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Breastfeeding Practices among Health Professionals in Tertiary Hospital in Nairobi, Kenya

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Abstract

Background: WHO aims to increase the 6 month exclusive breastfeeding rate to 50% by 2025. Breastfeeding is one of the key interventions that will help in achieving the sustainable development goals. Health professionals have been identified as a high risk group for early cessation of breast feeding. Work has been noted to be the major factor that interferes with breastfeeding. Kenyatta National Hospital (KNH) is a baby friendly hospital. A number of studies have been conducted on mother practices but none has been on the health care professionals.

Objective: The study explored breastfeeding practices during first six months by nurses and doctors working at Kenyatta National Hospital (KNH).

Methodology: Using a self administered semi-structured questionnaire we explored the practices and perceptions regarding exclusive breastfeeding female health professionals who had a child below age of 3 years

Results: Of the 160 questionnaires issued, 139 were valid for analysis. Of these 49 were residents and 90 were nurses. The median age for doctors was 31 years and that of nurses was 35 years. Initiation of breastfeeding within the first hour was 69.5% and 22% gave prelacteal feeds. The median duration of exclusive breastfeeding was 5 months. However, exclusive breastfeeding was 99.3% during the first three months was 94.9% at four months, 64.2% at 5 months, and 29.2% at 6 months. Sixty three percent thought 6 month exclusive breastfeeding was actually practical. After maternity leave, 81.3% reported a decrease in the amount of breastmilk but 66.7% made effort to ensure that their babies continued to get breastmilk. Only 46% had special consideration on duty allocation on return to work.

Conclusion: Only 29.2% exclusively breastfeed for 6 months and there was little consideration on allocation of duties when back to work. Effort to avail a breastfeeding friendly work environment needs to be made to rectify this.

Keywords: Breastfeeding; Children; Mothers; Kenya

Introduction

There is a universal consensus about the fundamental importance of breastfeeding for children's adequate growth and development. One should not forget the maternal benefits. These benefits extend well beyond basic nutrition and health to include social and economic ones that extend up to adulthood. These benefits are some of the key interventions that will help in achieving the sustainable development goals [1-4].

Exclusive breastfeeding for 6 months was endorsed by the world health assembly in 2001 [5,6]. The Lancet Series of 2003 estimated that exclusive breastfeeding could save 13% of all deaths of children younger than five years of age [7]. Kramer & Kakuma 2012 has since reviewed this and the protective effects of breastmilk still stand [8]. However global exclusive breastfeeding rates have remained low. In 2010 the global rate of exclusive breastfeeding was at 39% but the target is 50% which is expected by year 2025 [9]. By 2014 Kenya's rate of 61% was above the 2025 global target [10].

It is generally assumed that health care professionals are knowledgeable and thus their exclusive breastfeeding rates for six months should be high. Their knowledge and practices is likely to influence how they handle their clients [11]. The focus of many studies has been on how health care professionals assist their clients with few focusing on the health professional knowledge and practices for their own children. The reported exclusive breastfeeding rate among health care professionals is 11-58% [12-16].

Kenyatta National Hospital is a designated baby friendly hospital but no studies have been done to evaluate the breastfeeding experience of health care professionals working within the institution. The current study was carried out to establish the breastfeeding practices during the first six month among female doctors (residents) and nurses.

Methodology

Study Design, Setting and Participants

This was cross sectional descriptive study conducted from July to December 2015 and included only female residents and nurses with children aged 3 years and below. Kenyatta National Hospital (KNH) is a teaching and referral hospital with about 200 female residents and 1000 female nurses giving a total of 1200. Sample size using Fischer formula was 138.

Data Collection

In each ward or clinic, eligible subjects were briefed at the time of reporting to work on the purpose of the study and any queries answered individually. They were informed on the importance of the study and its voluntary participation. Consent was then sought and those willing to participate were given a semi structured self-administered questionnaires which were to be answered at their convenient time. To ensure spread throughout the hospital, the first two residents or first three nurses who were available at the time of recruitment from each ward or clinic were recruited. All work shifts were covered. The completed questionnaires were collected the same day or the following day as was convenient to the respondent.

Study Tool

The questionnaire included demographics, specialty or department, prenatal plan on breastfeeding, how soon breastfeeding was initiated and the duration they managed to exclusively breastfeed. Question on other feeds given before six months of age, reasons for this as well as major method of feeding was asked. And whether work schedule interfered with breastfeeding and the perception of placing extra demands on colleagues due to breastfeeding was asked. Finally, the tool sought to find out if prior medical training was sufficient in preparation for breastfeeding.

Ethics

Ethical approval was obtained from Kenyatta National Hospital/University of Nairobi Ethics and Research Committee. Informed written consent was gotten from all the participants.

Data analysis

Data were analysed using IBM Statistical Package for Social Scientists (SPSS) Version 18. Categorical data were summarized using frequencies and percentages. The mean and standard deviation or median and IQR was used to summarise continuous data. Statistical testing was done using Chi square for tests of association for categorical variables.

Results

Of the 160 questionnaires issued, 150 (93.8%) were returned. Of these 139 (93.7%) were valid, and 11 were wrongly filled. The valid questionnaires comprised of 49 (35%) residents and 90 (65%) nurses. The characteristics of the respondents are shown in table 1. Most of the doctors (89.4%) fell between ages 26 to 35 years

compared to the nurses who were a little more evenly spread out. Median age for doctors was 31 years the one for the nurses was 35 years; this difference was significant p= 0.00. Generally 89.2% were married. Caesarean section delivery was high at 39.6%.

	Doctors (n=49)		Nurses (n=90)	
Age	**Frequency**	**Percent**	**Frequency**	**Percent**
21-25yrs	2	4.3	7	7.6
26-30yrs	17	36.2	20	21.7
31-35ys	25	53.2	22	23.9
36-40yrs	3	6.4	30	32.6
41-45yrs	0	0	11	12
46-50yrs	0	0	2	2.2
Marital Status				
Married	44	93.6	80	87
Single	3	6.4	9	9.8
Divorced	0	0	2	2.2
Mode of delivery of youngest child				
Spontaneous Vertex Delivery	31	66	53	57.6
Caesarean Section	16	34	39	42.4

Table 1: Summary of the background split by profession.

The medical departments (paediatrics and internal medicine) had the highest number at 52.5% followed by the surgical disciplines at 41.0% as shown in table 2. Most of the doctors were in the medical departments, there was no doctor in the surgical discplines.

	Frequency	Percent	Cumulative Percent
Paediatrics	43	30.9	30.9
Surgical Specialties	39	28.1	59
Internal Medicine	30	21.6	80.6
Reproductive Health	18	12.9	93.5
Imaging/Radiology	3	2.2	95.7
Pathology	3	2.2	97.8
Critcal Care/ Anaesthesia	3	2.2	100
Total	139	100	

Table 2: Distribution by area of work.

Cumulatively, the total number who exclusively breastfed for the first three months was 99.3%, this proportion reduced to 94.9% at four months, and 64.2% at 5 months. However, by the sixth month only 29.2% had managed to exclusively breastfeed. The median exclusive breastfeeding period was 5 months. There were no differences between the doctors and nurses at each month.

As shown in table 3, initiation within an hour of birth was done by 69.6% of respondents. Those who delivered by Caesarean section were more likely to have delayed initiation p-value = 0.00. Twenty five respondents (22.1%) gave prelacteal feeds; of these 21 had delivered via caesarean section.

	Within the 1st hr	After 1 hr	Prelacteal feed	Total
Spontaneous Vertex Delivery	74 (88.1%)	10 (11.9%)	4	84 (60.4%)
Caesarean Section	23 (41.8%)	32 (58.2%)	21	55 (39.6%)
Total	97 (69.8%)	42 (30.2%)	25 (22.1%)	139

Table 3: Initiation of breastfeeding and use of prelacteal feeds in relation to mode of delivery

Other breastfeeding practices are shown in tables 4a and 4b. About eighty two percent (82.3%) intended to breastfeed exclusively for 5-6 months with the intention being higher among doctors. Fewer numbers (66.3%) thought the 6 month exclusive breastfeeding duration was feasible yet 94.2% had recommended it to others. Even though 46% did not have consideration on work schedule when they returned back to work it is gratifying that 75.5% had support from colleagues. Some (60.5%) made their own adjustment. However there was a perceived decrease in breastmilk supply in 81.8%. Only 34.9 % had had any post basic breastfeeding training.

Hindrances towards exclusive breastfeeding that they had as a healthcare professionals working at KNH included: Long working hours, lack of rooms to express milk; Lack of time and space to breastfeed; Short maternity leave; Heavy work.

	Frequency	Percentage %
Prenatal plan on breastfeeding		
Yes	114	82.7
No	24	17.3
Do you think that it is possible to practice exclusive breastfeeding for 6 months?		
Achievable	88	66.3
Not achievable	51	36.7
Recommended six month exclusive breastfeeding to others?		
Recommended	131	94.2
Not recommended	8	5.8
Other feeds given before baby attained six months.		
Cereals	15	10.9
Cow's milk	12	8.8
Water	9	6.6
Formula Milk	49	35.8

Table 4a: Summary of breastfeeding practices.

	Frequency	Percentage %
Reasons given for introducing other feeds before 6 months.		
Baby seemed hungry	50	36
Thought the baby was old enough	10	7.2
Wanted the baby to sleep long enough	16	11.5
Advised by friend or relative	14	10.1
Others	7	5
Measures taken to ensure baby has breastmilk when unavailable.		
Yes	92	66.7
No	46	33.3
Special consideration given on allocation of duties during breastfeeding at work.		
Yes	63	46
No	74	54
Outcome of breast milk supply on returning to work		
Decreased	113	81.8
Remained the same	22	15.9
Increased	4	2.8
Adjusted work schedule to accommodate breastfeeding		
Made adjustments	84	60.5
Did not make adjustments	55	39.5
Colleague support during breastfeeding		
Offered support	105	75.5

Did not support	34	24.5
Importance of prior medical training in breastfeeding		
Beneficial	117	84.2
Not beneficial	22	15.8
Need for a policy supporting breastfeeding at the hospital		
Yes	131	94.2
No	8	5.8
Attended a special course on breastfeeding after medical training		
Yes	45	34.9
No	84	65.1

Table 4b: Summary of breastfeeding practices.

Discussion

The current study concentrated on the practices during the first six months which is the period of exclusive breastfeeding. The response rate was high at 93.8%. This is in contrast to the 45-68% rate reported from other studies [17-19]. This is most likely due to the fact that our study was within the same institution with personal contact of the respondents rather than mail, and there was little lag time between the issuing of the questionnaire and collection.

Studies on exclusive breastfeeding vary according to the method of data collection. The WHO recommended collection is a 24 hour recall for all babies under 6 months of age [20]. But there is another way of looking at it in that mothers are interviewed after six months and only those who completed 6 months of exclusive breastfeeding are counted [21,22]. The two rates are likely to be different. In our study the rate at 6 months was 29.2%. However the rates were high during the first four months that are equivalent to the official 3 months maternity leave plus one month annual leave in Kenya [23]. There after the rates dropped considerably to a rate of 29.2% at 6 months. Up to 5 months the rates at each month are higher than the Kenyan data but as pointed out the method of our data collection was different.[10] At 6 months our rate is close to the 25% reported by Anyanwu, et al. [16]. Their study population was not very different from ours. In contrast Sadoh, et al. had a rate of 11% but their sample size was very small and they only included doctors [12]. On the other hand Renitha, et al. report a high figure of 58% exclusive breastfeeding rate at 6 months [15]. Their subjects were however a bit different because they included spouses of health professionals and covered a wider scope of female health professionals and the children were up to 5 years. This might have created a wider recall bias than our subjects whose children were less than 3 years. But their mean duration of exclusive breastfeeding 5.3 months was similar to our median of 5 months. Dachew in Ethiopia reported an exclusive breastfeeding rate of 35.9% among nurses and midwives [14]. Two thirds of the health workers in our study thought it was feasible to exclusively breastfeed for 6 months but a much lower percentage managed to do so. It is interesting to note that 94.2% had recommended the six month exclusive breastfeeding to others.

In this study, the intention to practice exclusive breastfeeding during the prenatal period was at 82.7%. This is similar to the study by Sadoh, et al. that showed a contrast between high intentions to breastfeed versus low rates achieved at the end of the first six months [12]. A number of studies have reviewed work and ability to continue exclusively breastfeeding let alone any breastfeeding [13,14].

The demand of work for nurses and junior doctors in any hospital is high and unless special consideration is given most cannot breastfeed during the working period [14]. Indeed this was cited by the respondents in our study. Allocation of duty soon after resumption of work could help the female health professional to continue exclusive breastfeeding. In our study only 46% of our respondents had special consideration in allocation of duty when they resumed work. This is also cited by Weber et al. in Australia as the reason to stop breastfeeding [15]. In the USA where maternity leave is very short (about 7 weeks) resident physicians are reported to have difficulties unless very highly motivated and have support from the hospital [22,23].

Making breastmilk available and assuring breastmilk production when mother is separated from her baby requires knowledge on breastmilk expression and storage. Only sixty percent of the respondents in our study tried to make breastmilk available. One reason for this could be a reflection of lack of knowledge since only 34% participants in the current study had had any post basic training on lactation management. Since 1992 KNH has

had the WHO infant and young child feeding course but it has not been possible to cover all workers. In addition there is a rapid turnover of staff. The other reason is that KNH has not made any provision for its workers to express their breastmilk during the working period. Basrowi et al. showed a 2.7 fold increase in exclusive breastfeeding and a 5.9 fold increase in knowledge in institutions that had dedicated breastfeeding facility and support programme [21,24].

Almost all respondents said that it was important to have a breastfeeding policy within the hospital 94.2% and mentioned provision of nursing rooms and breastmilk storage facility as the major supporting factor. This was echoed in other studies done in the US A [25-28]. It is possible to avail facility for lactating women in health institutions as described by Allen et al. in the USA and Dodgson et al. in Hong Kong [29,30]. If space is availed there are several ways that can support female workers in health institutions as explored by Weber et al. in Australia [18]. Just after this study Kenya government introduced a breastfeeding mothers' bill that mandates all employers to provide space and facility at the work place which KNH can adopt for all its lactating women employees [31]

Success of breastfeeding also depends on support of the people around the mother. In our study three quarters of the respondents said that they were encouraged by their colleagues during breastfeeding and this closely compared with a survey done to examine the influence of encouragement on breastfeeding women [13,17,18].

Early initiation of breastfeeding is one way of ensuring adequate lactation. Our study shows a low initiation rate of 69.8 % just slightly higher than the national initiation rate of 62% [10]. This is close to the 74.2% reported by Dachew in Ethiopia but a lot higher than the Nigerian study [12,14]. These rates are very dependent on hospital practices which we did not explore in the current study. Often delayed initiation is accompanied by use of prelacteal feeds. In our case this was practiced by 22% and most of these had delivered through caesarean section. A similar figure of 19% was reported by Dachew, et al. in Ethiopia [14].

A large number (81.3%) reported a decrease in breastmilk supply on return to work; a similar finding to other studies [13,17]. The decrease was most likely due to infrequent emptying of the breasts. The decrease in breastmilk plus mother being away for the baby led to introduction of other feeds. Most respondents (35.3%) used formula milk as an alternative feed compared to 18.6% cow milk use; 10.8% gave cereals and 6.5% water. Ideally cereals and water should not have been used. Other reasons given were baby seemed hungry, and some wanted the baby to sleep long, baby old enough. All these reasons are similar to other studies and do not differ from those given by non medical mothers. Again this displays lack of knowledge among our study subjects

Conclusion

Our work shows a great disparity between intention 82% and the exclusive breastfeeding rate for the first six months of 29.2%. Initiation within an hour of birth was also low at 69.8% with those delivering by Caesarean section taking longer which lead to the use of prelacteal feeds. Return to work without an enabling environment was the most common contributing factor. Provision of facility at the work place plus adequate information to the health workers can go a long way to increase exclusive breastfeeding among female health professionals

Disclosure Statement

Authors have no competing financial interests.

References

1. Victora CG, Bahl R, Barros AJD, Franca , Horton S, et al. (2016) Breastfeeding 1: Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet 387: 475-490.

2. Rollins NC, Bhandari N, Hajeebhoy N, Horton S, Lutter CK, et al. (2016) Breastfeeding 2: Why invest, and what it will take to improve breastfeeding practices. Lancet 387: 491-504.

3. Victora CG, Horta BL, de Mola CL, Quevedo L, Pinheiro RT, et al. (2015) Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: a prospective birth cohort study from Brazil. Lancet Glob Health 3(4): 199-205.

4. United Nations: Transforming our world: the 2030 agenda for sustainable development.

5. WHO (2001)The optimal Duration Of Exclusive Breastfeeding. Report of an Expert Consultation. World Health Organization Geneva pp: 1-10.

6. WHO (2001) Global strategy for infant and young child feeding. World Health Organization pp: 1-37.

7. Jones G, Steketee RW, Black RE, Bhutta ZA, Morris SS, et al. (2003) How many child deaths can we prevent this year?. Lancet 362(9377): 65-71.

8. Kramer MS, Kakuma R (2012) Optimal duration of exclusive breastfeeding. Cochrane Database Sys Rev 15(8).

9. WHO (2014) Comprehensive implementation plan on maternal, infant and young child nutrition. World Health Organization pp: 1-30.

10. Kenya National Bureau of Statistics and ICF Macro Dec 2015: Kenya demographic and health survey 2014.

11. Feldman-Winter LB, Schanler RJ, O'Connor KG, Lawrence RA (2008) Pediatricians and the promotion and support of breastfeeding. Arch Pediatr Adolesc Med 162(12): 1142-1149.

12. Sadoh AE, Sadoh WE, Oniyelu P (2011) Breastfeeding practice among medical women in Nigeria. Nigerian Medical Journal 52(1): 7-12.

13. Al-Binali AM (2012) Knowledge, attitude and practice of breast-feeding among female health care workers in a tertiary care hospital. Med J Cairo Univ 80(1): 159-164.

14. Dachew BA, Bifftu BB (2014) Breastfeeding practice and associated factors among female nurses and midwives at North gonad Zone, Northwest Ethiopia: a cross sectional institution based study. Int Breastfeeding J 9: 11.

15. Renitha R, Babu TA, Kumar M, Srinvasam S (2012) Breastfeeding practices among health care professional in a tertiary care hospital from South India. Indian J Public Health 56(2): 149-151.

16. Anyanwu OU, Ezeonu CT, Ezeonosike OB (2014) The practice of breastfeeding by healthcare workers in the Federal Teaching Hospital, Abakaliki, south-eastern Nigeria. S Afr J CH 8(2): 55-59.

17. Miller NH, Miller DJ, Chism M (1996) Breastfeeding practice among physicians. Pediatrics 98: 434-437.

18. Weber D, Janson A, Nolan M. Wen LM, Rissel C (2011) Female employees' perceptions of organizational support for breastfeeding at work: findings from an Australian health service workplace. Int breastfeeding J 6: 19.

19. Duke PS, Parsons WL, Snow PA, Edwards AC (2007) Physicians as mothers: Breastfeeding practices of physician-mothers in Newfoundland and Labrador. Can Fam physicians 53(5): 886-891.

20. WHO (2008) Indicators for assessing infant and young child feeding practices Part 1 Definitions. World Helth Organization Geneva pp: 1-26.

21. Hector DJ (2011) Complexities and subtleties in the measurement and reporting of breastfeeding practices. Int Breastfeeding J 6: 5.

22. Pullum TW (2014) Exclusive breastfeeding: aligning the indicator with the goal. Glob Health Sci Pract 2(3): 355-356.

23. Laws of Kenya: Employment Act.

24. Basrowi RW, Sulistomo AB, Adi NP, Vandenplas Y (2015) Benefits of a dedicated breastfeeding facility and support program for exclusive breastfeeding among workers in Indonesia. Pediatr Gastroenterol Hepatol Nutr 18: 94-99.

25. Sattari M, Levine D, Bertram A, Serwint JR (2010) Breast Feeding Intentions of Female Physicians. Breastfeed Med 5(6): 297-302.

26. Riggins C, Rosenman MB, Szucs KA (2012) Breastfeeding practice among physicians. Breastfeed Med 7(3): 1451-1454.

27. Orth TA, Drachman D, Habak P (2013) Breastfeeding in obstetric residency: Exploring maternal and colleague resident perspectives. Breastfeed Med 8(4): 394-400.

28. Sattari M, Levine D, Bertram A, Serwint JR (2013) Personal breastfeeding behaviour of physician mothers is associated with their clinical breastfeeding advocacy. Breastfeed Med 8(1): 31-37.

29. Allen JA, Belay P, Perrine CG (2014) Using mPINC data to measure breastfeeding support for hospital employees. J Hum Lact 30(1): 97-101.

30. Dodgson JE, Chee YO, Yap TS (2004) Workplace breastfeeding support for hospital employees. J Adv Nurs 47(1): 91-100.

31. Republic of Kenya (2017) The Breastfeeding Mothers Bill.