BREASTFEEDING, COMPLEMENTARY FEEDING AND HEALTH

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Health and nutrition indicators in children younger than two years: a reality for the implementation of the Brazilian Breastfeeding and Complementary Feeding Strategy in primary care in Governador Valadares County-MG, Brazil

Indicadores de saúde e nutrição de crianças menores de dois anos de idade: uma realidade para a implantação da Estratégia Amamenta e Alimenta Brasil na atenção básica de Governador Valadares-MG

Abstract

The aim of the current study is to analyze health and nutrition indicators in children younger than 2 years, who were treated in the primary healthcare service in Governador Valadares County - Minas Gerais State. It was done in order to substantiate the implementation of the Brazilian Breastfeeding and Complementary Feeding Strategy (EAAB - Estratégia Amamenta e Alimenta Brasil). The public domain SISVAN – Web was used to survey the investigated indicators. Breastfeeding of 301 children younger than 6 months and the complementary feeding of 1,064 children in the age group 6-24 months were analyzed based on data collected in SISVAN Food Consumption Marker Forms. The nutritional status of 4,450 children younger than 2 years was analyzed based on the SISVAN anthropometric assessment protocol. Exclusive breastfeeding practice comprised one third of children in the age group 0-6 months. Food introduction was recorded for one-fifth of children in the age group 6-8 months. The following food consumption rates were recorded for children in the age group 6-24 months: continued breastfeeding (54%), iron-rich food (21%); sweetened drinks (41%); stuffed cookies and candies (35%); instant noodles and snacks (34%). Most children younger than 2 years were eutrophic; however, the risk of overweight

development was identified in one third of these children, whereas approximately one fifth of them presented very short stature. It was possible concluding that the current scenario subsidizes efforts for EAAB implementation in the investigated county, since children younger than 6 months and children in the age group 6-24 months recorded unsatisfactory and disturbing values for the prevalence of exclusive and continued breastfeeding, respectively.

Keywords: Primary healthcare. Breastfeeding. Complementary feeding. Infant. Health education.

Resumo

Este estudo objetivou analisar indicadores de saúde e nutrição em crianças menores de 2 anos de idade assistidas na atenção básica de Governador Valadares - Minas Gerais, para subsidiar a implantação da Estratégia Amamenta e Alimenta Brasil (EAAB). Para o levantamento dos indicadores, utilizou-se o SISVAN–Web, de domínio público. A prática do aleitamento materno e da alimentação complementar de 301 crianças com menos de 6 meses de idade, e de 1.064 crianças entre 6 e 24 meses foram analisadas a partir dos dados do formulário de marcadores de consumo alimentar do SISVAN. Para o estado nutricional, analisaram-se 4.450 crianças menores de 2 anos, segundo o protocolo de avaliação antropométrica do SISVAN. A prática do aleitamento materno exclusivo correspondeu a um terço das crianças de 0-6 meses. A introdução de alimentos ocorreu entre 6-8 meses em um quinto das crianças. Nas crianças com idade de 6 a 24 meses, o aleitamento materno continuado foi de 54% e o consumo de alimentos ricos em ferro foi 21%; bebidas adoçadas foi 41%; de biscoito recheado e doces, 35%; de macarrão instantâneo e salgadinhos de pacote, 34%. A maioria das crianças menores de 2 anos se encontravam eutróficas, contudo, o risco de sobrepeso foi verificado em um terço delas, e a altura muito baixa em aproximadamente um quinto delas. Conclui-se que o cenário atual subsidia esforços para a implantação da EAAB no município, uma vez que foram encontrados valores insatisfatórios e preocupantes de prevalência de aleitamento materno exclusivo em menores de 6 meses e de aleitamento continuado entre 6-24 meses.

Palavras-chave: Atenção primária em saúde. Aleitamento materno. Alimentação complementar. Lactente. Educação em saúde.

INTRODUCTION

Breastfeeding and healthy complementary feeding help improving the survival, health and development of all children. Benefits generated by these practices reach populations living in high-, middle- and low-income countries. The Brazilian Ministry of Health (MH), based on recommendations by the World Health Organization (WHO), recommends the practice of exclusive breastfeeding (EBF) in the first six months of children's life. This practice can be extended to 2-year-old children (or older) along with the introduction of other food types in a well-balanced and harmonious manner.[1-4]

Breastmilk is the best food for children because it protects them from infectious, chronic and acute diseases. In addition, breastfeeding contributes to the adequate physical, emotional and psychological condition of mothers and babies.[5,6]

Children who are breastfed for longer present lower morbidity and mortality rates, lesser dental malocclusion and greater intelligence than the ones who are breastfed for shorter periods or who are not breastfed at all. The protection provided by breastmilk to infants results in lower costs for health systems, mainly in reduced child hospitalization rates. In addition, it has long-term benefits such as human capital, since prolonged breastfeeding can influence babies' intelligence and, consequently, it has positive impact on their income level in adulthood.[7-9]

Similar to breastfeeding, complementary feeding is essential to provide nutrient input for neuropsychomotor growth and development of children. Complementary feeding is defined as the period when other food or liquid types are provided to children along with breastmilk. It should comprise healthy, fresh, affordable food with family-eaten culinary ingredients. Infants experience a new cycle at this stage, when they are introduced to new flavors, colors, aromas and textures that will be necessary to shape proper eating habits.[4,10]

Thus, it is consensus and undeniable that breastfeeding and healthy complementary feeding practices bring several benefits to children younger than 2 years.

Brazil has undergone successive changes in socioeconomic development, urbanization, medical care and population health in the last three decades. Improvements found in the health of mothers and children living in the country have shown to what extent health systems and conditions, as well as social determinants, evolved until 2011. However, *Associação Brasileira de Saúde Coletiva - Abrasco*[11] (Brazilian Association of Collective Health) has analyzed data from *Sistema de Informação sobre Mortalidade – SIM* (Mortality Information System) collected from 2010 to 2016 and found that, after a period of sustained decline, mortality rates in the first year of life have increased across the country. These disturbing data are associated with Infant

Mortality Rate (IMR) increase and with increase in the post-neonatal period (deaths recorded from the 28th to the 364th day of life) in 2016. This outcome resulted from children exposure to external factors such as worsened living conditions and poor access to healthcare services.[11,12]

Breastfeeding is a protective factor for child morbidity and mortality; besides, it is one of the necessary strategies to reduce child mortality - the fourth goal of the United Nations' Millennium Development Goals to which Brazil is internationally committed.[13] Thus, based on the current epidemiological scenario, which is associated with IMR,[11] it is necessary implementing programs focused on promoting, encouraging and supporting healthy breastfeeding and complementary feeding within Sistema Único de Saúde - SUS (Unified Health System) scope, such as the Brazilian Breastfeeding and Complementary Feeding Strategy (EAAB).

EAAB is a governmental strategy that was implemented by the Brazilian Ministry of Health in 2013, through Ordinance N. 1920 from September 5, 2013.[14] The aims of the aforementioned strategy are to help reducing practices focused on discouraging breastfeeding and healthy complementary feeding; to contribute to the formation of healthy eating habits since childhood; to increase the prevalence of exclusive breastfeeding in children up to their six month of life and of complementary feeding in 2-year-old children (or older); to reduce children's early introduction to food; to increase children intake of fruits and vegetables on a daily basis; to decrease the number of children who feed on unhealthy and non-recommended food, mainly before the age of two; to improve children's nutritional profile by reducing nutritional, underweight and overweight issues.[14] Thus, EAAB has developed tutor training workshops aimed at qualifying work processes and at improving health professionals' skills and ability to promote, protect and support breastfeeding and complementary feeding in children younger than 2 years, in the primary care scope, in order to improve child health and nutrition indicators.[4,11,12]

The survey of health and nutrition indicators for children younger than 2 years can support the development, evaluation and redirection of policies focused on breastfeeding and on healthy complementary feeding.[11,14-17] Therefore, it is one of the pillars for EAAB implementation and monitoring processes.[18]

EAAB implementation process aims at improving breastfeeding and healthy complementary feeding indicators, at encouraging nutritional orientation as routine activity in healthcare services, at managing breastfeeding and its determinants, at introducing quality and timely complementary feeding to children, and at encouraging respect for the cultural and food identity of different Brazilian regions.[4,12]

Therefore, the aim of the current study was to analyze health and nutrition indicators for children younger than 2 years, who were treated in the Primary Care Network at Governador Valadares County - Minas Gerais State, in order to substantiate the EAAB implementation process.

METHODS

Study type and population

The current research was a cross-sectional, quantitative, descriptive and retrospective epidemiological study conducted in 2017, based on Sistema de Vigilância Alimentar e Nutricional (Food and Nutrition Surveillance System) – Web (SISVAN-Web).

The totality (100%) of Family Health Strategies (FHS) (n = 59) implemented in Governador Valadares County - MG was the analysis unit adopted in the current study.

Data collection

The report management module of SISVAN-Web19 was used to analyze health and nutrition indicators adopted by EAAB for children younger than 2 years (Chart 1).

Chart 1. Health and nutrition indicators for children younger than 2 years. Source: EAAB Implementation Manual.[18]

Health and nutrition indicators for children younger than 2 years
– Exclusive breastfeeding in children younger than 6 months.
– Vegetable, fruit and meat intake by children in the age group 6-24 months.
– Intake of other milk types by children younger than 2 years.
– Intake of soft drinks, snacks and stuffed cookies by children younger than 2 years.
– Nutritional status of children younger than 2 years.

Data about 301 children younger than 6 months and 1,064 children in the age group 6-24 months were analyzed in order to investigate breastfeeding and complementary feeding practices. Sample size calculation was based on the local Sistema de Informação sobre Nascidos Vivos – SINASC (Live Birth Information System) in order to cover 15% of the investigated population.[20]

The analyzed SISVAN-Web data were collected in SISVAN Food Consumption Marker Forms, which were made available by Coordenação Geral de Alimentação e Nutrição – CGAN (General Food and Nutrition Coordination) in order to be used in primary healthcare;[21] therefore, they were completed by FHS health professionals.

Data about the nutritional status of children in the age group 0-24 months were collected at the same site. However, they concerned a larger sample (n = 4,450), which comprised 552 children in the age group 0-6 months and 3,898 children in the age group 6-24 months, due to conditions set by the income transfer program known as Bolsa Familia (Family Allowance).[22]

The nutritional status of the investigated children was classified based on anthropometric indices such as weight-for-age (W/A), height-for-age (H/A), weight-for-height (W/H) and body mass index-for-age (BMI/A). The Z-Scale was used to classify anthropometric indices, according to recommendations by WHO, which were adopted by the Brazilian Ministry of Health for children younger than 5 years.[21]

Ethical issues

According to Resolution N. 510, from April 7, 2016, studies based on public domain information and on databases, whose information is aggregated without the possibility of individual identification, do not need to be registered and evaluated by Research Ethics Councils and/or by National Research Ethics Committees.[23]

Data analysis

Data were analyzed and expressed as frequencies, based on public reports generated in the SISVAN-Web system itself for children younger than 2 years who lived in the investigated county.

RESULTS

Table 1 shows the prevalence of exclusive breastfeeding in children younger than 6 months and the use of breastmilk substitutes in the assessed population living in the investigated county.

Table 1. Prevalence of exclusive breastfeeding, and of other milk types, in children younger than 6 months who were treated in the primary healthcare service in Governador Valadares Cunty - MG, 2017. Source: SISVAN-Web, 2017.

Feeding type in children younger than 6 months	n	%
Exclusive breastfeeding	100	33.3
Cow's milk intake	70	23.3
Infant formula intake	55	18.4
Not informed	76	25.0

Food introduction was identified in 22.7% (n = 60) of children in the age group 6-8 months (n = 264), whereas the prevalence of continued breastfeeding reached 53.9% (n = 573) of children in the age group 6-24 months.

Most children recorded high intake of fruits, vitamin A-rich food, vegetables, meat and eggs, as shown in Table 2, whereas few children consumed iron-rich food and leafy vegetables. There was significant intake of ultra-processed food, as well as inappropriate and improper intake of hamburgers and/or sausages, sweetened drinks, instant noodles, salty snacks and/or crackers, stuffed cookies, candies and deli.

Table 2. Food intake of children in the age group 6-24 months treated in the primary healthcare service of Governador Valadares County - MG, 2017. Source: SISVAN-Web, 2017.

Food intake markers of children in the age group 6-24 months	n	%
Minimum frequency and proper consistency	627	58.9
Minimal food diversity	871	81.9
Iron-rich food intake	217	20.4

Table 2. Food intake of children in the age group 6-24 months treated in the primary healthcare service of Governador Valadares County - MG, 2017. Source: SISVAN-Web, 2017. (continues)

Vitamin A-rich food intake	714	67.1
Vegetable intake	704	66.2
Leafy vegetable intake	265	24.9
Fruit intake	797	74.9
Meat and egg intake	720	67.7
Ultra-processed food intake	628	59.0
Hamburger and/or sausages intake	170	16.0
Sweetened drink intake	438	41.2
Instant noodle, salty snack and/or cracker intake	361	33.9
Consumption of Stuffed cookie, candy and deli intake	407	38.2

According to Table 3, most children in the age group 6-24 months recorded normal anthropometric indices. However, the risk of overweight development was the second most prevalent nutritional status, whereas very short height was prevalent in one fifth of the aforementioned children.

Table 3. Nutritional status of children in the age group 0-24 months who were treated in the primary healthcare service of Governador Valadares County - MG, 2017. Source: SISVAN-Web, 2017.

Anthropometric indices	Children in the age group 0-6 months	Children in the age group 6-24 months
	n (%)	n (%)
Weight-for-age		
Very low weight-for-age	66 (12.0)	178 (4.6)
Low weight-for-age	45 (8.1)	b6 (5.5)
Proper weight or eutrophic	401 (72.6)	3262 (83.7)
High weight-for-age	40 (7.2)	242 (6.2)

Table 3. Nutritional status of children in the age group 0-24 months who were treated in the primary healthcare service of Governador Valadares County - MG, 2017. Source: SISVAN-Web, 2017. (continues)

Anthropometric indices	Children in the age group 0-6 months	Children in the age group 6-24 months
	n (%)	n (%)
Weight-for-height		
Significant thinness	44 (8.0)	154 (3.9)
Thinness	55 (9.9)	154 (3.9)
Proper weight or eutrophic	330 (59.8)	2344 (60.1)
Risk of overweight	48 (8.7)	807 (20.7)
Overweight	26 (4.7)	232 (6.0)
Obesity	49 (8.9)	207 (5.3)
Height-for-age		
Very short height-for-age	96 (17.4)	776 (19.9)
Short height-for-age	42 (7.6)	475 (12.2)
Proper height-for-age	414 (75)	2647 (67.9)
BMI-for-age		
Significant thinness	36 (6.5)	171 (4.4)
Thinness	38 (6.9)	140 (3.6)

DISCUSSION

Based on data analyzed in the present study, the practice of exclusive breastfeeding in Governador Valadares County - MG was low and alarming, since it reached only one third of children in the age group 0-6 months.

In 2012, WHO presented six global goals to be met by 2025 in order to improve maternal-infant nutritional status, as well as the nutritional status of children younger than 5 years. These goals comprised increasing the overall exclusive breastfeeding rate to at least 50% in the first six months of children's lives. It means that the exclusive breastfeeding index in the county should considerably improve in order to meet this recommendation.[3]

According to guidelines published by WHO (2017), the global exclusive breastfeeding rate recorded for children in the age group 0-6 months reach 40%, whereas 45% of children in the age group 6-24 months are breastfed. Based on these statistics, the exclusive breastfeeding rate in Governador Valadares County (33.11%) was below the global average, which nevertheless is not satisfactory.[24] Besides, the prevalence of continued breastfeeding in the county reached 53.9%, which was slightly higher than the global mean. According to WHO, exclusive breastfeeding indicators ranging from 12% to 49% are considered poor/reasonable, which is the classification that falls on Governador Valadares County and on the global average. Very good indicators range from 90% to 100%; good indicators, from 50% to 89%; and very poor indicators, from 0% to 11% .[25]

The trend of exclusive breastfeeding in Latin America from 1990 to 2000 was a positive change in breastfeeding prevalence. Of the five countries analyzed in the study by Bersot,[26] only Dominican Republic showed decreased breastfeeding rates (from 28.3% to 11.3%). According to the aforementioned study, exclusive breastfeeding rate in Brazil and Peru increased from 25.7% to 45% and from 53.7% to 65.8% throughout the investigated period, respectively. Peru recorded 67% prevalence of exclusive breastfeeding in 2000, which was the highest rate described in Bersot's study. Only Peru, Bolivia and Guatemala were rated as "good" in the breastfeeding assessment spectrum; the remaining countries were still in the "poor/reasonable" spectrum.[27]

The II Survey on Breastfeeding Prevalence in Brazilian Capitals and in the Federal District, conducted by the Ministry of Health in 2009, has found 41% prevalence of EBF in Brazilian capitals as a whole; the investigate indicator presented highly heterogeneous behavior between regions in the country and their capitals. Northern Brazil recorded the highest prevalence of EBF (45.9%), whereas the Northeastern region recorded the lowest one (37.0%). According to the aforementioned survey, the national and regional classifications based on EBF did not reach satisfactory levels, they remained in poor/reasonable condition.[28]

Boccolini et al.[29] performed the temporal analysis of national EBF indicators comprising 30 years and found increased RBF rates from 1986 to 2013. This indicator recorded 36.6% prevalence in 2013 and it was classified as poor/reasonable.

Unlike EBF indicators, other milk types were early introduced in children's diet; 18% of children in Brazil already received other milk types in their first month of life, a practice that showed increasing trend in subsequent age groups. The prevalence of other milk types in children reached 48.8% between the 120th and the 180th day of children's life;[27] this outcome corroborated the high rates of cow's milk and infant formula intake found in the county.

According to Bortolini,[27] cow's milk was consumed by 62.4% of children younger than 6 months who received other milk types, whereas infant formula was consumed by 23% of them and soymilk intake varied from 14.6 % to 20% in children in the age group 0-12 months. In addition, the intake of other milk types before six months of life was more frequent in Southern and Northeastern Brazil.[27]

The introduction of complementary feeding in a timely manner in the county presented low prevalence in comparison to the national mean. Data were well below values presented by PNDS/2006,[30] which found that 64.4% of children in the age group 6-8 months received salty food, a frequency that increased to 81% in the age group 8-10 months. The II Survey on Breastfeeding Prevalence in Brazilian Capitals and in the Federal District[28] has also found that, against WHO recommendations, 21% of children in the age group 3-6 months, who lived in Brazilian capitals and in the Federal District, were early introduced to salty food. The prevalence of sweetened beverage intake (41.2%) in the age group 6-24 months in the current study showed values above the mean of Brazilian capitals, which recorded 4.9% prevalence of this indicator for children in the age group 6-9 months, as well as 11.6% for the ones in the age group 9-12 months.[30] According to PNDS (2006), the prevalence of soft drink intake among children in the age group 6-59 months reached 40.5%.[30]

The prevalence of stuffed cookie and candy intake in the age group 6-24 months reached 38.2% in the current study; this value was below the mean of national capitals, which recorded 46.4% prevalence in the age group 6-9 months and 71.7% in the age group 9-12 months. According to the II Survey on Breastfeeding Prevalence in Brazilian Capitals and in the Federal District, there is early introduction of crackers in children's diet; 8.9% of children in the age group 3-6 months already consume this product. Such intake rate increases in children in the age group 6-9 months (46.4%) and reaches 71.7% in the age group 9-12 months.[28]

Sweetened drinks, snacks/cookies and candies are inappropriate food for this age group and their high intake prevalence values indicate the need of making interventions to encourage healthy eating habits. There has been a reversal in population's dietary patterns in recent decades, since the intake of traditional food has decreased, whereas the intake of ready-to-eat food has increased.[31,32] The high palatability, availability and marketing of products produced by food industries make conscious eating a difficult task, since these aspects turn these products into preferred substitutes for fresh or minimally processed food.[33]

The nutritional status recorded for children living in the evaluated county may indicate inadequate dietary practices, as reported by WHO in review studies about evidences of the long-term effect of breastfeeding, or lack thereof, on human health.[33] Breastfed individuals are less

likely to be overweight due to better development of food intake self-regulation and to the unique composition of breastmilk.[34] Based on a study conducted in São Paulo City in 2015, 58.8% of children under EBF were classified as eutrophic. On the other hand, 47.8% of children who received other food type in addition to breastmilk before their 6th month of life were overweight.[35] According to studies conducted in Brazil, the increased intake of ultra-processed food, breastfeeding interruption and inadequate introduction of complementary feeding were associated with obesity in adolescent and adult individuals,[11,36-38] as well as with changes in children's lipid profile.[15]

The association between poor diet and previous infections is the most likely cause of the herein recorded low height index, which may reflect children's eating and morbidity conditions in early life. According to PNDS (2006), the Brazilian prevalence rate of height deficit (7%) in children younger than 5 years is classified as low.[29] The prevalence found in the herein investigated county was classified as intermediate.

Based on the low EBF rates recorded in Governador Valadares County, on the inadequate introduction of complementary feeding and on the association between these factors and children's impaired nutritional status and development conditions, it is necessary developing strategies focused on promoting and assuring the implementation of recommendations by the Ministry of Health, WHO and UN to improve the nutrition status of children in the age group 0-24 months.

The country has been showing positive breastfeeding indicators over the years. Based on the 1974-75 nutritional survey analysis, the median breastfeeding period lasted only 2.5 months, which was one of the shortest periods recorded among developing countries.[39] This indicator increased to 5.5 months in 1990 and to 14 months in 2006-07.[40-42] On the other hand, the prevalence of EBF in children younger than 4 months increased from 3.6% (in 1986) to 48.1% (in 2006-07).[29]

The nutritional status of Brazilian children has significantly improved, as well. Data from four national surveys conducted over a 33-year period have shown substantial reduction in the prevalence of height deficit (defined as height-for-age below –2 Z scores in WHO standards)[43] from 37.1% (in 1974-75) to 7.1% (in 2006-07).[5,29] This anthropometric indicator is the proxy of the development of a given population.[43]

Brazil has made efforts to maintain and expand advancements in maternal and child nutrition indicators. In 2013, *Rede Amamenta Brasil* (Brazilian Breastfeeding Network), together with *Estratégia Nacional de Promoção da Alimentação Complementar Saudável* (National Strategy

for the Promotion of Complementary Healthy Eating), launched EAAB in order to qualify primary healthcare professionals to meet population demands, based on the development of actions focused on promoting, protecting and supporting breastfeeding and complementary feeding practices.[4] Accordingly, a study conducted in Rio de Janeiro has shown satisfactory results, such as significantly increased the prevalence of the EBF indicator after the development of groups focused on supporting breastfeeding and on guiding its management.[44] A study conducted in Londrina County in 2012 has also shown satisfactory results, according to which the improved training of health professionals and, consequently, the increased education and information provided to the population had direct impact on children's health and nutrition indicators.[45] According to The Lancet Breastfeeding Series Group (2016), breastfeeding practices are highly responsive to interventions performed by health systems.[1]

Based on the positive impact of EAAB implementation on the primary healthcare network in Governador Valadares County - MG, the *Universidade Federal de Juiz de Fora* (Federal University of Juiz de For a) - Governador Valadares campus-, in partnership with *Governo de Estado de Minas Gerais* (Minas Gerais State Government), has trained tutors and developed workshops aimed at qualifying the work process of professional teams working in the Family Health Strategy and in *Núcleos Ampliados de Saúde da Família e Atenção Básica* (Extended Family Health and Primary Healthcare Centers). They also aim at improving health professionals' competences and skills to take actions focused on promoting breastfeeding and complementary healthy eating practices through continuing health education. Assumingly, EAAB implementation will have positive impact on health and nutrition indicators of children younger than 2 years who live in the investigated county.

SISVAN-Web has played a key role in the analysis of the investigated indicators and it will be essential to help monitoring them in Governador Valadares County. In addition, feeding the computerized system is a great challenge when it comes to training the top professionals responsible for data collection, and to the need of accountability for, and greater incentive to, the computerized system feeding process.

CONCLUSION

The practice of exclusive breastfeeding until the 6th month of children's life has recorded unsatisfactory rates in Governador Valadares County - MG, whereas complementary feeding was classified as inadequate. There was low prevalence of continued breastfeeding. The intake of food rich in protein, iron and other nutrients did not (mostly) meet the recommendations for the age group 6-24 months. The intake of ultra-processed food in this age group was disturbing.

Crackers, snacks, sweetened drinks and candies were early introduced in children' diet, although they are inadequate food types for children in this age group, who recorded significant intake prevalence values. Early weaning and inadequate complementary feeding introduction compromise children's nutritional status and development process, since they lead to low height index and overweight.

EAAB implementation is a legitimate and feasible measure to help changing this scenario in the county. Raising the awareness of, and training, health professionals is of paramount importance to guide and monitor children and their families. It is possible improving children's health indicators and nutritional status in the mid- and long-term by reinforcing actions focused on promoting, protecting and supporting breastfeeding and healthy complementary feeding practices.

University's support improves educational, cultural and scientific processes, since it enables teaching-service integration, as well as articulation between teaching/research/extension and community. Consequently, it enables significant knowledge exchange, as well as identifying critical nodes and the possibility of changing the current scenario.

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