

Original Article

USE OF DRUGS DURING LACTATION BY USERS OF A BASIC HEALTH UNIT

USO DE MEDICAMENTOS DURANTE A LACTAÇÃO POR USUÁRIAS DE UMA UNIDADE BÁSICA DE SAÚDE

UTILIZACIÓN DE MEDICAMENTOS DURANTE LA LACTANCIA POR USUARIAS DE UNA UNIDAD BÁSICA DE SALUD

Luana Soriano Mota¹, Edna Maria Camelo Chaves², Régia Christina Moura Barbosa³, Jefferson Falcão do Amaral⁴, Leiliane Martins Farias⁵, Paulo Cesar de Almeida⁶

The objective was to identify the drugs used during lactation acompanhadas among women in a primary care unit. Quantitative study carried out with 132 lactating mothers of a basic health unit. Data were collected through a questionnaire with objective questions and subjective August-October 2011. The nursing mothers used medication along the breast feeding 105 (80%), while 27 (20%) did not use any kind of medication. The drugs most commonly cited as the use were: nonsteroidal anti-inflammatory 82 (58%), contraceptives 16 (11%), antianemics 14 (11%), antibiotics 12 (9%), antihypertensive 5 (4%), antacids 3 (2%), among others 9 (6%). Of the mothers 77 (58.3%) breastfeeding women reported not having received counseling. Medication use by nursing mothers may have repercussions for the baby because the drugs are excreted in breast milk.

Descriptors: Drug Use; Breast Feeding; Pharmacoepidemiology.

Objetivou-se identificar os medicamentos utilizados durante o período de lactação entre mulheres acompanhadas em uma unidade básica de saúde. Estudo quantitativo, com 132 nutrizes de uma unidade básica de saúde. Os dados foram coletados através de um formulário com perguntas objetivas e subjetivas de agosto a outubro de 2011. As nutrizes estudadas usaram medicação ao longo da amamentação, 105 (80%), enquanto que 27 (20%) não fizeram uso de nenhum tipo de medicação. Os medicamentos mais citados quanto à utilização foram: antiinflamatórios não esteróides 82 (58%), anticoncepcionais 16 (11%), antianemicos 14 (11%), antibióticos 12 (9%), antihipertensivos 5 (4%), antiácidos 3 (2%), dentre outros 9 (6%). Das nutrizes, 77 (58,3%) relataram não ter recebido orientações. O uso de medicação pelas nutrizes pode ter repercussões para o bebê, pois os medicamentos são excretados através do leite materno.

Descritores: Uso de Medicamentos; Aleitamento Materno; Farmacoepidemiologia.

El objetivo fue identificar los fármacos utilizados durante la lactancia entre mujeres de una unidad de atención primaria. Estudio cuantitativo, con 132 madres lactantes de una unidad básica de salud. Los datos fueron recolectados a través de un cuestionario con preguntas objetivas y subjetivas, de agosto a octubre de 2011. Las madres lactantes utilizaron la medicación a lo largo de la lactancia, 105 (80%), mientras que 27 (20%) no utilizaron ningún tipo de medicación. Los fármacos más comúnmente citados cuanto al uso fueron: antiinflamatorios no esteroides anti 82 (58%), anticonceptivos 16 (11%), antianemics 14 (11%), antibióticos 12 (9%), antihipertensivos 5 (4%), antiácidos 3 (2%), entre otros 9 (6%). De las madres, 77 (58,3%) informaron no haber recibido orientaciones. El uso de medicamentos por las madres lactantes puede tener repercusiones para el bebé debido a que los fármacos se excretan en la leche materna.

Descritores: Utilización de Medicamentos; Lactancia Materna; Farmacoepidemiología.

Corresponding author: Leiliane Martins Farias

Rua Ministro Joaquim Bastos, 231, Apto 802- Fátima. CEP: 60415-040 Fortaleza-CE. E-mail:leiliane.martins@hotmail.com

¹Nursing student from the Great Fortaleza Metropolitan Faculty (FAMETRO). Fortaleza, CE, Brazil. E-mail: luana_soriano7@hotmail.com

²Master in Child and Adolescent Health from the State University of Ceará (UECE). Master in Clinical Nursing Care from UECE. PhD student in Pharmacology, Federal University of Ceará (UFC). Professor at FAMETRO. Fortaleza, CE, Brazil. E-mail: ednacam3@hotmail.com

³PhD in Nursing, Professor at FAMETRO, Nurse at Maternity School Assis Chateaubriand, Fortaleza, CE, Brazil, E-mail: regiabarbosa@hotmail.com

⁴PhD in Pharmacology. Professor at FAMETRO. Fortaleza, CE, Brazil. E-mail: falcofarma@yahoo.com.br

⁵ Master in Nursing. PhD student in Nursing from UFC. Fortaleza, CE, Brazil. E-mail: leiliane.martins@hotmail.com

⁶PhD in Public Health. Professor at UECE. Fortaleza, CE, Brazil. E-mail: pc49almeida@gmail.com

INTRODUCTION

In primary health care, through the Family Health Strategy (FHS), the nurse develops activities with an emphasis on disease prevention and health promotion, with minimal technological resources, but with increased knowledge about the clinic to operate in different programs.

In the routine of basic health units, nurses in their outpatient visits, are faced with nursing mothers using drugs in situations that require special care by the risks of adverse reactions to the newborn (NB).

This field of primary attention focuses on the guidelines, as well as on lectures about breastfeeding that should be offered to the nurse because the act of breastfeeding is ancient, has no cost, and is essential to the life of humans⁽¹⁾. Besides minimizing hunger, it saves lives and contributes to the development and growth of the child, as well as to strengthen the emotional bond. It is important to highlight that the process of breastfeeding is everyone's responsibility and not exclusively the woman's⁽¹⁾.

However, the nursing mother can go through difficulties, from holding the baby incorrectly to the fact she does not want to breastfeed due to the pain, or for not feeling able to, or ever for considering that her milk is weak or has dried⁽²⁾.

Thus, it is the role of the multidisciplinary team, particularly the nursing one, to provide strategies to sensitize mothers not to give up on breastfeeding due to the difficulties, because breast milk is the only food the baby needs exclusively for the first six months of life, without need to supplement with water, tea or porridge⁽³⁾.

However, during the period of breastfeeding, the mother may become ill, needing to use some type of medication. Thus, the professional must remember the physiological process of lactation. In the early days, there is the occurrence of colostrum, and it is in that period when drugs are transferred more easily into the breast milk because alveolar cells are smaller and the

intercellular space is wide. After the second week postpartum, there is a reduction in the levels of progesterone, followed by the growth of alveolar cells and narrowing of the intercellular spaces, reducing the transfer of drugs into the breast milk. However, the absolute dose of drug received by the NB is low due to the small volume of colostrum intake (50 to 60 mL/day)⁽⁴⁾.

Some drugs can affect the child, being grouped according to the risk category in a booklet produced by the Ministry of Health entitled Breastfeeding and the use of drugs and other substances⁽⁵⁾. There was the following classification: compatible use with breastfeeding, careful use during breastfeeding and inappropriate use during breastfeeding. With this information, healthcare professionals consult the list of drugs that can be used during lactation with lower risk for both mother and child.

Based on this theme, several questions, which are the conductors of this study, arose. Among them: what are the medications used by nursing mothers and the guidance provided during breastfeeding?

The use of drugs during breastfeeding should be viewed with caution, evaluating the benefit/risk to the baby. Considering this aspect, studies that identify the use of medications during breastfeeding become important. This way, the study aimed to identify the drugs used during the lactation period among women attending a primary health care.

METHOD

Descriptive study with a quantitative, transversal approach, held in a Basic Health Unit, with three teams responsible for the Family Health Strategy (FHS), two during daytime and one at night, in the city of Caucaia-Ceará, Brazil. The population consisted of 520 mothers assisted in the FHS program, the sample was composed by 132 mothers, according to the inclusion criteria for

the nursing mother being on the lactation period in the first six months.

One used as an instrument to collect data in a form with open and closed questions to collect information relating to the object of study. With variables related to age, marital status, occupation, education and descriptions of the products used by nursing mothers. The women were addressed in the guidance room group after nursing consultation by researchers, using a semistructured interview. Data were collected from August to October, 2011, by one of the researchers of the study. The first part of the instrument consisted of identification data and the second of breastfeeding, medications and guidelines.

The data were grouped in charts and then analyzed by simple average. The research followed the standards contained in Resolution No. 196/96 ⁽⁶⁾ of the National Health Council, about the guidelines and rules for research involving humans. The project was

approved by the Research Ethics Committee of the General Hospital of Fortaleza under protocol number 091202/10, it is noteworthy that we sought another institution different from UBS for committee approval because the study site has no ethics committee itself. Survey participants were informed about the aim of the study and they were requested to sign the consent form, signed in two copies, ensuring anonymity and use of the information only for scientific purposes.

RESULTS

The study participants were mothers of a Basic Health Unit who looked for childcare.

Table 1 - Socioeconomic data of the mothers interviewed. Caucaia, CE, Brazil, 2011

Variables	N=132	%	
Age (years) 14 -19 20 -30	33 76	25,0 58,0	
Above 31	23	17,0	
Marital status Maiden Married Consensual union	56 49 27	42,0 37,0 21,0	
Schooling 1 to 3 years 4 to 7 years 8 to 11 years 12 more Unknown	5 26 53 42 6	4,0 20,0 40,0 32,0 4,8	
Occupation Housewife Saleswoman Seamstress Teacher Others Health Problems Unchanged With changes	93 16 5 5 11 114 114	71,0 12,0 4,0 4,0 9,0 86,0 14,0	
Feeding time (days) 0-60 61-120 Above 121	59 38 35	44,6 28,7 26,5	
Total	132	100,0	

Out of the 132 mothers who participated in the survey, 109 (84%) were 30 years old or younger. Out of the mothers, 76 (58%) were married or had a stable relationship. Among the participants, 95 (72%) had education less than 8 years of schooling. As to occupation, 93 (71%) took care of the house (housewives), 16 (12%) salespeople, 5 (4%)

seamstresses, 5 (4%) teachers and 11 (9%) had other occupations. Regarding the presence of health problems, only 18 (14%) showed some pathology, while 114 (86%) did not show any health problems. Regarding the duration of breastfeeding, 59 (44.6%) maintained the child for a period of two months being breastfed.

Table 2 - Description of the medicines used by nursing mothers, health problems after their use and professional who prescribed them. Caucaia, CE, Brazil, 2011

Variables	N	%
Use of Medication		
Yes	105	80,0
No	27	20,0
Types of drugs		
NSAIDs*	82	58,0
Contraceptives	16	12,6
Antianemics	14	11,0
Antibiotics	12	9,0
Antihypertensive	5	4,0
Antacids	3	2,2
Others	9	6,0
Health Problems		
Headache	60	50,0
Infection after surgery	13	11,0
Anemia	9	7,0
Abdominal pain	4	3,0
Hypertension	4	3,0
Hyperthermia	4	3,0
The flu	3	2,2
Others	24	18,0
Who prescribed		
Doctor	71	54,0
Self Medication	25	19,0
Nurse	5	4,0
Family member	4	3,0
Did Not use medicine	27	20,0

^{*} Non-steroidal anti-inflammatory drugs

Out of the 132 study participants, 105 (80%) used medication during breastfeeding, while 27 (20%) did not use any kind of medication. Among the mothers who used drugs, the drugs mentioned were: 82 (58%) NSAIDs, (11%)contraceptives, (11%)12 antianemics, (9%)antibiotics, 5 (4%)antihypertensive, 3 (2%) antacids, 9 (6%) among others. It is important to highlight that some participants used more than one drug. The health problems referred by them, to make use of medication were 60 (50%) Headache, 13 (11%), postoperative infections, 9 (7%) anemia, 4 (3%) Abdominal pain 3 (3%) the flu, 4 (3%) Hypertension, 4 (3%) hyperthermia, 2 (2%) dental pain, 22 (18%) among others. Among the 132 mothers, 76 (58%) received indication of drug use by health professionals, 71 (54%) medical and 5 (4%) nurses, emphasizing self-medication that totaled 25 (19%).

Table 3 - Description of the guidance given to mothers during breastfeeding. Caucaia, CE, Brazil, 2011

Guidelines	N	%	
			•
About medication use*			
Jse drug with medical prescription	33	25,0	
Stop breastfeeding if using medication	9	7,0	
Take paracetamol only	6	4,5	
Do not take antibiotics, it passes into breast milk	5	3 ,8	
Jse medication on time	4	3,0	
Observe the child during the medication	4	3,0	
Take only n-butylscopolamine bromide	2	1,5	
Did not inform guidance	77	58,3	
Questions regarding the use of medication			
f the medication impairs the child			
What medicines can be taken	40	30,0	
What medications the mother cannot take	12	9,0	
What are the side effects for the child	10	8,0	
f the contraceptive dries the milk	8	6,0	
f antibiotics passes into breast milk	5	4,0	
lo doubt and/or curiosity about medication use	3	2,0	
•	54	41,0	

^{*} Obtained more than one response

Among the guidelines that were handed over to the mothers regarding the use of medication, and through closed questions were identified: 33 (25%) did not use medication without medical advice. On the other hand, the majority of mothers, 77 (58%) received no

DISCUSSION

The use of drugs during breastfeeding is a factor to be considered by professionals because of the risks to the mother and her baby. In this study most mothers used some kind of medication.

The medicalization of pregnancy exposes the mother and the baby to risks associated with consumption of drugs, determined by the pharmacotherapeutic needs that are part of the peculiarities of pregnancy, or by supplemental special nutrients (iron, folate), or obstetric complications, which determine the prescription requiring appropriate drug selection to avoid unwanted risks to the pregnant woman, the fetus or the newborn⁽⁷⁾.

guidance about medication use during lactation. Regarding the questions mentioned the most questioned referred to the fact that the medication harms the child, with 30% (40).

Regarding the variable maternal age, the majority belonged to the age group of 20-30, followed by women between 14 and 19 years of age, and finished by women above 31 years old. The finding was similar to other researches that identified the age of the mothers participating: 45% between 20 to 24 years old, 18% 25-29 years old, 14% 30-34 years old, 9%, with the same frequency 35-39 years and higher than or equal to 40 years old, and 5% less than or equal to 19 years old⁽⁸⁻⁹⁾

The majority of the mothers participating in the research were literate, because 64% finished elementary school, some reached high school and college. However, 44.6% breastfed their children up to a maximum of 60 days. The literature states that

education is an important factor in adherence to exclusive breastfeeding until six months of age, because knowledge about the importance of breastfeeding is transmitted in health education sessions promoted by Basic Units of Family Health (BUFH) and in hospitals⁽¹⁰⁻¹¹⁾

Regarding the occupation of mothers, they took care of the house, sharing housework with the child's assistance and care. Other studies show that concerning the profession, half of the mothers do not have a paid job in the formal market, having as their occupation housework, followed by remunerative activities related to the domestic universe, considered basically feminine, such as cleaning lady, secretary and salesperson⁽¹²⁾. It should be highlighted that education promotes access to certain occupations and different levels of income, as well as facilitating access to various health-related behaviors⁽¹³⁾.

Exclusive breastfeeding in the study was lower than recommended by the Ministry of Health, since 44.6% of the mothers breastfed for two months. Early weaning is still a problem and many factors can contribute to such an occurrence. The use of drugs is a contributing factor to the occurrence of early weaning⁽¹⁴⁾.

It is emphasized that the use of medications during breastfeeding is related to the age of the infant, as the risk of adverse effects is influenced by the type of feeding practiced, whether exclusive or not, and the degree of maturity of the main systems of elimination of drugs. Another aspect to be considered in neonates and young infants is the immaturity of the blood brain barrier which promotes increased passage of lipid soluble drugs that act on the central nervous system⁽⁴⁾.

Among the drugs mentioned by mothers, the most commonly used were non-steroidal anti-inflammatory drugs (NSAIDs), such as dipyrone, paracetamol and ibuprofen. It is noteworthy that acetylsalicylic acid (ASA) should be used sparingly

because of adverse reactions produced in the body of the infant. Among the NSAIDs found in the national market, none of them adds contraindication to breastfeeding ⁽¹⁴⁾. Research conducted in the immediate postpartum found a large number of mothers (96.2%) who used medication during breastfeeding, these drugs were grouped in 75.5% painkillers, anti-inflammatory 77.8%, 17.8% antibiotics and 58.8% other types⁽¹⁵⁾.

It was also observed that although the vast majority of medicines have been prescribed by the doctor, a percentage was self-medication. This fact was also reported in another study with mothers after discharge, which found self-medication in almost half ofthe mothers (16).

The association between drug use by the mother and insufficient guidance or not understanding the mothers reveals the need for constant updating of professionals who transcribe or guide the mothers about the use of drugs during lactation. During the consultation, it is extremely important that women are assisted completely, to clarify doubts and overcome difficulties in the role of mother and provider of breastfeeding to the child, being the role of health professionals who work in health services to provide quality care, making the act of breastfeeding pleasurable and not an obligation⁽¹⁷⁾.

Many new drugs have not been adequately studied. Some of the medicines used by lactating women have not clarified the side effect that they can cause to the human fetus. Therefore, it is necessary to reduce the use of medications during lactation, and use, if possible medications that contain information about certain features, such as diffusion through the body, metabolism and excretion through breast milk. Furthermore, it is emphasized that appropriate guidelines regarding the use of medicines benefits both the mother and her child.

CONCLUSION

Considering the results presented, one showed that in spite of the information about the use of medication, some mothers had doubts as to make use of it. Medication use by nursing mothers may have consequences for the baby, because the drugs are excreted through the human milk.

It emphasizes also the importance of women being counseled on the use of medications and breastfeeding in the prenatal consultations and in child care, opportunity to search for relevant information and clarify doubts.

REFERENCES

- 1. Rivemales MC, Azevedo ACC, Bastos PL. Revisão sistemática da produção científica da enfermagem sobre o desmame precoce. Rev Enferm UERJ. 2010; 18(1):132-7.
- 2. Pinheiro PM, Machado MMT, Lindsay AC, Silva AVS. Prevalência de aleitamento materno em mulheres egressas de um hospital amigo da criança em Quixadá-CE. Rev Rene. 2010; 11(2):103-11.
- 3. Ministério da Saúde (BR). Guia alimentar para crianças menores de 2 anos de idade. Brasília: Ministério da Saúde; 2005.
- 4. Chaves RG, Lamounier JA, César CC. Medicamentos e amamentação: atualização e revisão aplicadas à clínica materno-infantil. Rev Paul Pediatr. 2007; 25(3):276-88.
- 5. Ministério da Saúde (BR). Amamentação e uso de medicamentos e outras substâncias. 2ª ed. Brasília: Ministério da Saúde; 2010.
- 6. Conselho Nacional de Saúde. Resolução nº. 196, de 10 de outubro de 1996. Dispõe sobre diretrizes e

Thus, it is the health professionals' role, including nurses, careful research on the use of medications by the mother in order to provide guidelines that can minimize side effects for both mother and child.

It is necessary to direct the attention to breastfeeding and medications, issue little discussed among care professionals who are part of multidisciplinary teams. Therefore, it also belongs to the professional healthcare the function to inform customers about the risk regarding the use of drugs without proper prescription for certain clinical change, because the indiscriminate use of medicines can cause problems for both mother and the baby.

- normas regulamentadoras de pesquisas envolvendo seres humanos. Bioética. 1996; 4(2 Supl):15-25.
- 7. Brum LFS, Pereira P, Felicetti LL, Silveira RD. Utilização de medicamentos por gestantes usuárias do Sistema Único de Saúde no município de Santa Rosa (RS, Brasil). Ciênc Saúde Coletiva. 2011; 16(5):2435-42.
- 8. Lopes ENB, Tavares MJC. Factors leading to early weaning, identified by mothers who had prenatal care in a primary healthcare unit in the municipality of Jundiaí. Nursing. 2010; 13(151):640-5.
- 9. Campana JR, Araújo TAR, Fonseca AS. Breastfeeding: a challenge for university students from a private institution in São Paulo. Nursing. 2009; 12(131):182-9.
- 10. Oliveira AMMM, Marinho HA. Determinação de vitamina A no leite de mães doadoras do banco de leite humano (BLH) de Manaus/ AM: efeitos do processamento. Acta Amaz. 2010; 40(1):59-64.
- 11. Azevedo DS, Reis ACS, Freitas LV, Costa PB, Pinheiro PNC, Damasceno AKC. Conhecimento de primíparas sobre os benefícios do aleitamento materno. Rev Rene. 2010; 11(2):53-62.
- 12. Stefanello J, Nakano MAS, Gomes FA. Crenças e tabus relacionados ao cuidado no pós-parto: o

- significado para um grupo de mulheres. Acta Paul Enferm. 2008; 21(2):275-81.
- 13. Melo SCCS, Pelloso SM, Carvalho MDB, Oliveira NLB. Uso de medicamentos por gestantes usuáriasdos sistema único de saúde. Acta Paul Enferm. 2009; 22(1):66-70.
- 14. Chaves RG, Lamounier JA, César CC, Corradi MAL, Mello RP, Gontijo CM, et al. Amamentação e uso de antiinflamatórios não esteróides pela nutriz: informações científicas versus conteúdo em bulas de medicamentos comercializados no Brasil. Rev Bras Saúde Matern Infant. 2006; 6(3):269-76.
- 15. Lamounier JA, Cabral CM, Oliveira BC, Oliveira AB, Oliveira AM, Silva APA. O uso de medicamentos em puérpuras interfere nas recomendações quanto ao aleitamento materno. J Pediatr. 2002; 77(1):57-61.
- 16. Chaves RG, Lamounier JA, César CC. Self-medication in nursing mothers and its influence on the duration of breastfeeding. J Pediatr. 2009; 85(2):129-34.
- 17. Araújo OD, Cunha AL, Lustosa LR, Nery IS, Mendonça RCM, Campelo SMA. Aleitamento materno: fatores que levam ao desmame precoce. Rev Bras Enferm. 2008; 61(4):488-92.

Received: May. 3th 2012 Accepted: Aug. 23th 2012