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E-1500: Survey on feeding practices in the first 1,500 days of life, recommended by healthcare professionals in Latin America[☆]



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KEYWORDS

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Survey

Abstract

Introduction: Health-disease processes are established and programmed in the first 1500 days of life, a period in which nutrition and the microbiota play a fundamental role. Feeding practices vary, according to regional sociocultural characteristics. The Early Nutrition Group of the Latin American Society for Pediatric Gastroenterology, Hepatology and Nutrition (LASPGHAN) established the goal of identifying the main feeding practices in the first 1500 days that were recommended by health professionals in Latin America.

Materials and methods: A survey was conducted on the aspects of maternal-infant and young child nutrition during the first 1500 days of life. An open invitation was extended to Latin American healthcare professionals to anonymously answer the online survey.

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Results: A total of 1284 surveys from participants in 18 Latin American countries were analyzed. The mean age of the participants was 37.14 ± 11.1 years, 75.7% were women, 64.7% were physicians, and the rest were nutritionists/nutritionists. A total of 71.4% were familiar with the concept of the first 1000 days of life, 95% answered that exclusive breastfeeding should be carried out up to 6 months of age, and 34.3% responded that complementary feeding should be begun between 4 and 6 months of age. There was scant knowledge regarding nutrition in the pregnant woman. Adherence to traditional complementary feeding practices was evident.

Conclusions: In a group of Latin American healthcare professionals, knowledge about nutrition in the first 1000–1500 days of life of an individual is still incomplete and insufficient, showing the need for continued training of healthcare professionals, with respect to those themes.

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PALABRAS CLAVE

Alimentación
complementaria;
Nutrición infantil;
Latinoamérica;
Encuesta

E-1500: encuesta sobre prácticas de alimentación en los primeros 1500 días recomendadas por profesionales de la salud en Latinoamérica

Resumen

Introducción: En los primeros 1500 días de vida se establecen y programan procesos de salud-enfermedad y donde la nutrición y la microbiota tienen un papel fundamental. Las prácticas de alimentación varían acorde a características socioculturales regionales. El Comité de Nutrición Temprana de la SLAGHNP/LASPGHAN estableció el objetivo de identificar las principales prácticas de alimentación en los primeros 1500 días recomendadas por profesionales de la salud en Latinoamérica.

Materiales y Métodos: Se trató de una encuesta de aspectos de nutrición materno-infantil durante los primeros 1500 días de vida. Se invitó de forma abierta a profesionales de la salud de Latinoamérica para que la contestaran de forma electrónica y completamente anónima.

Resultados: 1284 encuestas de 18 países de la región fueron analizadas. La edad promedio de los participantes 37.14 ± 11.1 , 75.7% fueron mujeres. El 64.7% de los encuestados fueron médicos y el resto nutriólogo/nutricionista. El 71.4% conoce el concepto de los primeros 1000 días de vida. El 95% identificó que la lactancia materna exclusiva es hasta los 6 meses de edad. El 34.3% respondió que el inicio de la alimentación complementaria puede realizarse entre los 4 y 6 meses de edad. Hay poco conocimiento sobre la nutrición de la mujer gestante. Aun es patente el apego a las viejas prácticas de alimentación complementaria.

Conclusiones: Los conocimientos sobre nutrición en los primeros 1000-1500 días de vida de un individuo en un grupo de profesionales de salud de Latinoamérica aún son incompletos e insuficientes. Se requiere seguir capacitando al profesional de salud en estos temas.

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Introduction and aim

The first stage of infancy is one of the most dynamic, critical periods in child development, establishing the basis for the child's future wellbeing, learning, participation¹. Malnutrition during the first years of life can cause irreversible physical, cognitive alterations, increasing the probability of later suffering from undernutrition, overweight, obesity, noncommunicable chronic diseases, learning difficulties²⁻⁴. Cumulative evidence underlines the relevance of the first 1000 days of life of an individual for programming later diseases, during which nutrition is fundamental⁵. The microbiota is known to play an essential role in the mediation between nutrition, the programming of chronic diseases, so its adequate establishment, which stabilizes in the first

1500 days of life, is important⁶. However, nutritional problems are those that most affect Latin American children under⁵, years of age, the most frequent are chronic undernutrition, micronutrient deficiency⁷. Feeding practices vary from region to region, they are adapted to the sociocultural characteristics of each zone. Nevertheless, there are international guidelines that have been endorsed by different international societies, the acting authorities on the subject⁸⁻¹⁰.

Given the vast importance of this topic, the Early Nutrition Group of the Latin American Society of Pediatric Gastroenterology, Hepatology and Nutrition (LASPGHAN) set forth the goal of identifying the main feeding practices in the first 1500 days of life that are recommended by health professionals in Latin America.

Table 1 Demographic characteristics of the respondents.

| Characteristic | n | % |
|--|-----|-------|
| Profession | | |
| <i>Medical professional</i> | 831 | 64.7 |
| General physicians | 146 | |
| Specialists (not pediatricians or nutriologists ^a) | 61 | |
| Pediatric residents | 133 | |
| Pediatricians | 491 | |
| Neonatologists | 11 | |
| Pediatric gastroenterologists | 97 | |
| <i>Nutrition professional</i> | 453 | 35.3 |
| General nutritionist ^b | 447 | |
| Pediatric clinical nutritionist ^b | 6 | |
| Country of the participant | | |
| Colombia | 794 | 61.84 |
| Mexico | 311 | 24.22 |
| Ecuador | 28 | 2.18 |
| Bolivia | 25 | 1.95 |
| Uruguay | 25 | 1.95 |
| Argentina | 21 | 1.64 |
| Chile | 13 | 1.01 |
| Peru | 12 | 0.93 |
| Venezuela | 12 | 0.93 |
| Costa Rica | 11 | 0.86 |
| Guatemala | 10 | 0.78 |
| Brazil | 6 | 0.47 |
| Paraguay | 6 | 0.47 |
| El Salvador | 4 | 0.31 |
| Honduras | 2 | 0.16 |
| Panama | 2 | 0.16 |
| Nicaragua | 1 | 0.08 |
| Dominican Republic | 1 | 0.08 |

^a The terms nutritionist and nutriologist differ throughout Latin America. The term nutriologist utilized herein refers to the medical professional with a specialization course in nutrition.

^b The term nutritionist utilized herein refers to the non-medical professional with a degree in nutrition.

place of origin, age, sex, and profession, and the rest of the items refer to aspects of infant and young child nutrition within the first 1500 days of life, concerning general concepts (3 items); weight gain during pregnancy (2 items); maternal breastfeeding (6 items); complementary feeding (33 items), including time of introduction to foods considered potentially allergenic, additional components (sugar, salt), vitamin and mineral supplements, feeding method and focus, drinks during infancy; and feeding in children up to 3 years of age (16 items). The majority of those 61 questions were multiple choice, albeit many of them had the option of “other”, for filling in the blank. There was only one open-ended question, in which the participants were asked to give the name of the first food they recommended for starting complementary feeding. Forty-six of the questions had the option “I don’t know”, to minimize arbitrary responses to the other options presented. The survey can be viewed in the Supplementary Material.

The survey was published on the official website of the LASPGHAN. An additional link was also created, and an open invitation to Latin American healthcare professionals was extended, to answer the questionnaire online and anonymously. Emphasis was placed on the participants’ answering the questions in accordance with their usual behavior, regardless of international guideline recommendations. The questionnaires answered by persons that were not healthcare professionals, or by healthcare professionals not residing in Latin America, were excluded. The data were downloaded from the online survey system employed, to carry out the descriptive statistics. Proportions were determined for the qualitative variables and mean with standard deviation or median with interquartile range were determined for the quantitative variables. The study protocol was accepted by the Ethics Committee of the *Universidad El Bosque* in Bogotá, Colombia. Due to the fact that the study was an online survey answered by healthcare professionals, informed consent to take part in it was not requested from the participants. No experiments were performed on animals and/or humans. The authors declare that the present article contains no personal information that could identify any patient.

Materials and methods

A descriptive, observational, cross-sectional study, utilizing a survey, was conducted. At the time of this study’s conception, there was only one publication of an 8-item survey on nutrition in infants under one year of age, but it was insufficient for the aims we wished to evaluate¹¹. Thus, we decided to carry out a survey, named the E-1500 survey, that encompassed more aspects of infant and young child nutrition. It was conceived and developed by two of the researchers (LLM, RVF). Ninety-four questions were initially formulated. The questionnaire was reviewed by the other colleagues, also experts on the topic (CBM, EOO), and at a virtual meeting, the questions were discussed, producing the final questionnaire made up of 68 items. The survey was then applied to a small sample of 10 healthcare professionals, to ensure that the questions were clear, and to identify any differences in terminology among regions. The first 7 items refer to sociodemographic aspects, including

Results

Demographic characteristics

Between 2016 and 2017, the data from a total of 1550 surveys taken by participants from 21 countries were collected. For the analysis, only the data from surveys taken by healthcare professionals, physicians, and nutriologists/nutritionists living in Latin America were considered. Surveys of participants from Spain ($n=8$) and Portugal ($n=1$) were not included, nor were those of healthcare professionals residing in the United States ($n=8$), leaving a total of 1284 surveys of participants from 18 Latin American countries in the analysis. [Table 1](#) shows the distribution by country and profession. The mean age of the participants was 37.14 ± 11.1 years and 75.7% were women.

The first 1000 and 1500 days of life

Of the survey participants, 71.4% correctly answered that the concept of the first 1000 days of life encompasses the stage from conception to 2 years of age, whereas 56.5% were not familiar with the concept of the first 1500 days of life. Regarding the recommended total weight gain during pregnancy in adolescent females, with a normal pre-pregnancy body mass index (BMI), 25.7% of the participants responded accurately. Likewise, with respect to the recommended total weight gain during pregnancy in adult women, with a normal pre-pregnancy BMI, 26.9% answered correctly.

Maternal breastfeeding

Ninety-five percent of the participants correctly identified that exclusive breastfeeding is up to 6 months of age. However, only 17.8% answered that breastfeeding can continue beyond 2 years of age. Sixty-five percent identified the immunologic benefits of breast milk, whereas 32.7% only identified breast milk as a source of antibodies, without considering the oligosaccharides in breast milk as a source of immunologic benefit. A total of 23.9% recognized the adequate length of time for breast milk to be at room temperature and 75.3% clearly identified the contraindications for breast milk.

Complementary feeding

With respect to the age for starting complementary feeding, 34.3% of the participating healthcare professionals responded that it can be started between 4 and 6 months of age and 61.2% answered that it can begin at 6 months of age. A total of 44.8% identified 6 months as the age for introducing plain water. Sixty-one percent answered that the age for introducing complementary feeding was the same for breastfed children and formula-fed children. Regarding the first food to be introduced, 34.8% answered fruits, 30.9% vegetables, 12.1% cereals, and only 9% considered vegetable proteins (legumes). Table 2 shows the age for introducing eggs, wheat, fish, pork, chicken, peanut butter, and strawberries. In relation to the age for introducing vegetables, 63% responded that their recommendation was between 6 and 7 months. Fifty-seven percent indicated natural fruit juice from the start of complementary feeding and 77.1% responded that whole cow's milk should be introduced after 12 months of age. Regarding textures, 63.7% were unfamiliar with baby-led weaning.

A total of 78.5% of the survey participants recognized that the inclusion of protein in the diet has benefits associated with verbal skills, word processing, and verbal recognition. The nutritional benefit of iron in the development of the brain, regarding spontaneous movements, spatial memory, and general learning, was identified by 62.3%. A total of 89.7% responded that recommendations for feeding and nutrition for adequate neurodevelopment include: good breastfeeding practices, multivitamin supplementation for the mother during pregnancy and breastfeeding, adequate introduction of complementary feeding, and healthy lifestyles. Supplemental iron in drops was recommended as part of complementary feeding by 33.9%, and 71.2% recom-

mended supplemental vitamin D, before 6 months of age, in exclusively breastfed infants. A total of 64.9% participants recommended infant cereals as part of complementary feeding.

The addition of sugar during complementary feeding was not recommended by 94.8% of the healthcare professionals surveyed, and 88% responded that salt should not be added to food. Forty-nine percent recommended adding vegetable oils in preparing foods, during the period of complementary feeding. The introduction of complementary feeding, regarding vegetarian and vegan diets, was not considered adequate for infant growth and development by 80.2% and 83.5% of the participants, respectively.

Diet of the preschool child

A total of 62.6% of the survey participants responded that children should be integrated into the family diet at 12 months of age; 48.6% answered that 5 daily mealtimes should be established for children between 1 and 3 years of age; and 73.7% responded that breakfast is the most important mealtime.

Infant cereal consumption was recommended by 50.1% of the participants. A total of 87.2% responded that they do not recommend flavored milk drinks in the diet of the preschool child; 79.8% and 89.1% recommended the consumption of whole cow's milk and yoghurt, respectively, for children from 1 to 3 and a half years of age.

Water was the recommended beverage by 90.6% of the healthcare professionals surveyed, for children from 1 to 3 and a half years of age; 34.6% responded that children from one year of age can drink 4 to 6 oz of juice daily; and 96.5% did not advise coffee consumption in children. A total of 50.5% and 70.3% did not recommend adding salt or sugar, respectively, to the diet of children from 1 to 3 and a half years of age. A total of 71.5% responded that multivitamins were not required and 76.7% did not recommend the use of nutritional supplements/complements for healthy children from 1 to 3 and a half years of age. Finally, 92.2% responded that they recommended physical activity (active playing) for children between 1 and 3 and a half years of age.

Discussion

At present, this is the first survey that examines the recommendations made by healthcare professionals from different Latin American countries, with respect to feeding within the first 1500 days of life. Questions about nutrition have evolved over the last two decades, breaking paradigms and changing certain practices professionals were taught during their years of training that were based more on tradition than on evidence-based nutrition⁹. Current knowledge about early programming has resulted in the appearance of the concept of "the first 1000 days of life", which spans the period from conception to 2 years of age. That is the period when the programming of many physiologic processes mainly occurs and when there can be an increased risk for various chronic pathologic conditions in the child, including metabolic syndrome, cognitive dysfunction, immunologic dysfunction, and growth abnormalities, among others^{12,13}. Likewise, the first 1500 days of life are also spoken of, which

Table 2 Starting age for diverse food consumption recommended by the 1284 survey participants.

| Age at introduction | 4–6 months | 6–7 months | 7–9 months | 9–12 months | > 12 months | Does not know/does not recommend |
|---------------------|------------|------------|------------|-------------|-------------|----------------------------------|
| Egg | 5.0% | 18.1% | 19.3% | 31.0% | 24.6% | 0.7% |
| Wheat | 8.0% | 31.5% | 26.6% | 19.4% | 12.3% | 1.9% |
| Fish | 4.4% | 15.0% | 15.9% | 25.1% | 37.3% | 1.4% |
| Peanut butter | 3.1% | 6.2% | 5.2% | 9.7% | 59.3% | 15.2% |
| Soy | 4.0% | 15.7% | 13.8% | 18.3% | 33.6% | 13.1% |
| Beef | 10.6% | 43.7% | 27.5% | 11.7% | 5.4% | 0.9% |
| Pork | 5.8% | 23.0% | 20.9% | 17.8% | 27.1% | 2.6% |
| Chicken | 12.3% | 52.6% | 24.3% | 7.1% | 2.6% | 0.9% |
| Strawberries | 5.8% | 17.4% | 11.7% | 17.1% | 45.1% | 1.8% |
| Yoghurt | 2.5% | 14.2% | 15.5% | 24.3% | 34.8% | 8.6% |
| Cheese | 2.6% | 10.8% | 16.0% | 26.2% | 37.5% | 6.5% |
| Broccoli | 15.0% | 38.4% | 20.8% | 12.5% | 8.3% | 4.8% |

is the period from conception to 3 and a half years of age, and corresponds to the time in which the gut microbiota stabilizes and acquires characteristics similar to those observed in the adult⁶. Given that diet is the main factor that affects the gut microbiota, or better said, the main way in which the gut microbiota is modified, the Early Nutrition Group of the LASPGHAN decided to adopt that concept of nutrition in the first 1500 days of life because it directly impacts the gut microbiota (said impact was not evaluated in the present study). Despite the importance of those concepts, a considerable number of the survey participants were unaware of them.

Excessive weight gain during pregnancy is associated with greater weight of the child at birth and greater susceptibility to his/her later weight gain^{14,15}. Recommended weight gain during the pregnancy of adolescents with a normal pre-pregnancy BMI should be 12.5–17.5 kg¹⁶. The US National Institutes of Health recommends a weight gain of 11.5–16 kg for adult pregnant women with a normal pre-pregnancy BMI¹⁷. The results of our survey show the low level of knowledge about the ideal weight of women during pregnancy, signaling the need for establishing strategies to make the healthcare personnel aware of those data so they can guide the pregnant woman and her immediate family.

It is perfectly well known that the best way to begin feeding all infants, save a few exceptions, is with the milk each of the mothers produces, and should ideally be provided exclusively in the infant’s first 6 months of age and continued at least up to 2 years of age^{18,19}. Close to 5% of the participants surveyed did not recommend exclusive breastfeeding during the first 6 months of life. This is important to point out, because a similar percentage was found in a recent survey conducted in Mexico that showed that 91% of healthcare professionals recommended exclusive breastfeeding up to 6 months. Nine percent did not recommend it, despite the fact that it is well established that breast milk sufficiently covers the energy and nutrient requirements the infant requires, during the first 6 months^{18,20}. An important number of the healthcare professionals surveyed in the present study did not recognize the different immunologic components of breast milk; many of them identified immunoglobulins as defense components, but the large majority did not identify

oligosaccharides as having immunomodulatory and immunoprotective effects²¹. It is alarming that only one-fourth of those surveyed were aware of breast milk storage time. Once the breast milk is expressed, it can be kept at room temperature for 4–6 h, after which its composition changes. It can be stored in a cooler for up to 12 h, and in a freezer for up to 15 days²². There is still an important lack of knowledge, with respect to breast milk, and so medical, pediatric, and nutritional training programs should be restructured for more efficient acquisition of that awareness.

One of the aspects of infant and young child nutrition that has recently evolved the most is that of complementary feeding. The introduction time has not changed, and according to the Pan American Health Organization, it is 6 months of age²³. However, other international societies, such as the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN), state that in some countries, introducing complementary feeding between 4 and 6 months can be recommended⁷. That was reflected in the results of our survey. Even though the majority of healthcare professionals answered that it should be started at 6 months, at least one-third responded that it could be started between 4 and 6 months of age. A recent survey conducted in Colombia showed that close to 97% of those surveyed also answered that the introduction age should be between 4 and 6 months of age²⁴. Currently, the introduction time of complementary feeding is considered to be the same in breastfed children and formula-fed children⁷. Nevertheless, the Early Nutrition Group of the LASPGHAN considers that the nutritional gaps in complementary feeding differ between breast-fed children and formula-fed children, and therefore, the introduction time of complementary feeding should be different.

With respect to the first food or food group to be introduced in complementary feeding, the healthcare professionals surveyed considered any of them appropriate, but the traditionally recommended choice of fruits or vegetables was very frequent, results that were similar to those from other surveys conducted in Mexico and Colombia^{10,24}. Indeed, there is no contraindication for starting with a fruit or vegetable, but that should not be exclusively maintained for a prolonged period; instead, the introduction of the second, third, and fourth foods should be continued, to achieve

a diet that is as diverse as possible⁸. Juices are not a source of fiber or protein, and thus may lead to inadequate weight gain, and because of their usually sweet flavor, they are innately accepted by children. Therefore, it is better to offer children whole fruit²⁵. Despite the fact that, more than a decade ago, the former practices of food introduction in complementary feeding were shown to lack a scientific basis, the delay in introducing foods considered allergenic is still deeply ingrained. That was apparent in our survey, given that a significant number of healthcare professionals continue to delay the introduction of those foods until after one year of age, which was also true in the previously described surveys^{10,24}. The risk for an egg allergy decreases, when eggs are introduced between 4 and 6 months of age, whereas its risk increases, if the introduction of eggs is delayed^{7,26}. However, in our survey results, one-fourth of the participants still recommend delaying the introduction of eggs until after one year of age, and similar results (33%) were found by Dadán et al.²⁴ The same thing occurred with other foods, but to a lesser degree. One study conducted on 1612 children that evaluated exposure to different foods at 3, 6, 9, 15, and 24 months of age, and whose aim was to measure the development of wheat allergy, showed that introducing wheat after 6 months of age resulted in a greater risk for allergy in the children, compared with its introduction before 6 months of age, more specifically, between 4 and 6 months of age²⁷. There is evidence that the introduction of fish between 6 and 12 months of age reduces the appearance of allergic rhinitis, whereas its introduction between 6 and 9 months of age, reduces the sensitization of the infant^{28,29}. Nevertheless, more than one-third of our survey participants continue to recommend delaying the introduction of fish, as did 63% of the Colombian participants in the study by Dadán et al.²⁴ The introduction of beef and pork is recommended from 6 months of age, because they are an important source of iron, starting at that age. Chicken, as well as other meat products, can also be introduced from 6 months of age³⁰.

Infant cereals, preferably those fortified with iron and zinc, can be part of complementary feeding. They should be introduced in the form of simple grains, such as rice or corn, and should be prepared in breast milk or formula. Infant cereals reconstituted with water are not recommended because they can result in reduced protein and calcium intake³¹.

The addition of sugar is not recommended during the first 2 years of age because it contributes to the appearance of dental caries³². Salt should not be added to foods, either, given that their intrinsic sodium content is sufficient for covering the daily requirements⁷. Supplemental iron is recommended in premature or low birthweight neonates between 2 and 6 months of age or in children with iron deficiency anemia, under the recommendation and supervision of a physician⁷.

Some publications report that a vegetarian diet in children has diverse, long-term benefits, such as a low BMI in adulthood and low mortality from ischemic heart disease, which are related to a high consumption of vegetables, whole grains, legumes, and fruits. Other studies show that a vegetarian diet has no negative impact on the growth and development of children, compared with children that consume meats. Nevertheless, particular care should be taken

in that context. A vegetarian diet is feasible, as long as it is carried out under the strict supervision of an experienced nutriologist/nutritionist that specializes in vegetarian nutrition^{7,33}. A vegan diet can be implemented under strict medical and nutritional supervision by experienced healthcare professionals trained in plant-based nutrition, to ensure that the child receives adequate supplements of vitamin B12, vitamin D, iron, zinc, folate, proteins, and calcium, i.e., to ensure that the diet contains the nutrients and calories the child needs⁷.

There has recently been an increased demand by parents for baby-led weaning, or rather, baby-led complementary feeding, which is based on the child feeding himself/herself, from 6 months of age, instead of being spoon-fed by the parents^{34–36}. It is postulated that this method enables the child to achieve self-regulation in food consumption, and as a result, in calories, thus potentially preventing the risk for overfeeding and consequent overweight or obesity. However, the only controlled clinical trial on that method, called the Baby-Led Introduction to SolidS (BLISS) study, showed no reduction in the risk for overweight or obesity³⁶.

Very importantly, adequate feeding during the first months of life has implications on neurodevelopment. A protein and iron supply deficiency in the early stages of life can produce alterations in the development of the brain, modifying the normal anatomy of the neurons and their chemical processes, affecting communication and the entire neurotransmission system. Iron is one of the main substrates that contributes to the development of the brain, participating in multiple metabolic processes, including myelination and the regulation and conduction of neurotransmitters, such as dopamine, serotonin, and GABA. The alteration of their transport due to iron deficiency can compromise the affective response, cognitive functioning, movement coordination, and memory in children^{37–40}.

From one year of age, the child can consume the same foods as the rest of the family²³. Nevertheless, the fact that the period of complementary feeding is up to 2 years of age should be recognized, making 2 years the age that the child should be completely integrated into the family diet. In general, no multivitamins are recommended, if the child is receiving an adequate diet. The use of nutritional supplements/complements is only recommended in children that need them, for example, in children at a moderate or high risk for undernutrition. They are usually used in situations of insufficient nutrient intake, when there are increased energy requirements, or in cases of metabolic alterations that hinder correct nutrient utilization⁴¹.

Study limitations

Our study sample was very heterogeneous, regarding the level of experience and knowledge, and so generalizations regarding all the healthcare professionals could not be made. Given the study design, an important limitation was the fact that there was not an adequately balanced representation of all the Latin American countries, which also impeded making generalizations that would be true for each of the countries. Another limitation was the social desirability of the participants to provide the best answers and not be perceived as having insufficient knowledge, which could

have been reduced if the representatives of the different areas of healthcare had been interviewed.

Conclusions

Based on the results of the present study conducted on a group of Latin American healthcare professionals, their knowledge about nutrition in the first 1000–1500 days of life of an individual is still incomplete and insufficient. An important percentage of the healthcare professionals surveyed still adhere to traditional complementary feeding practices, despite new evidence. The present survey results give us an idea of the awareness of healthcare professionals, with respect to infant nutrition in the first 1500 days of life, revealing the need for their continued training on those topics. Continuous medical education programs are a feasible option and can even be integrated into healthcare career programs. In turn, having a Latin American consensus on maternal, infant, and young child nutrition, based on the healthcare needs and situations of the region, is essential.

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Conflict of interest

LLM: has received honoraria for conferences given at Abbott®, Mead Johnson®, Nestlé, and Nestlé Nutrition Institute®.

RVF: has received honoraria for conferences given at Abbott®, Nestlé®, and Nestlé Nutrition Institute®.

ALMP: has no conflict of interest.

MCBM: has received honoraria for conferences given at Abbott® and Danone®.

EOO: has received honoraria for conferences given at Danone®.

VPGMB: has no conflict of interest.

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