
	No	142	46		
When baby still hungry/not enough milk is justification for discontinuity of EBF?	Yes	76	13	2.21 (1.16-4.21)	**0.013**
	No	211	80		
EBF is restricted when mother sick or on medication	Yes	115	22	2.15 (1.26-3.67)	**0.004**
	No	172	71		
If there are problems in sucking/latching on you need to discontinue of EBF?	Yes	60	9	2.46 (1.17- 5.19)	**0.014**
	No	227	84		
Mother going to their work reduce EBF?	Yes	108	22	1.95 (1.14-3.32)	**0.013**
	No	179	71		

Non EBF: non-exclusive breastfeeding; EBF: exclusive breastfeeding; OR: odds ratio; CI: confidence interval; P value: probability value

Discussion:

Breastfeeding is the best way to introduce nourishment to the child and helps the child to get all the nutrients that are needed for proper growth and development1 [1]. The WHO recommends exclusive breastfeeding (EBF) for the first six months of life and continuation of breastfeeding and adequate complementary foods for up to two years of age or beyond [27].

Despite many benefits of EBF, this study showed low prevalence of EBF 24%.The prevalence remains below a global target of 50% and below WHO recommended prevalence of 90 % [28]. The result of present study is similar to finding from a previous study in Viet Nam 24% [28], however other studies from southern Ethiopia and Dula health center in Sanaa city showed EBF prevalence less than that in our study 13.4% , 16.9% respectively [29, 25] .However, this study was lower than studies done in Sana'a City 39.9 % [26].

From bivariate analysis of socio-demographic variables, mothers with babies in age group 3-< 6 months practiced EBF less than mothers with babies <3 months this study was supported by a studies in Bangladesh,[1], Ethiopia [30] and Ghana [31].

Regarding baby still hungry/not enough milk is justification for discontinuity of EBF mothers who believed in that were more likely to practice non-exclusive breastfeeding (non EBF) than who didn't believed that, this result is supported by study conducted in Kenya [17]. Moreover other study conducted in a peri-urban district of Ghana reavlead that 41.6% of the mothers said that breast milk alone is not sufficient for babies within 5–6 months while 4.2% said breast milk insufficiency comes after 6 months and above [8].

In addition, EBF was significantly low in mothers who said EBF is restricted when mother sick or on medication, this study is supported by study done in Kingdom of Saudi Arabia (KSA) that reported mothers who had chronic illness were more practicing non EBF [32].

Mothers who accept that if there are problems in sucking/latching on you need to discontinue of EBF were more likely to practice non EBF, this result is supported by two studies conducted in greater Boston, Massachusetts area that reported that mothers who discontinued EBF were more likely to have experienced problems with their infant latching on or sucking [33]. An additional study reported that mothers who did not report any breast related problem for the first six months after child birth [AOR 1.864 (C.I : 1.090-3.189)] was positively associated with EBF practice [34]. This could be explained that mothers who have breast problem may suffering pain during EBF.

In this study EBF was 24% which was approxmatly little more than the preveillance from other studies such as results of study EBF rate among working women in Egypt which was 14.1%, also of working mothers in India 15.9% also 10.3% of professional working mothers in Ghana , 7% was observed in Saudi Arabia , while similary rate from study done in Malaysia which was 25.4%.This variation in EBF rate between countries could be attributed to different methods for estimating EBF rate [35]. Significantly associated with mother work outside home, this result is similar to study was done in Sri Lanka ,that reported the adjusted odds of employed mothers discontinuing EBF early was 3.4 times the odds of unemployed mothers [36].Another study done in Central Ethiopia concluded that the odds of EBF for housewife 1.6 times higher than employed mothers [OR 1.66 (CI: 1.136-2.41)], (p = 0.01) [37]

Conclusions:

The prevalence of exclusive breast feeding (EBF) was lower than the WHO recommendation .The age of the baby, mothers who had problems as insufficient breast milk or inadequate breast milk secretion, who are sick or on medication, complain

of problems in sucking/latching and who had work out side home were statistically significant with EBF. Further efforts are required to increase the practice of exclusive breastfeeding through maintain the education of mother and strengthen maternal health service utilization, such as antenatal care. In addition, ensuring mothers receive consistent support and clear advice from trained and skilled personnel about exclusive breast feeding is very crucial.

Author Contributions:

Jarallah AL-Tbali and Labiba Anam are involved in the study from the inception to design, acquisition of data, analysis and interpretation and drafting of the manuscript. All authors read and approved the final manuscript..

Funding:

This study is funded by TEPHNET

Institutional Review Board Statement:

Ethics approval was obtained from the Ethical Committee at MoPHP, agreement and permission from health facilities directorates was obtained and verbal consents of mothers or husbands was taken before face to face interviews.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. (Annex 3).

Data Availability Statement:

The data presented in this study are available on request from the Corresponding author.

Acknowledgments:

This research project would have not been possible without the help and support of some people. To all those who contributed to this project, I express my thank fullness. The following people/institutions deserve to be mentioned as they contributed in this project : Y-FETP Staff , Dr .Labiba Anam (supervisor in Y-FETP Program) ,participating health facilites directors , data collectors, and all mothers who participate in this study

Conflicts of Interest:

The authors declare that no conflict of interest.

References:

(1) Mgongo, M.; Hussein, T. H.; Stray-Pedersen, B.; Vangen, S.; Msuya, S. E.; Wandel, M. Facilitators and Barriers to Breastfeeding and Exclusive Breastfeeding in Kilimanjaro Region, Tanzania: A Qualitative Study. Int. J. Pediatr. 2019, 2019.

(2) Ekholuenetale, M.; Mistry, S. K.; Chimoriya, R.; Nash, S.; Doyizode, A. M.; Arora, A. Socioeconomic Inequalities in Early Initiation and Exclusive Breastfeeding Practices in Bangladesh: Findings from the 2018 Demographic and Health Survey. Int. Breastfeed. J. 2021, 16 (1), 1–18.

(3) Babakazo, P.; Donnen, P.; Akilimali, P.; Ali, N. M. M.; Okitolonda, E. Predictors of Discontinuing Exclusive Breastfeeding before Six Months among Mothers in Kinshasa: A Prospective Study. Int. Breastfeed. J. 2015, 10, 1–9.

(4) Luz, L. S.; Minamisava, R.; Scochi, C. G. S.; Salge, A. K. M.; Ribeiro, L. M.; Castral, T. C. Predictive Factors of the Interruption of Exclusive Breastfeeding in Premature Infants: A Prospective Cohort. Rev. Bras. Enferm. 2018, 71, 2876–2882.

(5) Horwood, C.; Haskins, L.; Engebretsen, I.; Phakathi, S.; Connolly, C.; Coutsoudis, A.; Spies, L. Improved Rates of Exclusive Breastfeeding at 14 Weeks of Age in KwaZulu Natal, South Africa: What Are the Challenges Now? BMC Public Health 2018, 18 (1), 1–11.

(6) Ara, G.; Khanam, M.; Papri, N.; Nahar, B.; Haque, M. A.; Kabir, I.; Dibley, M. J. Peer Counselling Improves Breastfeeding Practices: A Cluster Randomized Controlled Trial in Urban Bangladesh. Matern. Child. Nutr. 2018, 14 (3), e12605.

(7) Benedict, R. K.; Craig, H. C.; Torlesse, H.; Stoltzfus, R. J. Trends and Predictors of Optimal Breastfeeding among Children 0–23 Months, South Asia: Analysis of National Survey Data. Matern. Child. Nutr. 2018, 14, e12698.

(8) Mensah, K. A.; Acheampong, E.; Anokye, F. O.; Okyere, P.; Appiah-Brempong, E.; Adjei, R. O. Factors Influencing the Practice of Exclusive Breastfeeding among Nursing Mothers in a Peri-Urban District of Ghana. BMC Res. Notes 2017, 10, 1–7.

(9) Sarki, M.; Parlesak, A.; Robertson, A. Comparison of National Cross-Sectional Breast-Feeding Surveys by Maternal Education in Europe (2006–2016). Public Health Nutr. 2019, 22 (5), 848–861.

(10) Victora, C. G.; Bahl, R.; Barros, A. J.; França, G. V.; Horton, S.; Krasevec, J.; Murch, S.; Sankar, M. J.; Walker, N.; Rollins, N. C. Breastfeeding in the 21st Century: Epidemiology, Mechanisms, and Lifelong Effect. The lancet 2016, 387 (10017), 475–490.

(11) Cai, X.; Wardlaw, T.; Brown, D. W. Global Trends in Exclusive Breastfeeding. Int. Breastfeed. J. 2012, 7 (1), 1–5.

(12) Jones, J. R.; Kogan, M. D.; Singh, G. K.; Dee, D. L.; Grummer-Strawn, L. M. Factors Associated with Exclusive

Breastfeeding in the United States. Pediatrics 2011, 128 (6), 1117–1125.

(13) Tadesse, F.; Alemayehu, Y.; Shine, S.; Asresahegn, H.; Tadesse, T. Exclusive Breastfeeding and Maternal Employment among Mothers of Infants from Three to Five Months Old in the Fafan Zone, Somali Regional State of Ethiopia: A Comparative Cross-Sectional Study. BMC Public Health 2019, 19, 1–9.

(14) Senghore, T.; Omotosho, T. A.; Ceesay, O.; Williams, D. C. H. Predictors of Exclusive Breastfeeding Knowledge and Intention to or Practice of Exclusive Breastfeeding among Antenatal and Postnatal Women Receiving Routine Care: A Cross-Sectional Study. Int. Breastfeed. J. 2018, 13, 1–8.

(15) Olayemi, O.; Aimakhu, C.; Bello, F.; Motayo, V.; Ogunleye, A.; Odunukan, O.; Ojengbede, O. The Influence of Social Support on the Duration of Breast-Feeding among Antenatal Patients in Ibadan. J. Obstet. Gynaecol. 2007, 27 (8), 802–805.

(16) Suresh, S.; Sharma, K. K.; Saksena, M.; Thukral, A.; Agarwal, R.; Vatsa, M. Predictors of Breastfeeding Problems in the First Postnatal Week and Its Effect on Exclusive Breastfeeding Rate at Six Months: Experience in a Tertiary Care Centre in Northern India. Indian J. Public Health 2014, 58 (4), 270.

(17) Matovu, S.; Kirunda, B.; Rugamba-Kabagambe, G.; Tumwesigye, N.; Nuwaha, F. Factors Influencing Adherence to Exclusive Breast Feeding among HIV Positive Mothers in Kabarole District, Uganda. East Afr. Med. J. 2008, 85 (4), 162–170.

(18) Karkee, R.; Lee, A. H.; Khanal, V.; Binns, C. W. A Community-Based Prospective Cohort Study of Exclusive Breastfeeding in Central Nepal. BMC Public Health 2014, 14, 1–6.

(19) Østergaard, L. R.; Bula, A. "They Call Our Children „Nevirapine Babies"": A Qualitative Study about Exclusive Breastfeeding among HIV Positive Mothers in Malawi. Afr. J. Reprod. Health 2010, 14 (3), 213–222.

(20) Mekuria, G.; Edris, M. Exclusive Breastfeeding and Associated Factors among Mothers in Debre Markos, Northwest Ethiopia: A Cross-Sectional Study. Int. Breastfeed. J. 2017, 10, 1–111.

(21) Bhandari, M. S.; Manandhar, P.; Tamrakar, D. Practice of Breastfeeding and Its Barriers among Women Working in Tertiary Level Hospitals. JNMA J. Nepal Med. Assoc. 2019, 57 (215), 8.

(22) Khatun, H.; Comins, C. A.; Shah, R.; Munirul Islam, M.; Choudhury, N.; Ahmed, T. Uncovering the Barriers to Exclusive Breastfeeding for Mothers Living in Dhaka's Slums: A Mixed Method Study. Int. Breastfeed. J. 2018, 13, 1–11.

(23) Alzaheb, R. A. A Review of the Factors Associated with the Timely Initiation of Breastfeeding and Exclusive Breastfeeding in the Middle East. Clin. Med. Insights Pediatr. 2017, 11, 1179556517748912.

(24) Khasawneh, W. Breastfeeding Practices, Facilitators, and Barriers among Immigrant Muslim Arab Women Living in a Metropolitan Area of the Southwest of United States; Arizona State University, 2017.

(25) Lutf M, A. Z.; Yahia A, R.; Intesar A, A. S. Effect of Breastfeeding on Growth in Ifemeni Infants. 2007.

(26) Dallak, A. M.; Al-Rabeei, N. A.; Aljahmi, Y. A. Breastfeeding Knowledge, Attitude, and Practices among Mothers Attending Health Centers in Sana'a City. ARC J Public Health Community Med 2016, 1 (2), 9–17.

(27) Jones, G.; Steketee, R. W.; Black, R. E.; Bhutta, Z. A.; Morris, S. S. How Many Child Deaths Can We Prevent This Year? The lancet 2003, 362 (9377), 65–71.

(28) Dearden, K. A.; Quan, L. N.; Do, M.; Marsh, D. R.; Pachón, H.; Schroeder, D. G.; Lang, T. T. Work Outside the Home Is the Primary Barrier to Exclusive Breastfeeding in Rural Viet Nam: Insights from Mothers Who Exclusively Breastfed and Worked. Food Nutr. Bull. 2002, 23 (4_suppl2), 99–106.

(29) Hoche, S.; Meshesha, B.; Wakgari, N. Sub-Optimal Breastfeeding and Its Associated Factors in Rural Communities of Hula District, Southern Ethiopia: A Cross-Sectional Study. Ethiop. J. Health Sci. 2018, 28 (1), 49–62.

(30) Setegn, T.; Belachew, T.; Gerbaba, M.; Deribe, K.; Deribew, A.; Biadgilign, S. Factors Associated with Exclusive Breastfeeding Practices among Mothers in Goba District, South East Ethiopia: A Cross-Sectional Study. Int. Breastfeed. J. 2012, 7 (1), 1–8.

(31) Mogre, V.; Dery, M.; Gaa, P. K. Knowledge, Attitudes and Determinants of Exclusive Breastfeeding Practice among Ghanaian Rural Lactating Mothers. Int. Breastfeed. J. 2016, 11 (1), 1–8.

(32) Amin, T.; Hablas, H.; Al Qader, A. A. Determinants of Initiation and Exclusivity of Breastfeeding in Al Hassa, Saudi Arabia. Breastfeed. Med. 2011, 6 (2), 59–68.

(33) Taveras, E. M.; Li, R.; Grummer-Strawn, L.; Richardson, M.; Marshall, R.; Rego, V. H.; Miroshnik, I.;

Lieu, T. A. Opinions and Practices of Clinicians Associated with Continuation of Exclusive Breastfeeding. Pediatrics 2004, 113 (4), e283–e290.

(34) Azeze, G. A.; Gelaw, K. A.; Gebeyehu, N. A.; Gesese, M. M.; Mokonnon, T. M. Exclusive Breastfeeding Practice and Associated Factors among Mothers in Boditi Town, Wolaita Zone, Southern Ethiopia, 2018: A Community-Based Cross-Sectional Study. Int. J. Pediatr. 2019, 2019.

(35) Abou-ElWafa, H. S.; El-Gilany, A.-H. Maternal Work and Exclusive Breastfeeding in Mansoura, Egypt. Fam. Pract. 2019, 36 (5), 568–572.

(36) Ratnayake, H. E.; Rowel, D. Prevalence of Exclusive Breastfeeding and Barriers for Its Continuation up to Six Months in Kandy District, Sri Lanka. Int. Breastfeed. J. 2018, 13, 1–8.

(37) Asfaw, M. M.; Argaw, M. D.; Kefene, Z. K. Factors Associated with Exclusive Breastfeeding Practices in Debre Berhan District, Central Ethiopia: A Cross Sectional Community Based Study. Int. Breastfeed. J. 2015, 10 (1), 1–9.