

J Nurs UFPE on line. 2019;13:e241927 DOI: 10.5205/1981-8963.2019.241927 https://periodicos.ufpe.br/revist as/revistaenfermagem

ORIGINAL ARTICLE

KNOWLEDGE OF STUDENTS ABOUT BREASTFEEDING* CONHECIMENTO DE ESCOLARES SOBRE ALEITAMENTO MATERNO

CONOCIMIENTO DE ESCUELAS EN LACTANCIA MATERNA

Roseanne de Sousa Nobre¹©, Maurilo de Sousa Franco²©, Gyzelda Barros de Sousa³©, Míria Kayny da Silva Leão⁴©, Hiugo Santos do Vale©⁵, Luisa Helena de Oliveira Lima©6

ABSTRACT

Objective: to evaluate the knowledge level of schoolchildren about breastfeeding. Method: this is a quantitative, descriptive and cross-sectional study in public schools with 752 children. A semi-structured form was applied, and then the data was processed and analyzed using Excel® 2000 and SPSS® software version 20.0 for Windows. For all inferential statistical analyzes, we considered them as statistically significant to those with p <0.05. Results: 307 children were investigated and it is reported that 59.6% of the participants were girls, 78% lived in the urban area and 48.2% of the families received less than one minimum wage. It is revealed that the vast majority of children (57.7%) had regular knowledge about breastfeeding and 36.2%, insufficient and there was no statistically significant association between knowledge and sociodemographic data. Conclusion: the knowledge of schoolchildren about breastfeeding was evaluated and it was concluded that the children have a poor knowledge regarding the duration, the introduction of other liquids, the advantages of breastfeeding and the introduction of other milk, as well as how to use bottles and pacifiers. Descriptors: Breast Feeding; Child Health; School Health Services; School Nursing; Knowledge; Nursing Care.

RESUMO

Objetivo: avaliar o nível de conhecimento de escolares sobre o aleitamento materno. *Método*: trata-se de estudo quantitativo, descritivo e transversal em escolas públicas com 752 crianças. Aplicou-se um formulário semiestruturado, em seguida, os dados foram processados e analisados utilizando-se o *Excel*® 2000 e o *software* SPSS®, versão 20.0, for *Windows*. Consideraram-se, para todas as análises estatísticas inferenciais, como estatisticamente significantes àquelas com p < 0,05. *Resultados*: investigaram-se 307 crianças e informa-se que 59,6% dos participantes eram meninas, 78% residiam na zona urbana e 48,2% das famílias recebiam menos de um salário mínimo. Revela-se que a grande maioria das crianças (57,7%) apresentou conhecimento regular sobre o aleitamento materno e 36,2%, insuficiente e não houve associação estatisticamente significante entre o conhecimento e os dados sociodemográficos. *Conclusão*: avaliou-se o conhecimento de escolares sobre aleitamento materno e conclui-se que as crianças têm um conhecimento insatisfatório no que se refere ao tempo de duração, à introdução de outros líquidos, quanto às vantagens do aleitamento e introdução de outro leite, bem como ao uso de mamadeiras e chupetas. *Descritores*: Aleitamento Materno; Saúde da Criança; Serviços de Saúde Escolar; Serviços de Enfermagem Escolar; Conhecimento; Cuidados de Enfermagem.

RESUMEN

Objetivo: evaluar el nivel de conocimiento de los escolares sobre la lactancia materna. *Método:* este es un estudio cuantitativo, descriptivo y transversal en escuelas públicas con 752 niños. Se aplicó un formulario semiestructurado, luego los datos se procesaron y analizaron con el *Excel*® 2000 y *el software* SPSS®, versión 20.0 para Windows. Para todos los análisis estadísticos inferenciales, los consideramos estadísticamente significativos para aquellos con p <0.05. *Resultados:* se investigaron 307 niños y se informa que el 59.6% de los participantes eran niñas, el 78% vivía en el área urbana y el 48.2% de las familias recibían menos de un salario mínimo. Se revela que la gran mayoría de los niños (57.7%) tenían conocimiento regular sobre la lactancia materna y 36.2%, insuficiente y no hubo asociación estadísticamente significativa entre el conocimiento y los datos sociodemográficos. *Conclusión:* se evaluó el conocimiento de los escolares sobre la lactancia materna y se concluyó que los niños tienen poco conocimiento sobre la duración, la introducción de otros líquidos, las ventajas de la lactancia materna y la introducción de otra leche, así como el uso de biberones y chupetes. *Descriptores:* Lactancia Materna; Salud del Niño; Servicios de Salud Escolar; Servicios de Enfermería Escolar; Conocimiento; Atención de Enfermería.

¹Federal Institute of Alagoas/IFAL. Maceió (AL), Brazil. ¹http://orcid.org/0000-0002-7489-440 ^{2,3}Federal University of Piauí/UFPI. Picos (PI), Brazil²http://orcid.org/0000-0003-0808-3763 ³http://orcid.org/0000-0003-2193-2467 ⁴Federal University of Ceará/UFC. Fortaleza (CE), Brazil. ⁴http://orcid.org/0000-0001-7789-3263 ⁵State University of Maranhão/UEMA. Caxias (MA), Brazil. ⁵http://orcid.org/0000-0001-5282-2418 ⁶Federal University of Piauí/UFPI. Picos (PI), Brazil. ⁶http://orcid.org/0000-0002-1890-859X

*Article extracted from the Course Conclusion Paper << Knowledge of students about breastfeeding >>. Federal University of Piaui. 2018.

Como citar este artigo

INTRODUCTION

It is known that breast milk is considered the ideal food for the child, being the only recommended exclusively up to 60 months of life and complementary up to two years or more. In addition, breastmilk contains all the nutrients essential for infant growth and development, better digestibility and lower allergenicity, and meets all nutritional needs alone and can prevent a variety of infectious and chronic diseases.¹

However, despite efforts to encourage breastfeeding, early weaning is still a challenge faced by health professionals. Nationally, the latest survey on the prevalence of exclusive breastfeeding found that only 9.3% of Brazilian children receive only breast milk until the sixth month of life.² This confirms the importance of new policies to encourage breastfeeding, as well as the creation of new strategies to reach goals.

However, there are several factors and reasons why a woman decides not to breastfeed her child or discontinue the practice before the recommended time. Among these factors are the socioeconomic, cultural, biological and psychic.³ In this context, it is observed that the decision to breastfeed may be related to the qualitative value that women attribute to the act of breastfeeding, which can be conveyed since childhood through family or formal education.⁴

However, although groups of pregnant women act as effective tools for the promotion of breastfeeding, the dissemination of knowledge should not be restricted to prenatal or postpartum only. In this perspective, it is emphasized that this teaching should be started much earlier, even in the childhood phase. It is inferred that the sooner children become more familiar with the subject, the more likely they will be to give greater importance to this practice as adults and thus influence the practice of breastfeeding.⁵

However, it is pointed out that the school is configured as a space for forming opinions and acquiring knowledge and can act in the formation of students on health issues, including breastfeeding. It is believed that, by disseminating information about breastfeeding among the school public, knowledge can be perpetuated until adulthood, as children are considered excellent vehicles for transmitting information and can encourage women in the family or community to breastfeed and, especially, to breastfeed their own children.⁵

It is noteworthy that research with preschoolers on the importance of breastfeeding is still incipient, revealing the greater need to work with this theme, with a view to establishing and rooting this habit since childhood.

Thus, it is believed that knowledge about these aspects in the school phase will contribute, in a

sustained way, to the awakening to the need to implement breastfeeding promotion measures since childhood and, thus, contribute to the protection, promotion and support breastfeeding as a public health priority.

OBJECTIVE

• To assess students' level of knowledge about breastfeeding.

METHOD

This is a quantitative, descriptive and cross-sectional study conducted in public schools in the city of Picos-PI, Northeast Brazil, which has schools located in urban and rural areas that were chosen for having students enrolled in the age group of 7 to 9 years. The population consisted of 752 children of both sexes. For the calculation of the sample size, the formula for cross-sectional studies with finite population was used.⁶

The parameters considered were the 95% confidence coefficient (1.96) and the 5% sampling error. From the application of the formula, a total of 307 participants were divided into ten schools in the urban area. Proportionally, participants were selected according to the number of students enrolled in each school.

Data was collected from August/2017 to February/2018, respecting school holidays. A semi-structured form was applied, which was answered in the schools. It is noted that the filling took place in a room indicated by the school management, safeguarding the student's confidentiality and privacy.

The form used for the collection was divided into two parts: socioeconomic variables and knowledge variables. In addition, as a way of characterizing the level of knowledge regarding breastfeeding, it was classified as excellent, good, fair and insufficient.

Considering the results obtained, the knowledge scores were classified as follows: optimal> 76% correct answers; good, from 51 to 75% of hits; 26 to 50% hits and insufficient <25% hits.⁷

It is emphasized that the data received descriptive treatment and were tabulated, interpreted, processed and analyzed, using the computer programs Excel® 2000 and the software SPSS®, version 20.0, for Windows, where the absolute frequencies were generated and, subsequently, the likelihood ratio was applied to the association of qualitative variables. For all inferential statistical analyzes, those with p <0.05 were considered statistically significant.

The research began after approval by the Ethics and Research Committee of the Federal University of Piauí with opinion number: 1.840.137. Thus, the formal requirements laid down in Resolution 466/12 of the National Health Council/Ministry of

Health - NHC/MH.⁸ were met. Those who agreed to participate were given a Free and Informed Consent Term (FICT), which was signed by their respective parents or guardians, as well as the Free and Informed Assent Term (FIAT).

RESULTS

The following are the results alluding to sociodemographic data, students' knowledge about exclusive breastfeeding, breastfeeding and complementary feeding regarding the analysis of the variables obtained through the investigation conducted with 307 children enrolled in municipal schools in the city of Picos-PI.

Table 1. Characterization of the sample in relation to sociodemographic variables. Picos (PI) Brazil, 2019.

Variables	n	%
1.Sex		
Female	183	59.6
Male	124	40.4
2. Age		
7 years	129	42
8 years	106	34.5
9 years	72	23.5
3. Color		
Brown	150	48.9
Whte	116	37.8
Black	33	10.7
Yellow	8	2.6
4. Living		
Urban zone	241	78.5
Rural zone	54	17.6
Don't know	12	3.9
5. Religion		
Catholic	184	59.9
Evangelical	76	24.8
Without religion	39	12.7
Spiritist	4 3	1.3
Jehovah's Witness	3	1.0
Jewish Congregation	1	0.3
6. Income		
< = 1 minimum wage	148	48.2
>= 2 minimum wages	91	29.6
Don't know	68	22.1
7. Education		
2nd year	155	50.5
3rd year	108	35.2
4th year	44	14.3

Table 2. Schoolchildren's knowledge of exclusive breastfeeding, breastfeeding, complementary feeding, introduction of other fluids during exclusive breastfeeding, advantages of breastfeeding, and knowledge of the use of other milk, bottles and pacifiers. Picos(PI) Brazil, 2019.

Variables	n	%
1. Exclusive breastfeeding		
Yes	21	6.8
No	286	93.2
2. Maternal breastfeeding		
Yes	25	8.1
No	281	91.5
Did not respond	1	0.3
3. Alimentação complementar		
Yes	42	13.7
No	265	86.3
4. AMEX water consumption		
Yes	180	58.6
No	118	38.4
Did not respond	9	2.9
5. AMEX tea Consumption		
Yes	123	40.1
No	178	58.0
Não sabe	6	2.0
6. AMEX Juice consumption		
Yes	132	43.0
No	172	56.0
Does not know	3	1.0
7. Is there any advantage for the baby in		
breastfeeding?		
Yes	238	77.5
No	54	17.6
Did not respond	15	4.9
8. Is it correct to give the baby another type		
of milk?		
Yes	144	46.9
No	163	53.1
9. Is it right to give the baby a bottle and a		
pacifier?		
Yes	227	73.9
No	80	26.1
10. Is it correct to give the baby another		
milk?		
Yes	144	46.9
No	163	53.1

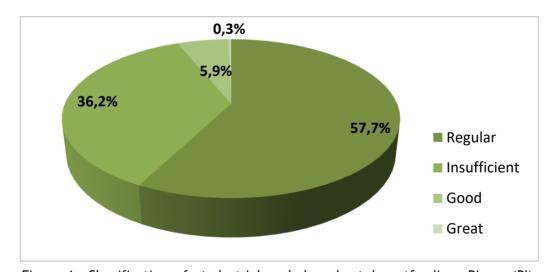


Figure 1. Classification of students' knowledge about breastfeeding. Picos, (PI) Brazil, 2018.

Table 3. Relationship between students' general knowledge about breastfeeding and sociodemographic factors. Picos (PI) Brazil. 2019.

breastreeding and sociodemographic factors. Picos (PI) Brazil, 2019.									
Knowledge									
Variables	Insuf	ficient	Reg	gular	G	ood	Gı	reat	p value*
	n	%	N	%	n	%	n	%	value
1. Sex									0. 384
Female	71	38.8	101	55.2	11	6	-	-	
Male	40	32.3	76	61.3	7	5.6	1	0.8	
Age group									0.441
7 years	55	42.6	67	51.9	7	5.4	-	-	
8 years	34	32.1	65	61.3	6	5.7	1	0.9	
9 years	22	30.6	45	62.5	5	6.9	-	-	
3. Color									0.257
White	40	35.7	66	58.9	6	5.4	-	-	
Brown	51	34	88	58.7	11	7.3	-	-	
Black	15	46.9	16	50	-	-	1	3.1	
Yellow	3	37.5	5	62.5	-	-	-	-	
4. Religion									0.549
Catholic	70	38.7	102	56.4	9	5	-	-	
Evangelical	22	29.7	49	66.2	2	2.71	1	1.4	
Jehovah's	1	33.3	2	66.7	-	-	-	-	
Witness									
Spiritist	2	50	2	50	-		-	-	
Without	14	35.9	19	48.7	6	15.4	-	-	
religion									
Jewish	-	-	1	100	-	-	-	-	
congragation									
5. Housing									0.324
Zone									
Urban	85	36	137	58.1	14	5.9		-	
Rural	18	33.3	32	59.3	3	5.6	1	1.9	

Likelihood ratio *

Table 3 shows that there was no statistically significant association between schoolchildren's knowledge and sociodemographic data.

DISCUSSION

In this study, the knowledge level of students enrolled in public schools in the city of Picos-PI about breastfeeding was evaluated. Thus, the discussion with the national and international literature was confronted for the elaboration of the discussion.

It is noteworthy, when analyzing the studied sample, that the majority of the investigated children were female, predominantly schoolchildren aged eight years, white, resident in the urban area, of catholic religion, with income less than or equal to one minimum wage and predominant education of 2nd year of elementary school.

Similarly, studies were conducted with this public to investigate the preventive effect of exclusive breastfeeding up to six months on the pubertal development of children aged seven to nine, reflecting that the female audience is the most frequent. It was possible to verify, by examining the age and sex relationship of the students, that there were no statistically significant differences between the level of knowledge when associated with age and gender.

In this context, it is recommended by the Ministry of Health, ¹ that breastfeeding should be performed for two years or more, being exclusive

in the first six months, and from then on, breast milk supplementation with other foods begins. In this study, it is evident that the students did not respond adequately when asked about what the types of breastfeeding were about (exclusive breastfeeding, breastfeeding and complementary feeding), thus not knowing how to differentiate them. It is emphasized that these data are in line with what is portrayed by the II Prevalence Survey on breastfeeding in the capitals and the Federal District, as they show that the low level of knowledge of students about this practice reflects directly on the institution of this habit in adulthood. ²⁻¹⁰

It is for the World Health Organization,¹¹ as exclusive breastfeeding, the period when the child receives only breast milk, direct from the breast or milked, or human milk from another source, with no other liquids or solids, except for drops or syrups containing vitamins, oral rehydration salts, supplements minerals or medicines. Thus, during this period, it is not recommended to offer water, tea or juice to the child.¹²

Regarding the approach to the introduction of liquids other than breast milk, it can be seen that the results presented showed that the vast majority of students stated that water intake is correct, that tea is not correct and it is not correct to drink juices.

Although widely reported that, before six months of age, the gastrointestinal system of the baby is immature, the introduction of other fluids should be avoided, as there is evidence that the use generates early weaning and increased infant morbidity and mortality, this practice is still verified.¹

From this perspective, it is shown with this study that most students responded inappropriately when asked about the water supply during exclusive breastfeeding and adequately about the offer of tea and juice in the same period. This shows a little of the culture found in the country where, for example, in the Northeast, mothers still consider that water is one of the factors that guarantee the survival of the child and teas are used as "medicines" in colic, difficulty sleeping, gas and calming children.¹⁰

Regarding the advantages of breastfeeding, 78.4% of students said that there are advantages to breastfeeding. These advantages include a variety of actors, including family, society and the environment, contributing to a healthier, more equitable and sustainable world, as well as reducing health care spending.¹³

Above all, it should be noted that when asked about the use of other milk, most stated that it was correct. However, it is shown in the literature that there are risks of the use of other milk in the child's diet, because during preparation, the milk is susceptible to contamination risk, as well as to the incorrect reconstitution, which may accentuate its inadequacy of the physiological and nutritional perspective of the child, causing risks to the infant's life.¹⁴

It was evident, regarding the use of pacifiers and bottles, that almost all of the respondents said they thought it was correct to use it. This finding is corroborated by a study conducted with a similar audience, which showed that 83% of the children used pacifiers and that they see mothers feeding their children with bottles (37.4%). 15

It is added, according to the World Health Organization and the Ministry of Health, regarding the use of pacifiers and other types of nipples, it is evident that the use of these devices is harmful to the health of the child and may lead to early weaning, It has serious consequences for the child, and its use is associated with the transmission of infections, such as oral candidiasis, as well as damage to the oral motor function, playing an important role in mouth breathing syndrome and also in the child's sucking and speaking problems caused by sucking the nozzle.¹⁵⁻⁶

Regarding the knowledge variables of the students about breastfeeding, the results show that more than half of the population demonstrated to have regular knowledge on the subject. It was noticed in research conducted in Brazil that this fact shows that there is still little

information on breastfeeding focused on children and that much remains to be done.⁴⁻¹⁷

This confirms the need for health professionals to act in order to introduce breastfeeding knowledge early and its benefits to school-age children. It is noteworthy that, in order to build a multi-professional and inter-sectoral dialogue, not only health professionals, but also education professionals, should act so as to promote the wide dissemination of learning on the subject.

this sense, it is emphasized breastfeeding education is essential for these students to increase the dissemination of the subject and their knowledge. By introducing knowledge to children, it may be possible for them to value the practice of breastfeeding when they become adults, as well as to influence other people in the environment in which they live. Thus, it is believed that the introduction of this theme at school age will facilitate and promote families' awareness of the importance and practice of breastfeeding and the benefits it brings to children and families, reducing infant mortality rates, such as also promoting a better quality of life for children and their families, as well as the cultural institution of the ancient practice of breastfeeding.

CONCLUSION

This study assessed the knowledge of schoolchildren about breastfeeding and concluded that children have a poor knowledge regarding the duration of time, the introduction of other fluids, the advantages of breastfeeding and the introduction of other milks, as well as the use of bottles and pacifiers.

It is noteworthy here that there was no significant association between knowledge about the subject with age, gender, skin color, religion or area of residence of the sample.

REFERENCES

- 1. Ministério da Saúde (BR), Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Saúde da criança: aleitamento materno e alimentação complementar [Internet]. Brasília: Ministério da Saúde; 2015 [cited 2019 June 01]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/saude_crianca_aleitamento_materno_cab23.pdf
- 2. Ministério da Saúde (BR), Secretaria de Atenção à Saúde, Departamento de Ações Programáticas e Estratégicas. II Pesquisa Prevalência do Aleitamento Materno nas Capitais Brasileiras e Distrito Federal [Internet]. Brasília: Ministério da Saúde; 2009 [cited 2019 June 01]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/pesquisa_prevalencia_aleitamento_materno.pdf
- 3. Padro CVC, Fabbro MRC, Ferreira GI. Early weaning from breastfeeding from mothers' perspective: a dialogical approach. Texto context-

- enferm. 2016 June; 25(2):e15800159. DOI: 10.1590/0104-07072016001580015
- 4. Galvão DMPG, Silva IA. The approach to breastfeeding in the first years of elementary school. Rev Esc Enferm USP. 2013 Apr; 47(2):477-85. DOI: 10.1590/S0080-62342013000200029
- 5. Martins FDP, Pontes CM, Javorski M, Gomes LF, Barros ACR, Leal LP. Construção e validação de instrumento avaliativo do conhecimento de escolares sobre amamentação. Acta Paul Enferm. 2017 Sept/Oct; 30(5):466-78. DOI: 10.1590/1982-0194201700068
- 6. Luiz RR, Magnanini MM. O tamanho da amostra em investigações epidemiológicas. São Paulo: Atheneu: 2006.
- 7. Beghini AB, Salimena AMO, Melo MCSC, Souza IEO. Nursing students' adhesion to gynaecological cancer: from theory to practice. Texto contextoenferm. 2006 Oct/Dec;15(4):637-44. DOI: 10.1590/S0104-07072006000400012
- 8. Ministério da Saúde (BR), Conselho Nacional de Saúde. Resolução nº 466, de 12 de dezembro de 2012 [Internet]. Brasília: Ministério da Saúde; 2012 [cited 2019 June 1]. Available from: http://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf
- 9. Lee HA, Kim YJ, Lee H, Gwak HS, Hong YS, Kim HS, et al. The preventive effect of breast-feeding for longer than 6 months on early pubertal development among children aged 7-9 years in Korea. Public Health Nutr. 2015 Dec;18(18):3300-7.DOI: 10.1017/S1368980015000518
- 10. Abreu LAO, Albergaria TFS, Santos GM, Silva LR. Breastfeeding: knowledge of male students in the last year of medical course. Arq Ciênc Saúde. 2018 Jan/Mar;25(1):65-70. DOI: 10.17696/2318-3691.25.1.2018.843
- 11. World Health Organization. Indicators for assessing infant and young child feeding practices: conclusions of a consensus meeting held 6-8 November [Internet]. Geneva: WHO; 2007 [cited 2019 June 01]. Available from: https://apps.who.int/iris/bitstream/handle/1066 5/43895/9789241596664_eng.pdf; jsessionid=77CB AE04F10E3E468FC13526CE94F74A?sequence=1
- 12. Leite MGB, Lima RF, Moura WA, Targino VP, Soares JG, Vasconcelos LPF, et al. Aleitamento materno exclusivo: olhar das nutrizes do interior do Paraibano. REAS/EJCH [Internet] 2018 [cited 2019 June 01];17(e55). Available from: https://acervomais.com.br/index.php/saude/article/view/55
- 13. Martins FDP, Leal LP, Guedes TG, Javorski M, Pontes CM. Promotion of breastfeeding on primary education: integrative review. Rev eletrônica enferm. 2016 Dec;18:e1198. DOI: 10.5216/ree.v18.40682
- 14. Santos FC, Silva Junior AFB, Lima JPS, Fontoura VM, Santos FAAS, Santos Neto M. Feeding practices among children under one year of age

- admitted to a public hospital. Enferm Glob. 2019 Jan;1(53):464-98. DOI: 10.6018/eglobal.18.1.301541.
- 15. Galvão DMPG, Silva IA. Portuguese school children breastfeeding experiences. Rev Esc Enferm USP. 2011 Oct;5(45):1055-62. DOI: 10. 1590/S0080-62342011000500004
- 16. Victora C, Bahl R, Barros A, França G, Horton S, Krasevec J, et al. The Lancet Breastfeeding Series Group. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet 2016 Jan;387:475-90. DOI: 10.1016/S0140-6736(15)01024-7
- 17. Rabello FB, Mariot MDM. Difficulties alleged by nursing mothers in the maternal breastfeeding process: an integrative review. Rev Cuidado em Enfermagem Cesuca [Internet]. 2019 Feb [cited 2019 Aug 10];5(6):68-81. Available from: http://ojs.cesuca.edu.br/index.php/revistaenfermagem/article/view/1421

Corresponding author

Roseanne de Sousa Nobre

Email: roseannenobre.2015@gmail.com

Submission: 2018/07/06 Accepted: 2019/11/05

Copyright© 2019 Journal of Nursing UFPE on line/JNOUL.

This is an Open Access article distributed under the terms of the <u>Creative Commons Attribution-ShareAlike 4.0 International License</u>. This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. Recommended for maximum dissemination and use of licensed materials.