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Medication use pattern among breastfeeding mothers in Benin City, Nigeria..... a multicenter sampling

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ABSTRACT

Background: Due to the risk associated with the use of medications among breastfeeding mothers, the study evaluates the pattern of medication and safety in three health facilities in Benin City, Nigeria.
Method: Structured questionnaires were distributed among consented breastfeeding mothers whose children were below twelve months old when visiting immunization clinics at the centers. Medication compatibility with breastfeeding was assessed using the World Health Organization and Lactation Risk Category classifications.
Results: Out of 634 breastfeeding women that participated in the study, the married respondents were 609(96.1%), 604(95.3%) attended prenatal class and 206(32.4%) were between 28 and 32 years. Higher baby weight of 3.3-5 kg was recorded among 425(67.0%) respondents. Breastfeeding information was common among 580(96.0%) respondents and 557(92.2%) agreed that breastfeeding was useful. Participants 290(45.7%) and 269(42.4%) had secondary and tertiary education respectively. Medications were used during breastfeeding by (95.3%) respondents. Total of 52 different types were identified and most of them (71.3%) were on medication compatible with breastfeeding. Analgesics 519(27.9%), antibiotics 274(14.7%), hematinic 433(23.3%) and anti-malarial drugs 235(12.6%) were commonly utilized. Respondents not counseled when taking medication during breastfeeding were 452(71.3%). Respondents that used medications requiring side effect monitoring were 3.6%. Healthcare givers prescribed medications for 60.2% and 39.85% self-medicated. The respondents that breastfed while on drugs were 575(95.5%) while 2% stopped breastfeeding because of drugs. Higher respondents 151(82.9%) claimed that nurses were the common healthcare givers.
Conclusion: The study revealed most medications used pattern and the compatibility pattern among breastfeeding mothers in the health facilities.

1. Introduction

Breastfeeding is an unequal way of providing ideal food for the healthy growth and development of infants to reduce morbidity and mortality[1]. Infants that are not breastfed experience increase morbidity from a variety of conditions compared with infants that are breastfed[2]. The concern of exposure of drugs to breast milk is noteworthy as some medicines in the maternal blood stream can potentially be transferred into breast milk thus exposing breastfed infants to the potential risk[3] of drugs. Besides conventional medications[4], some natural substances have also been associated with reduction of breast milk supply, they need to be investigated despite their clinical use[5]. The general approach is to be careful with drugs during lactation as some medications can cause harm. There are varied number of medications compatible with infants during breastfeeding[6]. In prescribing medications for breastfeeding mothers, the benefits should outweigh the risk. The transfer of medication into breast milk depends on

the concentration that allows passive diffusion of non-ionized, non-protein-bound drugs[7]. Mothers of premature or otherwise compromised infants may require altered dosing to avoid drug accumulation and toxicity in these infants[7]. Apart from prescription medication by healthcare professional, the burden of self-medication and the use of complementary and alternative medicine are quite enormous most especially in developing countries where sales of drugs are not fully regulated. Breastfeeding women often take either prescription or over-the-counter medications. There is a growing concern that one potential contributor to early cessation of breastfeeding is the use of medications[8]. The study therefore assessed the pattern of medication use by breastfeeding women to identify the safety category using standard protocols[4,9].

2. Methods

The study design was a cross-sectional design. It was carried out in three immunization centers of the University of Benin Teaching Hospital (UBTH), Central Hospital and St. Philomena Catholic Hospital, Benin City. Edo State. Ethical approval was sought and obtained from the centers. University of Benin Teaching Hospital (UBTH) is a Federal Government owed tertiary hospital. It is a 660-bed health facility center offering primary, secondary, and tertiary healthcare to the residents of Benin City and the neighboring states. It also serves as a referral center to other secondary and specialist health institutions. In the immunization center, there are six trained nurses, and the clinic runs from Monday to Friday. Immunization is given in all the days except Tuesdays which is a check-up for infant growth and development. The Central Hospital sometimes referred to as the specialist hospital Benin, is a state-owned health facility. It is about 10-12 km away from the University of Benin Teaching Hospital (UBTH). It is a 423-bed secondary health facility offering primary and secondary care to the residents of Benin City and environs. In the immunization center there are four trained nurses, and the clinic runs from Monday to Friday. Immunization is given on all working days of the week. St. Philomena catholic hospital Benin City is a mission based healthcare facility center. The immunization center has two trained nurses with a handful of student nurses. The clinic runs from Monday to Friday. Immunization is given in all the days except Tuesdays which serve as infant clinic day for growth and development. It is noteworthy that in virtually all the centers used, the clinic activities starts at 8.30 am and closes at 1.00 pm. Women from all cultural or ethnic backgrounds were eligible for the study. Usually, the first visit takes place at the age of two days, then at four weeks, and in the first half year mothers and their children visit the immunization center approximately once per month. Respondents were systematically sampled. Meaning for every for every twenty breastfeeding mothers that visited the clinic, twelve were selected that resulted in a total of seven hundred participants. Inclusion criteria were mothers that were breastfeeding at the time of survey, those above 18 years and had willingness to participate by giving consent. Exclusion criteria were mothers less than 18 years, those that had history of psychiatry illness and other physical challenges, those that had other chronic illness like Tuberculosis, Human Immunodeficiency Virus disease, ~~and~~ those too sick to be interviewed and those that refused consent to participate in the study. The sampling questionnaires consist of demographic information of the participants, breastfeeding practices and the use of drugs during breastfeeding. Other questions were the breastfeeding experience, breastfeeding status, use of infant formulary, and breast milk routine administration. Data were collected by adequately trained assistants. Prior to the main study, a pilot study was conducted among 25 breastfeeding mothers in the St, Philomena Hospital. Collected data were corrected for acceptability. The participants involved in the pilot study were not included in the main study.

2.1 Data analysis

Data was processed using excel spread sheet and transferred to SPSS version 16, for statistical analysis. Medication compatibility with breastfeeding was assessed using the WHO classification system and Dr. Hale Lactation Risk Category classification. The association between categorical variables were assessed using Chi-square test. *P*-values less than 0.05 were regarded as significant.

3. Results

Seven hundred structured questionnaires were distributed to selected subjects and 634 were returned giving a response rate of 90.6%. Most of the responses were from UBTH (41.6%). The age group with the highest frequency was 28-32 years 206(32.4%). Majority of the respondents were married 606(96.1%) and 290(45.7%) had secondary education. On the average, 318(50.2%) were self-employed and the modal income of 10,000-19,000 Naira for 29.4% of the respondents. Majority of the respondents were multi-parae (73.2%), ~~and~~ 82% had vaginal delivery and 67.4% had babies weighing above 3 kg. Ninety five

percent attended the prenatal classes and 92.2% found the information on breastfeeding useful. There was a significant association between the level of education and medication use ($P < 0.05$). Higher proportion of participants that participated in the study had secondary education. There was no significant association between income and medication use.

X^2 =5.585, df=6, P=0.471. Seventy-five percent of respondents had previous breastfeeding experience. The average breastfeeding times were between 6-10 times per day. Respondents that could not ascertain the quantities of breast milk given to the babies were 631(99.5%) as in Table 3. Those that agreed using breastfeeding formula were 304(47.9%) as in Table 3. The most frequently reported reason for combining breastfeeding with infant formula was perceived insufficient breast milk among 60.5% individuals and 11.8% had difficult schedule. Among the 634 respondents, 95.3% agreed they had used one or more drugs for various purposes during breastfeeding. A total of 52 different types of medicines were revealed among the surveyed respondents in the study. The most frequent pharmacological classes of medication used were analgesics 27.9% antibiotics 14.7%, antimalarial 12.6%, vitamins 23.3%, anti-hypertensives 1.6% and herbal medicines 0.8%. The total number of medications used was 1860. Most of drugs used were compatible with breastfeeding except for metronidazole, hydrochlorothiazide, cimetidine. Amoxicillin/clavulanic was the most frequently used antibiotics while Artemether-lumefantrine and paracetamol were the most frequently used antimalarial and analgesic respectively. Medication use according to WHO safety category. The two sources used to determine the safety in lactation of the medication while breast feeding were the WHO classification System and Dr. Hale Lactation Risk Category classification. Using the WHO source, the frequency of use of the safe drugs were 1331(71.5%), 67(3.6%) for medication that were compatible but monitor for side effects and 76(4.1%) for medication that was labeled unsafe in breastfeeding mothers. The frequency of use of medication that had no available human data on safety was among 206(11.1%) respondents.

Table 1. Demographic data of 634 breastfeeding mothers as respondents

Demographic data	UBTH	CENTRAL	ST. PHILOMINA	TOTAL
Age group (years)				
18-22	16	8	9	33(5.2)
23-27	71	63	32	166(26.1)
28-32	81	97	28	206(32.4)
33-37	75	69	35	179(28.2)
38-42	18	19	10	47(7.41)
43 and above	3	-	-	3(0.47)
Total	264(41.4)	256(40.4)	114(18.0)	634(100)
Marital status				
Single	15	5	-	20(3.17)
Married	245	250	114	609(96.1)
Divorced	1	1	-	2(0.32)
Separated	2	-	-	2(0.32)
Widow	1	-	-	1(0.16)
Religion				
Christianity	228	220	112	560(88.3)
Islam	16	10	-	26(4.1)
African traditional religion	19	23	2	44(6.94)
Others	1	3	-	4(0.63)
Education				
Not educated	1	5	2	8(1.26)
Primary	24	22	21	67(10.6)
Secondary	114	122	54	290(45.7)
Tertiary	125	107	37	269(42.4)
Average income per month				
<N10000	54	74	59	150(23.6)

N10000-19000	42	88	20	187(29.4)
N20000-29000	90	46	10	146(23.0)
N30000-39000	27	18	12	57(8.99)
N40000 and above	51	30	13	94(14.8)
Occupation sector				
Civil servant	71	22	10	103(16.2)
Private sector	33	52	14	99(15.6)
Self employed	128	122	68	318(50.2)
Not employed	47	60	27	134(21.1)
State of origin				
Edo	232	241	110	583(92.0)
Delta	20	7	3	30(4.7)
Others	12	8	1	21(3.3)

Higher percentage of the respondents were married, of age between 28 and 32 years, self-employed, had secondary and tertiary education resident in Edo state.

Table 2. Post natal and infant information of breastfeeding mothers. N=634

	UBTH	CENTRAL	ST.PHILOMINA	TOTAL
Patten of delivery				
Vaginal	206	214	100	520(82.0)
Cesarean	58	42	14	114(18.0)
Term of delivery				
Full term	247	243	114	604(95.3)
Premature	17	13	-	30(4.73)
Baby's weight at birth				
<3.0 kg	99	85	23	207(32.6)
3.3-5 kg	164	170	91	425(67.0)
>5 kg	1	1	-	2(0.4)
Age of child at visit				
<3 months	163	157	101	
3-6 months	68	51	13	
7-9 months	4	11	-	
10-12 months	29	37	-	
Parity				
Child	74	64	32	170(26.8)
2 children	99	92	36	227(35.8)
3 children	51	48	22	121(19.1)
4 and above	40	52	24	116(18.3)
Prenatal class				
Attended	256	238	110	604(95.3)
Not attended	8	18	4	30(4.7)
Breastfeeding in progress				
Yes	249	224	107	580(96.0)
No	9	12	3	24(4.0)
Usefulness of Breastfeeding information				
Yes	251	205	101	557(92.2)
No	5	33	9	47(7.8)

Most respondents had two children, with baby weight of 3.3-5kg, were breastfeeding. They had vaginal delivery of full term and attended prenatal classes.

Table 3. Previous breastfeeding experience among respondents

Breastfeeding experience	UBTH	CENTRAL	ST.PHILOMINA	TOTAL
Previous breastfeeding experience				
Yes	192	197	85	474(74.8)
No	72	59	29	160(25.2)
Are you breastfeeding now				
Yes	264	256	114	
No	-	-	-	
Number of times breastfed per day				
1-5 times	39	29	4	72(11.3)
6-10 times	168	178	38	384(60.0)
>10 times	57	49	72	178(28.1)
Breastfeeding quantity estimation				
Yes	3	-	-	3(0.5)
No	261	256	114	631(99.5)
Is your baby on formula				
Yes	136	121	47	304(47.9)
No	128	135	67	330(52.1)
Age on formula				
<1 month	55	40	12	107(16.9)
1-3 months	17	15	10	42(6.6)
4-6 months	53	60	24	137(21.6)
7-9 months	9	6	3	18(2.8)
Not on formula	190	136	65	330(52.1)
Reasons for combining breastfeeding and formula				
Nipple breast problem	2	-	2	4(1.3)
Insufficient milk	75	85	24	184(60.5)
Baby refused	6	10	-	16(5.3)
Schedule difficult	19	12	5	36(11.8)
Did not want to	1	-	3	4(1.3)
Others	31	14	15	60(19.7)
Not on formula	130	135	65	330
Medication use				
Yes	257	241	106	604(95.3)
No	7	15	8	30(4.7)

Most of the respondents had previous breastfeeding experience and were breastfeeding as at the time of the study. Some agreed using infant formula and medication

Table 4. Class of medication used during breastfeeding

Class of medication	N	%
Anti-biotics	275	14.8
Anti-diabetics	14	0.8
Anti-fungal	14	0.8
Anti-hypertensives	29	1.6
Anti-malarial	235	12.6
Analgesic	519	27.9
Anxiolytics	6	0.3
Antispasmodics	12	0.6
Anti-asthmatics	8	0.4
Antitussives	15	0.8
Contraceptives	16	0.9
Diuretics	6	0.3
Heamatinics	433	23.3
Proton Pump Inhibitors	11	0.6
Vitamins	224	12
Anta-acids	14	0.7
Anti-epileptics	7	0.4
Antipsychotics	6	0.3
Herbals	15	0.8
Vaccines	1	0.1

Most respondents used antibiotics, analgesic and hematinics during breastfeeding

Table 5. Frequency distribution and safety category

Safety profile		Frequency	%
Compatibility with breastfeeding	(safe)1	1331	71.5
Compatibility (but monitor for side effects)	Probably safe 2	67	3.6
Avoid if possible (monitor for side effects)	Unsafe 3	76	4.1
Avoid if possible (it may inhibit lactation)	Controversial 4	6	0.3
Avoid	5	0	0
Compatible,	No data on long term use 1,2	158	8.6
Compatible from six weeks postpartum	1,4	16	0.9
No available data on safety	NDS	206	11.1
Total		1860	10

Safety profile of self-medication and use of drugs prescribed by healthcare professionals

Classification	Self-medication	Healthcare provider
Compatible	551(79.1)	780(78.8)
Compatible, monitor	33(4.7)	34(3.4)
Avoid if possible, monitor	14(2.06)	62(6.3)
Avoid, inhibit lactation	0	6(0.6)
Avoid	0	0
No available data	98(14.2)	108(10.9)
Total	696(100)	990(100)

Safety profile of self-medication and drugs prescribed by healthcare providers. ~~This~~ There was statistically significant difference between the drugs prescribed by health care providers and those on self-medication ~~with regards to~~ based on WHO classification System X^2-41.269, df=6, P<0.0001. Higher risk factors were associated with the drugs prescribed by healthcare providers compared with self-medication.

Table 6. Pattern of breastfeeding and drug use among respondents

Pattern of breastfeeding	N (%)
Stopped breastfeeding	
Yes	12(2)
No	592(98)
Stopped drugs	
Yes	15(2.5)
No	589(97.5)
Combined breastfeeding and drugs	
Yes	575(95.5)
No	59(4.5)
Counseling in breastfeeding and drug use	
Yes	182(29.7)
No	452(71.3)
Those that counseled	
Doctor	22(12.2)
Nurse	151(82.9)
Pharmacist	00
Other	9(4.9)

Most respondents did not stop breastfeeding while on medication. They were counseled mostly by nurses.

4. Discussion

This multicenter study explored the medication pattern among breastfeeding mothers attending three immunization centers in Benin City, Edo state. The proportion of women using medication during lactation in this study was 603/634(95.3%). This is similar to studies in Brazil[10] and in India[11] where they had a high proportion of women using at least one or more medication. In this study, most women were aged 28 and 32 years with median age 30years. This is similar to the findings by Mannion and co-workers in which the median ages were 30 and 32 years respectively[12,13]. The age range represents the peak of childbearing age in women in the environment thus information given in this ~~appropriate~~ group may be reliable. Christians as the main religious group represents the category of persons resident in the South-South region of Nigeria; in case of advocacy the government and non-governmental organizations can reach out to breastfeeding mothers on drug safety through churches as the main religious center. The data obtained revealed that a little less than half of the respondents had secondary education. While the other proportion which is also about half attained tertiary education. This level of education can be useful in getting adequate information from participant in designing the protocol of drug utilization among breastfeeding mothers. As shown in the study the level of education also support the reliability breastfeeding pattern and drug utilization history. About a quarter of this study population were unemployed and has poor economic power; this area calls for attention where breastfeeding mothers need to be gainfully employed to support their homes. This finding underscores the poverty level of the country even in the face of attaining useful employment. In this study, over 95% of the respondents attended prenatal classes in which the benefit of breast feeding, dangers of breast milk substitute, self-medication, handling breastfeeding difficulties and common breastfeeding problems, with emphasis on their early recognition and management form the core lessons. Majority of those that attended agreed the information was useful as in Table 2. About three-quarter of the respondents had previous breastfeeding experience and average breastfeeding times were between 6-10 times per day as in Table 3. Nearly half of the breastfeeding women in the study also gave infant formula to those babies. The main reason for combining breastfeeding with infant formula was perceived insufficient breast milk in over 60% respondents. This perceived insufficient milk as in Table 3 had been described as "The Insufficient Milk Syndrome" (IMS)[14]. This finding is similar[11] study on breastfeeding

self-sufficiency and the use of prescription medication were about one third of the study population had to use Domperidone during breastfeeding to increase milk production. In this study almost all the respondents could not estimate the quantity of breast milk given to their babies. This finding in Table 3 aligns with the observation that maternal perception of insufficient milk production is almost never validated by measured milk volume but is a prime influence in maternal decision making to supplement the formula, discontinue breastfeeding, or use of products that stimulate milk supply[12]. This also corroborated[14] where 23% discontinued breastfeeding because of perceived "insufficient milk production" The data obtained revealed that analgesics, anti-infectives, antimalarials, and vitamins were predominantly used by the breastfeeding mothers as in Tables 4. This finding is comparable to other studies done among breastfeeding women in Italy[16]. This was however in contrast[13] in a USA cohort studies with 45 women participating. This had multivitamin (73%) as the most common medication taken by breast feeding women, followed using Non-steroidal Anti-inflammatory Drugs. The use of contraceptive among these breastfeeding women in this study was minimal, when compared with previous 24% was found[13]. The observed differences could be partly due to differences in the study population socio-demographic (developed and developing countries) impacts on the family planning perception and practices. Although it is well documented that about 12-20% of women suffer depression and anxiety in the postpartum period[17], less than one percent of women in this study used and antidepressants other antipsychotics. This may be as a result of the availability social and family support when a woman put to birth in the African setting. In addition breastfeeding may help to lower the risk of postpartum depression. In most African culture, breastfeeding during medication is done with caution. This perhaps may also account for the low use of antidepressants. The use of herbal medicines among the respondents in this study was not frequent, there were about less than one percent reported with the use of at least one herb. None, except one of them could identify the name of the herb used which was just bitter leaf. Recent studies[18] in Western Australia demonstrated that 60% of the respondents took at least one herb for medicinal purpose during breastfeeding. The most used herbs were fenugreek, ginger, garlic, blessed thistle and dong quai as in Tables 4. The perception of what constitute herbal medication by the respondents in the study may account for the low value seen as compared[18] with garlic and ginger as specific herbal medicines. During the period of the study, over one third of the respondents were on self-medication; most of the drugs were hematinic, analgesics and some antibiotics. It was observed in this study that lactating women with younger infants continue the use of their left-over iron salts taken during pregnancy and this could account for high use of hematinic. Similar study[16] on self-medication in nursing mothers found 52.1% of the nursing mothers practicing self-medication. Breastfeeding women do have concerns about medication, and this may affect their behavior in medication use. About two percent of the respondents of the study population stopped breastfeeding because they had to use drugs, and about the same proportion stopped using drugs because they breastfed. Higher proportion as in Table 6 that do not stop breastfeeding while on medication is a reflection of achieving greater therapeutic profile in the course of treatment; while there might be greater risk in some individuals that stopped medication most especially when prescribed. In previous study[19] observed that about 10% of 297 women stopped either breastfeeding or medicine use. In reported medication and breastfeeding in 2006[20], approximately one million mothers stated that "They had to take medicine and did not want their baby to get it" as a reason they discontinued breastfeeding. Lactating mothers need to be cautious of drug use during pregnancy and lactation due to the perceived aftermath effect to the developing fetus and the young infant. The easy access to over-the-encounter and prescription drugs in an environment like ours, where legal restrictions are few, makes the risk of ingesting harmful drugs even greater. The WHO classification showed majority of the medication taken by lactating women in this study were compatible with breastfeeding most especially the commonly used classes as in Tables 4. Although varied spread was seen with many drugs belonging to different classes. Less than a quarter of the respondents were taking medications that have been deemed probably safe or unsafe. These were metronidazole, hydrochlorothiazide, cimetidine and some contraceptives. About a tenth was on medication with no available data on human safety in breastfeeding. The findings in this study are similar with that done[21] where 17% of the women were on medication that were unsafe. Higher risk was associated with the drugs prescribed by healthcare providers compared with those on self-medication. This was possibly due to the increase in the use of metronidazole in the prescriptions by health care providers. The rating of safety and extent of safety profile adherence was seen more with healthcare providers as in Table 5. It was observed in this study that women that had caesarean section and those

that had problems with vaginal delivery, all had use metronidazole at some point in their drug therapy. This issue gives an idea that metronidazole needs to be investigated to establish its implication in delivery. Opinions vary among experts on the advice of using metronidazole during long-term therapy while breastfeeding, but some sources recommended discontinuing breastfeeding for 12 to 24 hours after single-dose maternal treatment. Nevertheless, the amount transferred to infants through breast milk is much lower than therapeutic dosage for infants, therefore no adverse effects have been reported from exposure to breast milk[4]. It is advised where there are safer alternatives or other safer route such drugs with undermined safety are best avoided. For example, topical or vaginal use of metronidazole during breastfeeding is unlikely to of concern. Three respondents took cimetidine, an H_2-receptor blocker which is known to stimulate prolactin secretion. Additionally, because of its potential for causing hepatic enzyme inhibition, other drugs might be preferred. About three quarter of the study population had not received any counseling specific to breastfeeding and medication use. Of those that received counseling, majority of them were counseled by nurses and none by pharmacist as in Table 6. Although pharmacist were at the disposition of counseling, the unit of immunization is an outlet where only vaccines are conveyed and stocked in below 4^{o}C. It would have been of importance if there is a pharmacist assigned to that unit to reflect pharmaceutical care practice. The content of the health talk in all the centers were not sufficient. It lacks information about potential hazards of self-medication, procurement and taking medication prescribed by non-qualified health care practitioners. This finding reflects the potential role for pharmacist in influencing breastfeeding women's decision regarding prescription and over-the-counter products use during breastfeeding. The pharmacist drug expertise can also influence safe medication use during lactation. In previous study[22], counseling during breastfeeding women by pharmacist, it was revealed that more than half (58%) of the pharmacists never asked women if they were breastfeeding but were focused on issues relating to other medication use. However, the study has shown in population that none of them reported counseled by the pharmacists on issues relating to medication use and breastfeeding as in Table 6. The infant's medication exposure can be limited by prescribing medications to the breastfeeding mother that are either poorly absorbed orally or by avoiding breast-feeding during times of peak maternal serum drug concentration or by avoiding breastfeeding during times of peak maternal serum drug concentration or by prescribing topical therapy when possible. Some limitations in this study shows even though this research was an interviewer administered questionnaire, information on the types of medication use was as volunteered by the respondents and may under estimate the use of herbal medicines as it may also overestimate prescribed medications during breastfeeding as a result of voluntary response bias. Due to the self-reporting nature in this study, there is the possibility that some respondents might not have correctly recalled all the medication history as at the time of the interview. As a result this bias the finding cannot be generalized. Further studies involving the use of case note or written prescription is advised. Another concern is the effect of medication to improve on the quantity and quality of breast milk produced, which may impact on the exclusively, duration and success of breastfeeding. Some medicines that have been reported to alter production of milk include bromocriptine, ergotamine and pseudoephedrine[3] while peppermint, sage and parsley have been used traditionally for weaning as a result of their perceived ability to reduce breast milk production. However, there is lack of research-based evidence to support their clinical use[5]. Some of these drugs used during breastfeeding may be excreted into the breast milk and may pose potential risk to infants[8].

5. Conclusion

Analgesics, antibiotics, anti-malarials and hematinics were the most frequently used medications by breastfeeding mothers. Most of the medications used were prescribed by health care providers although self-medication is still an issue that need to be addressed. Most of the medications taken were compatible with breastfeeding but there is need to monitor a few ones for side effects. It is recommended that Pharmacist who should be at the fore front of counseling breastfeeding mothers on the potential adverse effects of medicines used during lactation period. This study has contributed to the database on drug utilization in breastfeeding and provided information on the profile and safety category of medications in breastfeeding.

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