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Knowledge of community health workers about breastfeeding

Conhecimento dos agentes comunitários de saúde sobre o aleitamento materno

Conocimiento de los trabajadores comunitarios de la salud sobre la lactancia materna

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ABSTRACT

Objective: to analyze knowledge about breastfeeding and the factors associated with this understanding among community health agents. **Method:** quantitative, descriptive-analytical, cross-sectional study, carried out with 153 CHAs from Senhor do Bonfim, Bahia. To verify the variables associated with knowledge about breastfeeding, bivariate analysis was carried out (Odds Ratio, 95% Confidence Interval and Chi-square/Fisher Tests) and adjusted analysis using Multiple Logistic Regression (Stepwise). **Results:** the study showed that community health agents have a high level of knowledge about breastfeeding. There was an association between knowledge about breastfeeding and having children, working in the Family Health Strategy, having participated in training and high knowledge about the general responsibilities of the profession. **Conclusion:** Professionals have an adequate understanding of the topic. However, important mistakes were observed and, if passed on to the community, they could harm the installation and maintenance of breastfeeding.

Descriptors: Primary Health Care; Nursing; Community Health Workers; Breast Feeding; Knowledge.

RESUMO

Objetivo: analisar o conhecimento sobre aleitamento materno e os fatores associados a esse entendimento entre agentes comunitários de saúde. **Método:** estudo quantitativo, descritivo-analítico, transversal, realizado com 153 ACS de Senhor do Bonfim, Bahia. Para a verificação das variáveis associadas ao conhecimento sobre aleitamento, realizou-se análise bivariada (*Odds Ratio*, Intervalo de Confiança 95% e Testes Qui-quadrado/Fisher) e análise ajustada através da Regressão Logística Múltipla (Stepwise). **Resultados:** o estudo mostrou que os agentes comunitários de saúde apresentam elevado nível de conhecimento sobre aleitamento materno. Houve associação entre o conhecimento sobre aleitamento materno e ter filhos, trabalhar na Estratégia de Saúde da Família, ter participado de capacitação e alto conhecimento sobre as atribuições gerais da profissão. **Conclusão:** Os profissionais possuem adequado entendimento sobre a temática. Todavia, importantes equívocos foram observados e caso repassados para a comunidade podem prejudicar a instalação e manutenção do aleitamento materno. **Descritores:** Atenção Primária à Saúde; Enfermagem; Agentes Comunitários de Saúde; Aleitamento Materno; Conhecimento.

RESUMEN

Objetivo: analizar el conocimiento sobre lactancia materna y los factores asociados a ese entendimiento entre agentes comunitarios de salud. **Método**: estudio cuantitativo, descriptivo-analítico, transversal, realizado con 153 ACS del *Senhor do Bonfim*, Bahía. Para verificar las variables asociadas al conocimiento sobre lactancia materna, se realizó análisis bivariado (Odds Ratio, Intervalo de Confianza del 95% y Pruebas Chi-cuadrado/Fisher) y análisis ajustado mediante Regresión Logística Múltiple (Stepwise). **Resultados**: el estudio demostró que los agentes comunitarios de salud tienen un alto nivel de conocimiento sobre la lactancia materna. Hubo asociación entre conocimiento sobre lactancia materna y tener hijos, trabajar en la Estrategia Salud de la Familia, haber participado en capacitaciones y alto conocimiento sobre las responsabilidades generales de la profesión. Conclusión: Los profesionales tienen un conocimiento adecuado del tema. Sin embargo, se observaron errores importantes que, de transmitirse a la comunidad, podrían perjudicar la instalación y el mantenimiento de la lactancia materna. **Descriptores:** Atención Primaria de Salud; Enfermería; Agentes Comunitarios de Salud; Lactancia Materna; Conocimiento.

INTRODUCTION

The World Health Organization (WHO) and the Brazilian Ministry of Health (Portuguese Acronym: MS) recommend Exclusive Breastfeeding (EB) for the first six months of life and supplementation for up to two years or more¹. Such recommendations are appropriate since Breastfeeding (BF) provides several benefits both to nursing mothers and newborns.

For infants, breastfeeding provides better nutrition as well as weight and height gain, reduction of infant mortality, reduction of morbidity caused by diarrhea and respiratory infections, decrease in allergies and chronic non-communicable diseases in adulthood, and better intellectual and oral cavity development¹.

For women, breastfeeding protects against diabetes mellitus and gestational diabetes as well as breast, ovarian and cervical cancers, postpartum anemia, it helps the uterus return to its normal size and eliminate waste products from childbirth².



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Breastfeeding is an ancient practice, but it is still recognized for its great nutritional, economic, immunological, cognitive, and social benefits³. Furthermore, the benefits of breastfeeding are not limited to the duration of the practice itself, but extend into adulthood, providing long-term quality of life³.

Breastfeeding is not an easy process; therefore, guidance and clinical management focused on this practice must begin during prenatal care. Expectant mothers must have an early understanding of aspects such as lactation physiology and the benefits it brings for themselves and the child, signs of hypoglycemia, intervals between feeds, among other guidelines that may contribute to greater adherence to breastfeeding by women⁴.

According to the most recent National Survey on Child Nutrition (Portuguese Acronym: ENANI), among children under four months of age, the prevalence of exclusive breastfeeding in 2019 was 60.0% in Brazil⁵. For advances to occur regarding this practice, Primary Health Care (PHC) stands as the primordial health level for promoting breastfeeding, especially in terms of providing support and guidance to health professionals, which includes the Community Health Agents (CHA).

The CHA is a worker whose main roles include registering and monitoring families through home visits, developing actions that integrate the community and the Family Health Strategy (FHS), and developing health-promoting activities through individual and collective educational actions⁶.

Furthermore, the community agent is the healthcare professional with greater proximity to the nursing mothers and, therefore, they have an important part in the success of BF, as they carry out an integrated work of support and clarify the questions of pregnant and lactating women, in addition to acting as an integrative link between health unit professionals and the community/family⁶.

However, in order to ensure that the work of the CHA has a positive impact and promotes greater adherence to EBF for the first six months of life and encourages mixed breastfeeding for the first two years of life, it is important that this professional is prepared to provide pregnant and postpartum women with knowledge about the practice and benefits of breastfeeding for the mother-child binomial.

Thus, this study aimed to analyze the knowledge about breastfeeding and the factors associated with this understanding among community health agents.

METHOD

This is a quantitative, descriptive-analytical, cross-sectional study. It was developed in all the Basic Health Units with professionals of the Family Health Teams or the Community Health Agents Program (Portuguese Acronym: PACS) located in the rural and urban areas of the municipality of Senhor do Bonfim, in the state of Bahia, with an estimated population of 79,813 inhabitants in 2021 and a Municipal Human Development Index (MHDI) of 0.666 (medium level of development)⁷.

The MHDI is calculated based on income, longevity, level of education and its rating varies from 0 to 1: very low (0 to 04.99), low (0.500 to 0.599), medium (0.600 to 0.699), high (0.700 to 0.799) and very high (0.800 to $1)^7$.

The target population for the study was made up of Community Health Agents belonging both to the FHS, with ten teams in the urban area and six in the rural area, and the PACS teams, with two teams in the urban area and two in the rural area allocated in the referred municipality.

The inclusion criteria were CHAs working in the health units of Senhor do Bonfim who were active in their role during the period of data collection and had at least one year of experience as a CHA.

The exclusion criteria were CHAs on sick leave or in a different role during the period of data collection, as well as professionals with less than 1 year of experience in the profession.

Initially, there was a total population of 175 CHAs working in the city. However, there were 22 losses related to the following aspects: less than one year of experience as a CHA, work leave enforced by the National Social Security Institute, maternity leave, vacation, refusal to participate in the study, medical certificate and non-attendance on the date of completion of the questionnaire without any justification, even though three attempts were made to invite the referred professionals. As a result, in the end, 153 CHAs were surveyed (87.5% of the total number of professionals).

This study is part of the research protocol known as "Analysis of knowledge of Community Health Agents about prenatal care", whose purpose is to evaluate the level of knowledge of the CHAs regarding their profession, prenatal care, postpartum care, and Breastfeeding. To this end, a questionnaire with 97 questions was created based both on a literature review on the above-mentioned topics and a similar study carried out in the city of Ribeirão Preto, in the state of São Paulo⁸.

The questionnaire was divided into nine blocks: block 1 - identification (CHA's sociodemographic and professional data); block 2 - aspects relating to their professional performance; block 3 – work of the CHA with pregnant women in the priority group; block 4 – routine tests and vaccines required during pregnancy; block 5 -

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guidance for pregnant women to be provided by CHAs regarding prenatal care; block 6 – warning signs and symptoms of risk during pregnancy and signs of labor; block 7 - postpartum aspects; block 8 – Breastfeeding practice.

The blocks focused on knowledge-based aspects included statements about the respective topics and the CHA had to mark the alternative as "true", "false" or "does not know" the answer. To analyze the knowledge of these CHAs about the BF practice in this context, the questions in block 8 (13 questions) were analyzed.

Data collection took place between November 2019 and February 2020 in all the 16 health units found in the municipality.

The data collection team consisted of three undergraduate students of a Nursing course. Before conducting the interview with the CHAs, a training session was carried out with the researchers and a data collection guide was drawn up to improve the quality of field work.

Initially, the FHS Team and the PACS Team were contacted in order to explain to the CHAs and the coordinating nurses of each team the purpose of the study and how the process of data collection would occur.

Furthermore, an agreement was reached on when the questionnaire would be applied in the health unit itself, based on the dates and times provided by the referred team. Regarding the application of the questionnaire, a limit of up to three attempts of contact was established before excluding the participant.

On the agreed date, the researcher went to the Basic Health Unit and the meeting with the CHAs took place in a separate room. Before filling out the questionnaire, the professionals were once again informed about the purpose of the research and about the details related to the data collection process.

During the entire period in which the CHAs were filling out the questionnaire, the researcher remained in the room to clarify potential doubts, as well as to ensure that the professionals did not access their cell phones or consult their colleagues, which could bias the study's result.

To type the database and perform the statistical analysis, the Statistical Package for Social Sciences (IBM SPSS[®]) software, version 19, was used. The database was entered twice, and then possible typing errors were analyzed based on the comparison between simple frequencies of the variables among the databases, followed by the correction of typing errors.

Initially, a descriptive analysis was carried out based on the simple and relative frequencies of the sociodemographic/professional variables and based on the statements related to the knowledge of the professionals.

To verify the factors associated with knowledge about BF, a dependent variable called "Knowledge about Breastfeeding" was constructed based on the questions included in block VIII (13 statements), which covered knowledge about different aspects of the breastfeeding practice. This variable was divided into two categories: "Low Knowledge" and "High Knowledge".

These categories were developed based on the median of the total number of correct answers given to the questions related to BF. The median found was 10, therefore, those who answered 11 or more questions correctly were rated as having "High Knowledge" and those who answered 10 or less questions correctly were rated as having "Low Knowledge".

The independent variables included sociodemographic/professional characteristics such as: gender, age, race/skin color, children, schooling, social class, time working as a CHA, work team, course in the health area, BF training and knowledge on the CHA's duties.

This last variable derived from the nine statements included in block 2 and was divided into two categories, also elaborated from the calculation of the median (9 questions) of the total number of correct answers (with a minimum of 0 and a maximum of 9 correct answers). "Low Knowledge about the profession's duties" indicated that the CHA answered up to 8 questions correctly, and "High Knowledge" indicated that all 9 alternatives were answered correctly.

To verify the associations between the independent and dependent variables, the study used the Odds Ratio (OR), the 95% Confidence Interval (CI), and the Chi-square/Fisher's Exact Tests (significant association when p value < 0, 05), followed by the Multiple Logistic Regression method (Stepwise).

The inclusion and exclusion criteria were guaranteed and the CHAs that agreed to participate in the research signed the Free and Informed Consent Form (Portuguese Acronym: TCLE) and completed the self-administered questionnaire, plus the research protocol was approved by the Research Ethics Committee (CEP) of the institution involved.

RESULTS

Among the 153 CHAs interviewed, 75.2% were female (n=115), 57.5% were over 45 years old (n=88), 88.2% selfdeclared as black/brown (n =135), 62.1% had 12 or more years of study (n=95), 68% belonged to social class C/D or E





(n=104), 80% had already participated in training programs focused on BF (n= 123) and 43.1% had low knowledge about the profession's duties (n=66). Table 1 presents the results of the bivariate analysis.

TABLE 1: Sociodemographic/professional characteristics about BF among the Community Health Agents in the municipality of Senhor do Bonfim, BA, Brazil, 2020.

	Knowledge about Breastfeeding				
	Total	Low	High		p-
Sociodemographic/ professional characteristics	N(%)	N(%)	N(%)	OR (95% CI)	value*
Gender					0.311
Male	38 (24.8)	26 (28.3)	12 (19.7)	1	
Female	115 (75.2)	66 (71.7)	49 (80.3)	1.6 (0.7-3.8)	
Age (years old)					0.125
< 45	65 (42.5)	34 (37.0)	31 (51.0)	1	
≥ 45	88 (57.5)	58 (63.0)	30 (49.0)	0.6 (0.2- 1.1)	
Race/Skin color					1
Black/Brown	135 (88.2)	81 (88.0)	54 (88.5)	1	
Not black/Brown	18 (11.8)	11 (12.0)	7 (11.5)	0.9 (0.3-2.9)	
Children					0.270
Yes	128 (83.7)	74 (80.4)	54 (88.5)	1.86 (0.7-5.7)	
No	25 (16.3)	18 (19.6)	7 (11.5)	1	
Schooling (years)					0.580
< 12	58 (37.9)	37 (40.2)	21 (34.4)	1	
≥ 12	95 (62.1)	55 (59.8)	40 (65.6)	1.3 (0.6-2.7)	
Social class ^a					0.294
A or B	49 (32.0)	26 (28.3)	23 (37.7)	1.5 (0.7-3.2)	
C, D or E	104 (68.0)	66 (71.7)	38 (62.3)	1	
Time working as a CHA					0.258
<15	83 (54.2)	46 (50.0)	37 (60.7)	1	
≥ 15	70 (45.8)	46 (50.0)	24 (39.3)	0.6 (0.3-1.3)	
Work team					0.001
PACS	43 (28.1)	35 (38.0)	8 (13.1)	1	
FHS	110 (71.9)	57 (62.0)	53 (86.9)	4.0 (1.6-11)	
Course in the health area					0.882
Yes	55 (35.9)	34 (37.0)	21 (34.4)	0.9 (0.4-1.8)	
No	98 (64.1)	58 (63.0)	40 (65.6)	1	
Breastfeeding training					3.441
Yes	123 (80.0)	69 (75.0)	54 (88.5)	2.5 (1-7.5)	
No	30 (20.0)	23 (25.0)	7 (11.5)	1	
Knowledge of the duties					0.108
Low	66 (43.1)	45 (49.0)	21 (34.4)	1	
High	87 (56.9)	47 (51.0)	40 (65.6)	1.8 (0.9-3.8)	

Notes: ^aAverage monthly income of class A (>20 minimum wages), class B (>5 and <10 minimum wages), class C (> 1 and <3), classes D and E (< 1 minimum wage). The minimum wage in reais (Brazilian currency) in Brazil at the time of the research was R\$ 1,045.00. CHA – Community Health Agent; PACS – Community Health Agents Program; FHS – Family Health Strategy.

OR - Odds Ratio; *P value: Chi-square/Fisher's Exact Tests.

It was observed an association between the knowledge about BF and the professional experience in a Family Health Team (p=0.001). Regarding the level of knowledge about Breastfeeding, 61.4% of the CHAs (n=59) showed high knowledge (11 or more questions answered correctly). Table 2 shows the adjusted analysis.



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Table 2: Estimates of adjusted odds ratios (Odds Ratio – OR) andcorresponding Confidence Intervals (95%CI) for the variables analyzed inthe multiple regression model (Stepwise) among Community HealthAgents in the municipality of Senhor do Bonfim, BA, Brazil, 2020.

e		
Sociodemographic/professional	Adjusted OR	
variables	(CI 95%)	р*
Children		0.045
Yes	2.9 (1.06-8.8)	
No	1	
Work team		0.001
PACS	1	
FHS	4.3 (1.85-11.4)	
Breastfeeding Training		0.017
Yes	3.2 (1.3-9.3)	
No	1	
Knowledge of the duties		0.032
Low	1	
High	2.2 (1.08-4.8)	

Notes: PACS – Community Health Agents Program; FHS – Family Health Strategy; OR - Odds Ratio; CI - 95% Confidence Interval; *P value: Chi-square/Fisher's Exact Tests.

There was an association between knowledge about Breastfeeding and the following variables: having children, working in an FHS, having participated in training programs focused on BF and having high knowledge about the general duties of the profession. Table 3 presents data related to the knowledge of CHAs about BF.

Table 3: Knowledge of Community Health Agents about Breastfeeding, municipality of Senhor do Bonfim, BA, Brazil, 2020.

Statements are and in the sussiin and in	Correct answer	Error	Does not know
Statements presented in the questionnaire	N (%)	N (%)	N (%)
It is important that infants are breastfed every 3 hours so that they don't wake up several times during the night (F).	56 (36.6)	86 (56.2)	11 (7.2)
Infants must be breastfed for 10 minutes per breast, and a switch from one breast to the other must always occur after this period (F).	67 (43.8)	77 (50.3)	9 (5.9)
It is advisable that pregnant women take the following daily care: Use a scrub brush on their nipples, wash their breasts with plenty of soap and then moisturize them with creams or ointments (F).	111 (72.5)	33 (21.6)	9 (5.9)
Breast milk cannot be stored in the refrigerator and then offered to the baby (F).	131 (85.6)	22 (14.4)	0
Some mothers have low or weak milk production, and, in these cases, it is necessary to use other sources of milk (F).	131 (85.6)	20 (13.1)	2 (1.3)
The position in which the mother holds the infant while breastfeeding does not result in the quality of the breastfeeding session (F).	132 (86.3)	19 (12.4)	2 (1.3)
Stress, tiredness, concerns, poor sleep and bad nutrition are factors that can negatively affect breastfeeding (T).	146 (95.4)	7 (4.6)	0
The Ministry of Health recommends Breastfeeding for two years or beyond and infants must be exclusively breastfed during the first six months of life. (T)	147 (96.1)	6 (3.9)	0
The use of pacifiers and baby bottles is recommended from the 1st week of the infant's life, as they contribute to the breastfeeding process (F).	147 (96.1)	4 (2.6)	2 (1.3)
Breastfed infants have less risk of infections, diarrhea, allergies, hypertension, cholesterol, diabetes, obesity and malformation of the oral cavity (T).	149 (97.4)	4 (2.6)	0
It is advisable that mothers, starting at pregnancy, expose their breasts to sun rays for 10 to 15 minutes, at least three times a week (T).	149 (97.4)	3 (2)	1 (0.7)
The more the infant is breastfed, the more milk the mother produces (T).	151 (98.7)	2 (1.3)	0
The CHAs play an important role in the success of breastfeeding, as they are the health professionals with greater proximity to women after they had given birth (T).	151 (98.7)	1 (0.7)	1 (0.7)

Notes: T - True; F - False; CHA - Community Health Agent. CHA.





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Although most professionals showed a good level of knowledge, inadequate knowledge was observed on some topics: 86 professionals affirmed that the infants must be breastfed every three hours to prevent them from waking up in the middle of the night (56.2%), 77 reported that every ten minutes women must switch breasts while breastfeeding, among other errors (50.3%).

DISCUSSION

The CHAs surveyed showed a high level of knowledge about BF. An association between this knowledge and the fact of having children was observed – this link may result from to the influence of a previous breastfeeding experience that the CHA had with their own children, which may generate a positive impact on the professional's understanding of the topic⁹.

An association between the facts of having knowledge about breastfeeding and having participated in training courses on the subject must be highlighted. Similar finding was observed in a study carried out with 148 CHAs from a municipality in the state of São Paulo that also showed a link between the ability to support mothers in achieving an adequate BF technique and the fact that the CHA had participated in training sessions or courses on the subject⁶.

A link between high knowledge of the profession's general duties and high knowledge about BF was also observed. The fact that the professional understands their rights and duties can also contribute to a better understanding of their role in priority groups, such as the attention to the mother-child binomial in the breastfeeding process.

In 2015, the Ministry of Health through Act No. 243 established the Introductory Course for CHAs with a minimum of 40 hours of instruction aimed at working on basic curricular components for this formation¹. Therefore, it is essential that the municipal management carries out quality Introductory Courses, using problem-solving educational strategies with content focused on the mother-child health¹⁰.

The fact that the professional belonged to an FHS team was linked to greater knowledge about BF. The FHS stands out in comparison with the PACS for its multidisciplinary work with a family focus that values bonding, welcoming and humanizing practices as well as continuing education in service¹¹, aspects that directly contribute to improving the work of the CHAs in the community.

However, even with high knowledge about breastfeeding, there was a significant percentage of errors related to some important aspects, and providing such erroneous information to nursing mothers may compromise the quality of their breastfeeding practice.

A study carried out in the city of Tubarão, in the state of Santa Catarina, in 2021, showed that 76% of the 77 CHAs surveyed showed high level of knowledge about EBF, however, 53.2% had low knowledge on how to adequately manage the breastfeeding practice, especially in terms of proper position and hold¹².

Approximately half of the professionals participating in the present analysis reported that the nursing mothers should switch breasts every ten minutes while breastfeeding. However, according to the Brazilian Society of Pediatrics, the time spent at each breast should not be fixed, considering that each mother-child binomial has a different breast emptying time, and this period may vary depending on the volume of milk stored in the breast, the baby's hunger, the time interval since the last feeding, etc¹³.

Any percentage similar to that mentioned above indicates that the child must be breastfed every three hours. However, the current guidance is that the infant should be breastfed on demand, that is, without restrictions on breastfeeding times and duration¹³. Breastfeeding on demand helps with milk production, prevents breast engorgement, and strengthens the bond between mother and child, among other benefits¹.

Another important advice to women during their pregnancy-puerperal period is that they should avoid using creams, lotions and oils on their areolas and nipples, as they can cause allergies and block the lactiferous ducts¹. However, in the present analysis, approximately a quarter of the professionals believe that soaps or creams are indicated for breast care.

Among the professionals from the municipality of Senhor do Bonfim, 14.4% stated that breast milk cannot be stored in the refrigerator to later be offered to the baby, a percentage lower than that found in a survey carried out in the city of Fortaleza, in the state of Ceará, where 60% of the professionals had poor knowledge on how to preserve breastmilk after pumping sessions¹⁴.

In this study, 13.1% of those interviewed stated that some mothers have a low or weak breast milk production, which reinforces the fact that this mistaken assumption is still rooted in some professionals. The belief that breastmilk is insufficient in quantity or quality contributes to early weaning¹³.





Health education actions focused on BF must occur during pregnancy, childbirth, and the postpartum period. To this end, the healthcare team must attentively listen to women, to their doubts, fears, beliefs, and expectations about breastfeeding so that more appropriate guidance can be provided¹⁵.

Home visits in the postpartum period made by trained CHAs, especially in the first week postpartum, can contribute to overcoming breastfeeding difficulties⁶.

In this visit, the participation of a medical and/or nursing professional is also essential; in addition, if these visits are delayed, they can end up being inefficient as breast complications can set in early, thus favoring the interruption of the breastfeeding practice¹⁶.

With regard to Breastfeeding training, most CHAs have already participated in activities related to this topic. When these professionals get involved in continuing education programs in the FHS, there is a boost in their confidence and security in passing on information to the community, which reinforces the bond between the community agents and the families they assist¹⁶.

Educational moments focused on BF with the CHAs provide the opportunity to deconstruct outdated ideas and favor the adoption of more reliable practices and guidelines that encourage mothers to continue breastfeeding¹⁷.

Nurses have a crucial role in supervising, coordinating, and carrying out continuing education activities with the CHAs¹⁶. Therefore, the nursing professional responsible for the team must observe issues, requirements, capabilities and train the agents to keep developing their work focused on breastfeeding.

Study limitations

It is important to highlight some limitations found in the present study. As it is cross-sectional research, it cannot be used to describe causal relationships; in addition, the difficulty in contacting some CHAs even after several attempts via telephone or through the nurse at the Primary Health Unit caused losses in the initial sample, that would be made up of all CHAs in the municipality.

The advantage of this work is that it can be replicated in different Brazilian realities, thus allowing comparisons and diagnoses focused on the knowledge of these professionals. This understanding can serve as a basis to develop training programs on the topic that can actually have a positive impact on the work of the CHAs.

CONCLUSION

The CHAs surveyed showed a high level of knowledge about breastfeeding, but important errors were observed and, if such guidelines are passed on, they could compromise the quality of the breastfeeding practice.

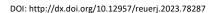
The link between greater knowledge about BF among the professionals and their participation in the FHS, in addition to having undergone an Introductory Course, reinforces the importance of converting the existing PACS teams into FSH teams and offering quality Introductory Courses for professionals who are starting out in the role.

The information gathered by this study can be used to develop and carry out training programs focused on the major weaknesses spotted in the CHA's knowledge about Breastfeeding, so that this professional can become more prepared and confident in passing on appropriate information, thus having a real impact on improving both BF and mother-child health indicators.

REFERENCES

- 1. Lima APC, Nascimento DS, Martins MMF. The practice of breastfeeding and the factors that take to early weaning: an integrating review. J Health Biol Sci. 2018 [cited 2021 May 18]; 6(2):189-96. DOI: http://dx.doi.org/10.12662/2317-3076jhbs.v6i2.1633.p189-196.2018.
- Furtado LCR, Assis TR. Different factors that influence the decision and the duration of breastfeeding: a review of the literature. Rev Movimenta. 2018 [cited 2021 Aug 21] 5(4):303-12. Available from: https://www.revista.ueg.br/index.php/movimenta/article/view/7073.
- Ciampo LAD, Ciampo IRLD. Breastfeeding and the Benefits of Lactation for Women's Health. Rev Bras Ginecol Obstet. 2018 [cited 2021 May 21]; 40(6):354-9. DOI: https://doi.org/10.1055/s-0038-1657766.
- 4. Turke KC, Santos LR, Matsumura LS, Sami ROS. Risk factors for the lack of adherence to breastfeeding. Rev Assoc Med Bras. 2021 [cited 2023 Nov 29]; 67(1):107-14. DOI: https://doi.org/10.1590/1806-9282.67.01.20200510.
- Estudo Nacional de Alimentação e Nutrição Infantil. Resultados preliminares indicadores de aleitamento materno no Brasil. Rio de Janeiro: Universidade Federal do Rio de Janeiro, 2020 [cited 2022 Jan 12]; 9p. Available from: https://enani.nutricao.ufrj.br/index.php/relatorios/.







- Moimaz SAS, Serrano MN, Garbin CAS, Vanzo, KLT, Saliba O, et al. Community health workers and breastfeeding: challenges related to knowledge and practice. Revista CEFAC. 2017 [cited 2021 May 12]; 19(2):198-212. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1516-18462017000200198&lng=en&nrm=is.
- 7. Instituto Brasileiro de Geografia e Estatística [homepage na internet]. Senhor do Bonfim. 2021 [cited 2021 Nov 27]. Available from: https://www.ibge.gov.br/cidades-e-estados/ba/senhor-do-bonfim.html.
- 8. Bonifácio LP, Marques JMA, Vieira EM. Assessment of the knowledge of Brazilian Community Health Workers regarding prenatal care. Prim Health Care Res Dev. 2019 [cited 2021 Nov 22] 20:e21. DOI: https://doi.org/10.1017/s1463423618000725.
- 9. Andrade DR, Lima LM, Júnior SA, Silva MS, Terra FS, Ribeiro PM. Conhecimento do agente comunitário de saúde acerca da amamentação. Enferm Brasil. 2021 [cited 2022 Nov 05]; 20(4):506-19. DOI: https://doi.org/10.33233/eb.v20i4.4642.
- Silva HPR, Toassi RFC. The problematizing education approach in a technical course for community health workers: an experience of meaning production in health work. Physis. 2022 [cited 2022 Aug 12] 32(3):e320310. DOI: https://doi.org/10.1590/S0103-73312022320310.
- 11. Arantes LJ, Shimizu HE, Hamann EM. The benefits and challenges of the Family Health Strategy in Brazilian Primary Health care: a literature review. Ciênc. saúde cole. 2016 [cited 2022 Feb 09] 21(5):1499-509. DOI: https://doi.org/10.1590/1413-81232015215.19602015.
- Silva AB. Avaliação do conhecimento dos agentes comunitários de saúde do município de tubarão, Santa Catarina sobre aleitamento materno[Trabalho de Conclusão de Curso]. 2021, 21f. Faculdade de Nutrição, Ânima Educação, Santa Catarina; 2021 [cited 2022 Dec 08]. Available from: https://repositorio.animaeducacao.com.br/handle/ANIMA/13771.
- 13. Sociedade Brasileira de Pediatria. E-book: Pais tirem suas dúvidas sobre aleitamento materno. 2022 [cited 2022 Dec 01]. Available from: https://www.sbp.com.br/fileadmin/user_upload/sbp/2022/agosto/12/ebook_agosto_dourado_sbp.pdf.
- Silva TN, Lima LC, Oliveira MGO, Venâncio DO, Ferro SA, Chaves AFL. Conhecimento dos agentes comunitários de saúde sobre o aleitamento materno. In: Congresso Virtual Brasileiro, 2018. Anais Convibra. Ceará, Universidade Federal do Ceará, 2018 [cited 2022 Nov 24]. Available from: https://convibra.org/congresso/res/uploads/pdf/2018_156_15386.pdf.
- Rocha IP, Bastos NLMV, Luz RT, Brito SA, Tavares MG. Breastfeeding in primary care: the role of the multidisciplinary team. Contemporânea. 2022 [cited 2023 Jun 02]; 2(6):1088-103. Available from: https://revistacontemporanea.com/ojs/index.php/home/article/view/311/225.
- Silva LLB, Feliciano KVO, Oliveira LNFP, Pedrosa EN, Corrêa MSM, Souza AI. Cuidados prestados à mulher na visita domiciliar da "Primeira Semana de Saúde Integral". Rev. Gaúcha Enferm. 2016; [cited 2023 Jan 13]; 37(3):e59248. DOI: http://dx.doi.org/10.1590/1983-1447.2016.03.59248.
- 17. Silva DRS, Santos EFO, Carvalho HG, Albuquerque NLA, Santos RB, Wanderley TC, et al. Oficina sobre aleitamento materno com agentes comunitários de saúde: do saber ao aprendizado. RBCS. 2019 [cited 2023 May 10]; 23(4):411-20. DOI: https://periodicos.ufpb.br/index.php/rbcs/article/view/42079.

Authors' contributions

Conceptualization, C.V.R.S. and M.S.A.; methodology, C.V.R.S.; software, A.G.L.; validation, C.V.R.S., A.G.L. and M.S.A.; formal analysis, A.G.L.; investigation, C.V.R.S., A.S.A.L.A. and R.L.S.; resources, C.V.R.S., A.S.A.L.A. and R.L.S.; data curation, C.V.R.S. and M.S.A.; manuscript writing, C.V.R.S. and M.S.A.; manuscript review and editing, L.P.B., C.S.S.S., A.S.A.L.A., R.L.S. and T.N.A.R.; visualization, L.P.B., C.S.S.S. and T.N.A.R.; supervision, M.S.A.; project administration, M.S.A. All authors have read and agreed to the published version of the manuscript.

