

The National Vitamin A Supplementation Program: practices and social representations of mothers in the municipality of Vale do Jequitinhonha

Programa Nacional de Suplementação de Vitamina A: práticas e representações sociais de mães em um município do Vale do Jequitinhonha

Elisângela Christina Siqueira Marques¹
Romero Alves Teixeira¹
Sílvia Regina Paes¹

¹ Universidade Federal dos Vales do Jequitinhonha e Mucuri, Faculdade de Ciências Biológicas e da Saúde, Programa de Pós-graduação *stricto sensu* em Saúde, Sociedade e Ambiente. Diamantina-MG, Brasil.

Correspondence
Elisângela Christina Siqueira Marques
E-mail: elisangela_nut@yahoo.com.br

Abstract

The objectives of this study were to identify practices related to the Vitamin A National Supplementation Program and to reveal social representations of mothers of beneficiary children about the Vitamin A, Vitamin A Deficiency and the Program in the municipality of Vale do Jequitinhonha. A qualitative approach and the Theory of Social Representations were adopted. Semi-structured and focused interviews with 20 mothers were carried out, which were submitted to a thematic content analysis. This study showed that the vitamin A supplementation has been a strategy linked to the National Immunization Program and that the practice of supplementation has been unaccompanied by an adequate process of communication, information and education aimed at the beneficiary population. It was demonstrated that lack of knowledge about the Program and about the Vitamin A Deficiency prevails among mothers. It was revealed that some mothers see vitamin A as the “vitamin of the health center”, which indicates the primary conception of this nutrient as a medicine and not as a food element. The conception of vitamin A as a vaccine or simply as a vitamin (in a generic way) was pointed out and, finally, it was demonstrated that this vitamin is valued by the mothers, even if at times they do not understand its importance. It was concluded that it is essential to develop/strengthen educational activities aimed at the population on Vitamin A Deficiency and actions aimed at their prevention/control it. In addition, it is necessary to reflect on

the representations that this program has left for the beneficiary families, by the professionals who work in its development.

Keywords: Vitamin A. Vitamin A deficiency. Nutrition programs and policies. Health education.

Resumo

Os objetivos deste estudo foram identificar práticas relacionadas ao Programa Nacional de Suplementação de Vitamina A e revelar representações sociais de mães de crianças beneficiárias acerca da vitamina A, da Deficiência de Vitamina A e do programa em um município do Vale do Jequitinhonha. Foram adotadas a abordagem qualitativa e a Teoria das Representações Sociais. Realizaram-se entrevistas semiestruturadas e focalizadas em 20 mães, sendo essas entrevistas submetidas à análise de conteúdo temática. Este estudo mostrou que a suplementação de vitamina A tem sido uma estratégia vinculada ao Programa Nacional de Imunização e que a prática de suplementação tem sido desacompanhada de um adequado processo de comunicação, informação e educação voltado à população beneficiária. Demonstrou que entre as mães predomina a falta de conhecimento sobre o programa e a Deficiência de Vitamina A. Revelou que algumas mães veem a vitamina A como a “vitamina do posto”, o que indica a concepção primária desse nutriente como medicamento e não como elemento constituinte dos alimentos. Apontou a concepção da vitamina A como vacina ou simplesmente como uma vitamina (de forma genérica), e, por fim, que essa vitamina é valorizada pelas mães, mesmo que, em alguns momentos, elas não compreendam sua importância. Conclui-se que é indispensável o desenvolvimento/fortalecimento de atividades educativas voltadas à população sobre a Deficiência de Vitamina A e as ações voltadas à sua prevenção/controle. Além disso, são necessárias reflexões sobre as representações que esse programa tem deixado para as famílias beneficiárias, por parte dos profissionais que atuam no seu desenvolvimento.

Palavras-chave: Vitamina A. Deficiência de vitamina A. Programas e políticas de nutrição e alimentação. Educação em saúde.

Introduction

The Vitamin A Deficiency (VAD) is a major public health problem of food and nutrition in Brazil today,^{1,2} and actions aimed at their prevention and their control are developed in the country since 1983.³ Currently, the National Vitamin A Supplementation Program is in operation, a program that establishes supplementation with megadoses of vitamin A in children from 6 to 59 months of age and in postpartum women in the immediate postpartum period, and it also provides for the development of educational activities in food and nutrition.^{4,5}

Few scientific research in Brazil focused on the actions/programs of prevention and control of VAD.⁶⁻¹¹ It is worth noting that research has not yet been carried out with this theme in Vale do Jequitinhonha, a region located in the northeast of Minas Gerais,¹² which has been indicated by the Federal Government for the development of actions to prevent and control VAD, since they were initiated in the country.^{3,13} In addition, only part of the research carried out was attended by representatives of beneficiary families.⁵⁻⁸

The Theory of Social Representations has been very useful in the process of understanding different social objects.¹⁴ This approach allows the valuation of daily structured knowledge in the conversations that people establish or in the moments in which they are exposed to the institutions, the media and the historical-cultural heritage of their communities.¹⁵ This approach is necessary because if there is no explanation of the representations made about social objects, it is not possible to understand them or to understand the context in which they were generated. Without being revealed, social representations and contexts of formation are perpetuated and maintain their influence on the practical life of the people, without questioning and without the modifications that may be necessary.

The objective of this study was to identify practices related to the National Vitamin A Supplementation Program (PNVITA) and to reveal social representations of mothers of beneficiary children about vitamin A, Vitamin A Deficiency (VAD) and PNVITA, in a municipality of Vale do Jequitinhonha.

Methods

It is a research with a qualitative approach, chosen for being considered more appropriate to its objectives, since, as Minayo points out,¹⁶ this type of research deals with the universe of meanings, motives, aspirations, values, beliefs and attitudes.

“Practices” related to the National Vitamin A Supplementation Program were analyzed, which can be understood as practical activities developed or not in the municipality. In addition, the mothers’ knowledge about the subject was analyzed, based on the Theory of Social Representations.

Social representations can be understood as “ideas, images, conceptions and world perspectives that social actors build on reality, which are linked to social practices” (p. Xi).¹⁷ It is worth mentioning that the differential of this study, in relation to the others, lies in the fact that it sheds light on the PNVITA, from the perspective of social representations.

The field work occurred from December 2012 to March 2013 in an urban area of a municipality with a population of about 45,000 inhabitants.¹⁸ The study involved 20 mothers of children benefiting from the program, a number defined by progressive inclusion, interrupted by the saturation method.¹⁹

Preference was given to mothers whose children were between 36 and 59 months old at the time of the field research. The names and addresses of these mothers were initially identified from records of the Family Health Teams in the municipality. Some of these mothers were interviewed and, after the interview, they had the opportunity to indicate other subjects for the research. It is important to mention that this led to the inclusion of mothers of children outside the preferential age group previously established in two situations: one of these children was 60 and the other 61 months of age. However, it was decided to maintain them, considering that this age group was defined as indicating a greater time of attachment to the program, meaning a greater chance that the mother had experiences with it.

Semi-structured and focused interviews were conducted,²⁰ which were recorded in audio, transcribed and submitted to content analysis in the thematic modality, from a qualitative perspective.²¹⁻²³

The research followed the ethical principles of the Declaration of Helsinki, respecting the precepts of Resolution CNS nº 466/2012.²⁴ Fieldwork started after the approval of the project by the Research Ethics Committee of the Universidade Federal dos Vales Jequitinhonha and Mucuri, by Opinion No. 71/2012. The subjects were identified by numbers, according to the chronological order of the interviews, from “Mother 01” to “Mother 20”.

Results and Discussion

Characterization of mothers interviewed

The age range of the interviewees varied between 21 and 47 years, and the average age was 29 years. They had one to four children, and at least one of them aged between 36 and 61 months. The mothers' schooling ranged from incomplete elementary school to full tertiary education with a *lato sensu* postgraduate course, and most of them had completed high school.

Practices related to the National Vitamin A Supplementation Program

The two thematic categories related to the development of the National Vitamin A Supplementation Program in the municipality were highlighted.

Vitamin A supplementation: a practice linked to the National Immunization Program

In the analysis of the interviews, it was verified that the practice of supplementation has been linked to the practices related to the National Immunization Program (PNI). It was observed that the supplementation has been a secondary action before vaccination, that is, in some cases, supplementation occurs for the child, in the Basic Health Unit (BHU), however the action targeted by the mothers is the vaccination. Some of them are doubtful if the child receives or has already received the supplement and others affirm that their child has not received. It should be noted that, in relation to the mothers mentioned below (9 and 11), there was verification of the children's health books, and attestations were made to the occurrence of supplements.

The whole vaccination was there, but ... I do not remember him receiving it.[...] He is going [to the BHU] just to get vaccinated. (Mother 09)

I went to the Health Center only for the polio vaccination, I did not know about this vaccine, nor did I know that it existed, this vitamin A. So, it's ... I did not have any education, we just saw it because you saw it on the card, because I did not know that. (Mother 11)

In other situations, the mothers recognize the occurrence of supplementation for the children, but indicate that it occurs in a complementary way, and, in general, the vaccination is the intervention that motivates the trips to the BHU:

I take him for weighing or for the vaccination campaign and if it is during the vitamin A season and he takes it. But exclusively to take the vitamin A, I think I never took him. (Mother 13)

Another aspect of relevance observed in mothers' speeches is the linkage of vitamin A administration to immunization campaigns. In addition, some mothers emphasize the occurrence of supplementation only during campaign moments:

When he has those... vitamins of the campaign that he takes at the health center, those with the drops in the mouth.[...] otherwise, he does not take it. (Mother 17)

Another form of linkage between the PNVITA and the PNI was also perceived: the occurrence of supplementation and vaccination records in the same document - the child's health booklet, called by the mothers as the "vaccination card". The following statement illustrates this statement:

They [community health agents] come to our house to be able to control, right? See if the card is up to date, they look at everything. If not, they will say, "Look, you have to go to the health center for this vitamin or vaccine."
(Mother 02)

The linkage resulting from the integrated development of the PNVITA with the PNI draws close attention. According to Martins et al.,³ such operational linkage occurs since the supplementation was initiated in the country. The administration of vitamin A in National Vaccination Campaigns was a pioneering initiative in Brazil, later recommended by WHO and UNICEF as a way of controlling the VAD in the short term. These authors also note that, according to data compiled by the WHO in 1998, 40 countries had already adopted this operational strategy and reached supplementation coverage of between 30 and 100%.

Currently, the suggestion of the Ministry of Health is that supplementation should be given priority in the routine of health services (spontaneous or programmed demand, home visit and active search) and that, if necessary, complementary strategies should be adopted as a specific campaign for supplementation ("Vitamin A Day") or the administration of vitamin A along with the campaign against poliomyelitis. These recommendations aim to improve the program, since it is expected that all the contacts of the child with the health team will be used so that the professionals, besides checking the regularity of the supplements, advise the responsables for them about this action and also about the importance of healthy eating.⁵

It should be noted that some reports from the mothers indicate that in the municipality, the vitamin A administration has not only occurred at times of vaccination, but has already been carried out in the various contacts of the child with the health team, especially in the visits to the Basic Health Unit for anthropometric evaluation.

Another aspect that has favored the supplementation strategy is the occurrence of registration of the administrations in the children's health books, an action that is recommended in the PNVITA manual of general conduct.⁵ In the interviews, the constant vigilance of these books was emphasized, both when the mothers visit the Basic Health Unit and when community health agents visit their home. Such monitoring is of vital importance in keeping the child health data up to date, which ultimately covers data on vitamin A administrations. In addition, monitoring of health records is also important in preventing vitamin overdose, resulting from multiple visits of the children to the Basic Health Units.

It is observed, however, that the binding of vitamin A supplementation to immunization can have negative repercussions. One of them is the occurrence of “passive participations” in the PNVITA and this could be evidenced in the present study in cases of some mothers’ lack of knowledge regarding the occurrence of vitamin supplementation for their children. In general, these mothers usually go to the Basic Health Unit for immunization of the children and they do not realize that besides the vaccine there is also the administration of vitamin A.

Therefore, as stated by Martins et al.,⁶ the distribution of the supplement, through the PNI, proves to be efficient in relation to the supplementation coverage, but it does not contribute to clarify the population about the importance of vitamin A.

Vitamin A supplementation: a practice unaccompanied of an adequate communication, information and education process

From the interviews, the current thematic category was highlighted, which indicates that vitamin A supplementation has been a practice unaccompanied of an adequate communication, information and education process for the beneficiary families.

In the following sections, experiences related to the program experienced by mothers still in the maternity of the municipality are described:

I have taken it.[...] They just gave me the ... vitamin, right? They said that I needed to take it, to be able to get her milk too. (Mother 06)

Yes, they gave it to me. But they did not tell me what it was. (Mother 07)

These reports reveal the occurrence of vitamin A supplementation in the maternity ward, with no orientation or guidance limited to the fact that the supplement is important for the woman and the breastfed child, but without further clarification on this relevance. However, it is necessary to analyze this result with caution, taking into account the time elapsed since the occurrence of this experience, which in some cases is more than three years, as well as the fact that the memories of the mothers may have been damaged by alterations suffered in the physical and emotional state arising from the lived moment.

The reports of experiences in the Basic Health Unit also indicate a similar situation: there has been supplementation of vitamin A for children, but the communication/information process related to this practice has been deficient:

Yeah, usually the girls from the health center do not explain us a lot of things. You just get there with the child, take it and leave. They do not not explain, you do not know what it is for. So... Yeah, I am not well informed. (Mother 02)

They do not explain much at the health center, you know? They say things like ... “you have to bring him every 6 months, until he completes 5 years of age, I guess,” I do not know, something like that. But... What the vitamin A does, that I do not know. (Mother 07)

The poor communication process is also evident in the situation already reported, of “passive participation in the PNVITA” – children who receive the supplement without the mothers knowledge.

Another relevant aspect identified in this study is that all interviewees report the absence of communication, information and education activities on vitamin A, VAD and PNVITA, as exemplified in the following sections:

No ...That’s why I do not know nothing, right? (Mother 01)

There are family reunions at the station, but that’s just family planning. But they do not talk about this vitamin business, no. (Mother 02)

The occurrence of food and nutritional education activities was also investigated. Some mothers report that they have never participated in this type of activity in the Basic Health Unit in which they are registered, others have referred to the information about food and nutrients. The following reports are illustrative:

No, well ... that this is better ... it is better ... No. For example, I listen more to what my mother says, because ... Understood? (Mother 07)

Whenever we go to the health center [...] we are always informed. [...] We are the ones who never remember, but they explain all the vitamins from vitamin A, B to D also [...]. And about the food. We have a lapse, right, that we are not reminiscent of the characteristic of each vitamin, about the feeding, but not about the supplementation. (Mother 20)

The mothers’ statements indicate that, in the municipality, the prevention/control of VAD has been focused on vitamin supplementation and that this strategy (when perceived) has been configured before the mothers as an isolated action and not as part of a program that has other actions, motivations to exist and goals to achieve.

It is necessary to remember that to achieve prevention/control of VAD, vitamin supplementation (when necessary) should always be accompanied by strategies aimed at improving vitamin A intake, such as dietary diversification and food fortification.²⁶ In this sense, an attribution provided for the municipalities that have the PNVITA implemented is the carrying out of educational activities

in food and nutrition for the beneficiary families.⁵ In fact, according to Rodrigues and Roncada,²⁷ nutritional education activities are recommended in official VAD prevention programs, since they were implanted in the country. However, they are not receiving the same merit, disclosure and investment destined to vitamin supplementation.

All the mothers interviewed emphasized that they never participated in educational actions that dealt with VAD and PNVITA, which is a negative aspect, since such actions are important for families to recognize VAD as a public health problem and assume co-responsibility for adoption of preventive measures.⁵

Some mothers reported that they have not participated in food and nutritional education activities (not specifically as part of VAD's control actions), and others reported receiving food information, which focused on food and nutrients but that, in general, were not assimilated, which indicates the existence of failures in the educational processes developed. Apparently, such activities have been centered on the logic of transmitting information about the importance of food for health, the functions and characteristics of nutrients, that is, a predominantly technical approach, focusing on biological aspects, decontextualized from the cultural, social and economic reality in which people live and thus inadequate to the goal of promoting healthy eating habits.

It is known that food and nutritional education, in the context of the realization of the Human Right to Adequate Food and guarantee of Food and Nutrition Security, is a fundamental strategy for the prevention and control of alimentary and nutritional problems, being able to contribute in an effective way in the prevention and control of nutritional deficiencies.²⁸ But this can not be an educational practice based on the monologue (in which only the educator speaks and it is up to the pupil to listen and obey), that does not take into account the facts related to food and their meanings in the life of individuals. The “deep encounter between men established through dialogue, listening to the student to be able to speak with him” is necessary (p.14).²⁹

It is worth remembering that there are some principles that should be considered in educational activities. One of them is the respect and appreciation of “the different expressions of the identity and food culture of the population, recognizing and spreading the incessant wealth of local and regional foods, preparations, combinations and practices.” The other principle is to have “feed and food as a reference” (p.25-26),²⁸ since according to Valente,³⁰ humans do not eat calcium, iron, proteins or vitamins, they feed on food socially produced from the moment it is obtained until the time of preparation and sharing. According to this author, when feeding, man does not simply satisfy hunger and nutritional needs, he replaces himself, potentiates himself as a human being in the organic, intellectual, psychological and spiritual dimensions and reaffirms himself in his identity and culture.

Social representations about the National Supplementation Program for Vitamin A and Vitamin A Deficiency

It was verified that among the mothers predominated the lack of knowledge about the “Vitamin A Program”. As they were questioned about what they knew about it, the following responses were given:

I do not know him about it. (Mother 09)

I know nothing. Uninformed. (Mother 14)

The same was true when mothers were asked about what they know about “Vitamin A Deficiency” (with the use of this term):

I have never heard about it. (Mother 17)

I have no idea. (Mother 19)

In view of this, it was found that, in general, Vitamin A Deficiency and Vitamin A Program are not phenomena of social representation for the group studied. Such terms are abstract, they are not the subject of educational activities developed in the BHU, they are not part of the conversations that the mothers establish nor are they commonly used by the mass media, and thus they remain in the unfamiliar universe, unknown to the mothers. It should be remembered that, according to Moscovici, the purpose of social representations is to make familiar, something unfamiliar.³¹

When analyzing the interviews, it was also highlighted the idea that the Vitamin A Program is the vitamin supplementation for children, which occurs in the BHU:

Well, I think, so ... if the child does not have a good diet, it is a way to supply the vitamin that is missing, so I think it is very important [the program] to continue. (Mother 05)

The association of the term “Vitamin A Program” with educational actions directed to the population on supplementation was also verified, together with the affirmation that such a program does not exist and its implementation would be positive:

I think this program should be great, at least, to guide people about what the vitamin is, what it ... its deficiency, what it causes. Understood? [...] Despite always going to the BHU, I do not know this program. [...] This program that I'm telling you that I think is good, I think it's going to be good even for the population to have more knowledge. (Mother 20)

Given that social practices are essential to the process of generating social representations,¹⁵ it is believed that the idea that the program is the vitamin supplementation for children, and the notion that it does not exist (since it is related to educational actions on supplementation) originated from the reality perceived by mothers in daily life. As mentioned, the mothers' reports indicate that, in the municipality, the program is centered on the strategy of vitamin supplementation and that this practice has not been accompanied by an adequate process of communication, information and education for families.

It should be noted that, during the interviews, there were speeches from mothers related to "lack of vitamin A", however it was considered relevant to present these speeches in the following topic.

Social representations about vitamin A

Four thematic categories related to the mothers' social representations about vitamin A, presented below, were highlighted.

Vitamin A: the vitamin of the health center

From the interviews, the social representation of vitamin A was verified as "vitamin of the health center", also identified as droplet, bisnaguinha, medicine, among other denominations, as shown below:

Well, the vitamin ... as they say, it is ... a medicine that every child has to take, right? [It is found] In the health center, right? (Mother 02)

Well, I know that the boys take it [vitamin A] at the health center, right? They have never explained it well enough. He says it's a vitamin you have to take there. That it is a droplet, right? (Mother 03)

This representation indicates the primary conception of vitamin A as a medicine and not as a constituent element of food. It was identified in the reports of the mothers who recognize the strategy of supplementation and manifested itself as the first idea regarding the nutrient, the most evident, becoming explicit from the beginning of the interviews, when the mothers were questioned about what they knew about vitamin A. It should be noted that this vitamin was related to food only after specific questions about its dietary sources or the cause of its lack in the body, or by mothers who did not know the strategy of supplementation.

It is believed that the formation of this representation is especially the result of mothers' routine exposure to the vitamin supplement given to children in the BHU, which consists of an oily liquid contained in a capsule.

The fixation of this image may also be due to the communication processes established between the mothers and the professionals of the Municipal Health Teams which, according to the mothers themselves, do not mention dietary sources as often as they mention nutrient supplementation

It is also possible that the formation of this representation is the result of a historical process driven by various interests. In this sense, Latham²⁵ asserts that textbooks, manuals, and policy discussions on vitamin A listed the distribution of the supplement as one of several strategies for VAD control and not as superior to other approaches. Supplementation was recognized as a short-term measure, a palliative of pending dietary improvements. However, throughout the 1990s, supplementation has become increasingly accepted as the main or almost only effective pathway to prevent VAD and also as an effective way to save children's lives in countries with high infant mortality rates. The scientific basis for this change was the Beaton Report of 1993, which showed from a review of the studies conducted up to that time that vitamin A supplementation resulted in an average 23% reduction in infant mortality rates from 6 to 60 months. However, this author considers that this Report has been used selectively, since it also states that more gradual and sustainable approaches, based on food, could have been as effective as the supply of the vitamin supplement.²⁵

It is believed that the fact that mothers see vitamin A as a medicine may generate the idea that foods are insufficient to meet the nutritional needs of children and that therefore they would only be provided if the supplement was used. As a consequence, this may give mothers a sense of dependence on health services, to maintain adequate nutrition for children, and the belief that it can not be guaranteed through community resources that promote increased consumption of food sources of the vitamin.

From the interviews, it was also noticed that vitamin A is not always understood as a specific nutrient, but that in the conception of mothers, this element has the meanings of vaccine and vitamin, as explained below.

Vitamin A: a vaccine

The following statements show that some mothers see vitamin A (or vitamin of the health center) as vaccine:

Oh, the only thing I think about is that it [vitamin A] should be a very important thing right, if it was not ... I think our agent would not look at the card every month and ask, and look if it was missing or not, if it was needed, the vaccine. (Mother 06)

Vitamin, I think it comes like a vaccine, right? Whenever the boy who is vaccinated, the boy who is little, they say it is a vitamin, it like a vaccine. (Mother 17)

The social representation of vitamin A as a vaccine means that for some mothers these two elements are identical, being classified in the same category and not as two independent elements with different characteristics and functions. This representation is mainly due to the operational link between the PNVITA and the National Immunization Program mentioned above and a consequence of the absence or inadequacy of educational processes on PNVITA for the population.

It is worth noting that, as in the present study, two studies conducted in the State of Paraíba revealed that those responsible for the PNVITA beneficiary children perceived the vitamin as another vaccine in the basic immunization schedule.^{7,9}

It is believed that this conception can positively influence the interest and the search of the mothers for megadose of vitamin A, since the vaccines are important elements, as shown by Pugliesi et al.³² However, it may suggest the idea that supplementation alone is capable of eradicating VAD (as it may occur in relation to vaccine-preventable diseases), and therefore no food-based intervention is required.

Vitamin A: a vitamin

In the analysis of the interviews revealed that mothers do not attribute to the vitamin A (or vitamin of the health center) only specific characteristics of this nutrient, but they also give them knowledge that they have about vitamins in general. This was observed, for example, when Mother 09 was questioned about vitamin A, and she discussed about the importance of vitamins, and when Mother 17 responded similarly to questions about vitamin A and vitamins in general:

[Response to the question about the importance of vitamin A] *I know it is very important both in for the intellectual and physical development of the child, it also depends on the vitamin, right? [...] It facilitates the development of his organism ... because it has many ... many properties.* [Question: Are you talking about vitamin A or about all vitamins in general?] *Of all. I do not know anything specific about the vitamin A.* (Mother 09)

[Speaking about the importance of the vitamin received by the child at the BHU]: *I know it's good to ... it strengthen bones and everything, right? And it helps to prevent illness. [...] I think it's important, right? For the boy, for his growth it, right?* [Talking about the importance of vitamins in general]: *To strengthen the boy, right? So he grows healthy. Strengthen the ... Avoid diseases.* (Mother 17)

Some of the mothers' reports of vitamin A sources also indicate the anchoring of vitamin knowledge to this particular vitamin. Among the sources cited are fruits, vegetables and legumes, which are generally important sources of vitamins, and orange, a food known as a source of vitamin C. There has also been reference to carrot, a source food of vitamin a, but in the case of Mother 12, she was cited along with the sun, an important element in the metabolism of vitamin D.³³

It is believed that Moscovici's teachings on anchoring (one of the processes by which social representations are generated, transforming the unfamiliar into familiar) can aid in understanding the formation of this representation. According to him, anchoring is

classifying and naming something. [...] The moment a given object or idea is compared to the paradigm of a category, acquires characteristics of that category and is readjusted so that it fits in with it. If the classification thus obtained is generally accepted, then any opinion which relates to the category will also relate to the object or to the idea" (p.61).³¹

This author is even more enlightening when talking about how the classification process occurs and, in the specific case of vitamin A/vitamin ratio, refers to generalization. According to him, the classification is made in two ways, generalizing or particularizing: "generalizing, we reduce the distances. We randomly select a feature and use it as a category [...]. Thus, the characteristic becomes, as it were, coextensive with all members of this category" (p.64).³¹

It is believed that the social representation of vitamin A as a vitamin (something similar to a multivitamin) can have repercussions on the mothers' greater interest in megadose, since vitamin is an element recognized as important for health maintenance, which was evidenced by Garcia, for example.³⁴ On the other hand, such representation may give rise to the erroneous idea that more general dietary deficiencies may be offset by the use of vitamin A, ie the notion that the need for vitamins is being met with the megadose distributed in the BHUs, not worrying about the proper consumption of food sources.

Vitamin A: something valued

In the analysis of the interviews, the value given by mothers to vitamin A (or vitamin of the health center) was also emphasized, qualified as good, important, necessary, etc. In some reports, it is perceived that this value is associated with the benefits that mothers believe the vitamin offers for health, as illustrated below:

Wow, I know it's important to the child's growth. (Mother 02)

[...] I know it's good for the eyes, right? (Mother 12)

In addition, it is noted that some mothers consider vitamin A to be important because it is available at the BHU or made available by the government, and also because Family Health Team professionals always charge for it:

Oh, the only thing I think is that it should be a very important thing, if it was not ... I think our agent would not look at the card every month and ask, and look if it was missing or not, if it was needed, the vaccine. (Mother 06)

I think it must be very important because it's available at the health center, so I believe ... the community really needs this vitamin, you know? Because when it is something that is necessary, but it is not so necessary, people have trouble finding it, usually these vitamins or vaccines are paid, the government, right, already in a (Mother 20)

It can be seen, therefore, that the value of vitamin A is not only due to its intrinsic value, because of the properties and benefits that mothers believe it has, but it is also related to the representations they have about other social issues, the products and services offered in the BHU (or made available by the government) or the issues that require the commitment of the health team.

It is worth mentioning that, when elaborating social representations, people attribute value to objects because “neutrality is prohibited by the logic of the system, where each object or being must have a positive or negative value and assume a certain place on a clear hierarchical scale” (p.62).³¹

Considering the role of social representations in guiding behaviors,³⁵ it is believed that this valorization of vitamin A can stimulate the mothers' search for the megadose distributed in the BHUs.

Despite the positive view regarding vitamin A and its representation as a vitamin or as a vaccine (elements also valued), it was noted that the participation of mothers in supplementation actions in the municipality does not always seem to relate to the social representations they have, for example, mothers whose children receive or have already received the supplement, without even knowing about it, since there are times when the supplementation is done together with the vaccination and it gets confused with it, as already discussed.

Final considerations

From the reports of mothers of beneficiary children, it has been identified that the vitamin A supplementation has occurred in the city under study and that this practice has been linked to the practices related to immunization of children, which occurs in the Basic Health Units (BHU), an issue that may favor the supplementation strategy with regard to the coverage, but which may have the passive participations in the National Program of Supplementation of Vitamin A (PNVITA) as negative consequence.

It was observed that vitamin supplementation seems to be the central prevention/control strategy for Vitamin A Deficiency (VAD) in the municipality, being this practice unaccompanied by an adequate process of communication, information and education aimed at families.

Using the Theory of Social Representations in this study was considered valuable. This approach allowed the apprehension of the view that representatives of beneficiary families have on the subject addressed, in addition to having made possible the inference on psychological, social and historical factors that seem to influence the construction of this knowledge.

This study revealed knowledge that mothers have elaborated in their daily lives, when they visit BHU or receive health professionals at home, in the conversations they establish or in the actions they witness. It is sometimes perceived that distorted ideas are formed in this process, for example, that vitamin A is a vaccine or a vitamin in a generic way. While these concepts may favor the participation of mothers in the supplemental actions, this is not what is expected, since, taking into account the right of access to information,³⁶ it is intended that the individual participates voluntarily, freely and enlightened in practices relating to their health.

On the other hand, mothers were generally unaware of Vitamin A Deficiency and Vitamin A Program, which seems to be related to the lack of communication processes for the beneficiary families of the PNVITA.

The representation of vitamin A was primarily identified as “the vitamin of the health center”, as well as the representation of the PNVITA as “vitamin A supplementation”, which indicates that the program has given the population the idea of the medical supplement, more than the idea of the nutrient food sources. Therefore, it is considered that the professionals involved in the development of the program need to reflect on these social representations and on the representations that are intended to be maintained in relation to vitamin A and the program for the prevention and control of VAD. It is believed that, in such reflections, it is essential to have in mind the human right to adequate food and the importance of valuing governmental, non-governmental and family interventions linked to adequate and sufficient food consumption.

In addition, in view of the results presented here, it is of fundamental relevance to develop/strengthen educational activities aimed at the population, capable of promoting an understanding about vitamin A and the existence and purpose of a program aimed at the prevention and control of VAD and also able to promote healthy eating habits. It should be noted that, for the effectiveness of these actions, it is necessary to take into account the context in which people live. In this sense, it is understood that the social representations revealed here can be very useful, indicating another perspective to be considered in the set of factors that influence the behaviors of the individuals and can affect the effective control of the VAD.

Finally, it is worth mentioning that further studies on PNVITA are needed in the Vale do Jequitinhonha region, especially including the perspective of other social actors, such as Family Health Team professionals and program managers.

Contributors

Marques ECS worked on the theoretical and methodological design of the research, execution of field activities, data analysis, elaboration and final review of the article. Teixeira RA and Paes SR worked on the theoretical and methodological conception of the research, on the orientation to execute all its stages and on the critical review and final writing of the article.

Conflict of interest: The authors declare that there is no conflict of interest

References

1. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Política Nacional de Alimentação e Nutrição. Brasília: Ministério da Saúde; 2013.
2. Vannucchi H, Vítolo MR, Jordão Júnior AA. Micronutrientes. In: Brasil. Ministério da Saúde. Centro Brasileiro de Análise e Planejamento. Pesquisa Nacional de Demografia e Saúde da Criança e da Mulher – PNDS 2006: dimensões do processo reprodutivo e da saúde da criança. Brasília: Ministério da Saúde; 2009. p. 249-263. (Série G. Estatística e Informação em Saúde).
3. Martins MC, Oliveira YP, Coitinho DC, Santos LMP. Panorama das ações de controle da deficiência de vitamina A no Brasil. *Rev Nutr.* 2007; 20(1):5-18.
4. Brasil. Ministério da Saúde. Portaria nº. 729, de 13 de maio de 2005. Institui o Programa Nacional de Suplementação de Vitamina A e dá outras providências. *Diário Oficial da União* 16 maio 2005, Seção 1:60.
5. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Manual de condutas gerais do Programa Nacional de Suplementação de Vitamina A. Brasília: Ministério da Saúde; 2013.
6. Martins MC, Santos LMP, Santos SMC, Araújo MPN, Lima AMP, Santana LAA. Avaliação de políticas públicas de segurança alimentar e combate à fome no período 1995-2002. 3 – O Programa Nacional de Controle da Deficiência de Vitamina A. *Cad Saúde Pública* 2007; 23(9):2081-2093.
7. Brasil. Ministério da Saúde. Organização das Nações Unidas para Agricultura e Alimentação. Análise do Programa Vitamina A Mais e do acompanhamento das condicionalidades de saúde do Programa Bolsa Família em alguns municípios da região Nordeste [informe]. Brasília: Ministério da Saúde; 2009.
8. Almeida ER, Carvalho AT, Nilson EAF, Coutinho JG, Ubarana JA. Avaliação participativa do Programa Nacional de Suplementação de Vitamina A em um município da região Nordeste do Brasil. *Cad Saúde Pública* 2010; 26(5):949-960.
9. Peixoto JBS. Programa brasileiro de prevenção e controle da deficiência de vitamina A: percepção de beneficiários [dissertação]. Campina Grande (PB): Universidade Federal da Paraíba; 2011.
10. Brito VRS, Vasconcelos MGL, Diniz AS, França ISX, Pedraza DF, Peixoto JBS, et al. Percepção de profissionais de saúde sobre o Programa de combate à deficiência de vitamina A. *Rev Bras Promoç Saúde* 2016; 29(1):93-99.

11. Paiva AA, Cagliari MPP, Queiroz D, Souto RA, Brito VRS, França ISX. Programa Nacional de Suplementação de Vitamina A no Estado da Paraíba: uma análise a partir do relato de profissionais da equipe de saúde da família. *Epidemiol Serv Saúde* 2011; 20(3):373-383.
12. Souza JVA. Introdução. In: Souza JVA, Henriques MS, organizadores. *Vale Jequitinhonha: formação histórica, populações e movimentos*. Belo Horizonte: UFMG/PROEX; 2010. p. 11-23.
13. Brasil. Ministério da Saúde. Portaria nº 2.160, de 29 de dezembro de 1994. Cria, no Instituto Nacional de Alimentação e Nutrição, o Programa Nacional de Controle das Deficiências de Vitamina A. *Diário Oficial da União* 30 dez. 1994; Seção 1:222.
14. Farr RM. Representações sociais: a teoria e sua história. In: Guareschi PA, Jovchelovitch S, organizadores. *Textos em representações sociais*. 13. ed. Petrópolis: Vozes; 2012. p. 27-51.
15. Guareschi PA, Jovchelovitch S. Introdução. In: Guareschi PA, Jovchelovitch S, organizadores. *Textos em representações sociais*. 13. ed. Petrópolis: Vozes; 2012. p. 17-24.
16. Minayo MCS. O desafio da pesquisa social. In: Minayo MCS, Deslandes SF, Gomes R. *Pesquisa social: teoria, método e criatividade*. 28. ed. Petrópolis: Vozes; 2009. p. 9-29.
17. Oliveira DC, Moreira ASP. Apresentação. In: Moreira ASP, Oliveira DC, organizadores. *Estudos interdisciplinares de representação social*. 2. ed. Goiânia: AB Editora; 2000. p. xi-xiii.
18. Instituto Brasileiro de Geografia e Estatística. *Cidades@ - Minas Gerais*. Brasília: IBGE; 2017. Disponível em: <http://cidades.ibge.gov.br/xtras/perfil.php?lang=&codmun=312160&search=minas-gerais|diamantina|infograficos:-informacoes-completas>
19. Deslandes SF. O projeto de pesquisa como exercício científico e artesanato intelectual. In: Minayo MCS, Deslandes SF, Gomes R, organizadores. *Pesquisa social: teoria, método e criatividade*. 28. ed. Petrópolis: Vozes; 2009. p. 31-60.
20. Lakatos EM, Marconi MA. *Metodologia científica*. 5. ed. São Paulo: Atlas; 2008.
21. Minayo MCS. *O desafio do conhecimento: pesquisa qualitativa em saúde*. 8. ed. São Paulo: Hucited; 2004.
22. Bardin L. *Análise de conteúdo*. São Paulo: Edições 70; 2011.
23. Gomes R. Análise e interpretação de dados de pesquisa qualitativa. In: Minayo MCS, Deslandes SF, Gomes R. *Pesquisa social: teoria, método e criatividade*. 28. ed. Petrópolis: Vozes; 2009. p. 79-108.
24. Brasil. Ministério da Saúde. Conselho Nacional de Saúde. Resolução nº 466, de 12 de dezembro de 2012. Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. *Diário Oficial da União* 13 jun. 2013, Seção 1:59.
25. Latham M. The great vitamin A fiasco. *World Nutrition* 2010; 1(1):12-45.
26. Organización Mundial de la Salud. *Directriz: administración de suplementos de vitamina A a lactantes y niños 6-59 meses de edad*. Ginebra: Organización Mundial de la Salud; 2011.
27. Rodrigues LPF, Roncada MJ. A educação nutricional nos programas oficiais de prevenção da deficiência da vitamina A no Brasil. *Rev Nutr.* 2010; 23(2):297-305.

28. Brasil. Ministério do Desenvolvimento Social e Combate à Fome. Secretaria Nacional de Segurança Alimentar e Nutricional. Marco de referência de educação alimentar e nutricional para as políticas públicas. Brasília: MDS; 2012. 68 p.
29. Boog MCF. Educação nutricional: passado, presente, futuro. *Rev Nutr.* 1997; 10(1):5-19.
30. Valente FLS. Segurança Alimentar e Nutricional: transformando natureza em gente. In: Valente FLS. *Direito humano à alimentação: desafios e conquistas.* São Paulo: Cortez; 2002. p. 103-136.
31. Moscovici S. *Representações sociais: investigações em psicologia social.* 13. ed. Petrópolis: Vozes; 2012.
32. Pugliesi MV, Tura LFR, Andreazzi MFS. Mães e vacinação das crianças: estudo de representações sociais em serviço público de saúde. *Rev Bras Saúde Mater Infant.* 2010; 10(1):75-84.
33. Combs Júnior G. Vitaminas. In: Mahan LK, Escott-Stump S. *Krause: alimentos, nutrição & dietoterapia.* 10. ed. São Paulo: Roca; 2002. p. 65-105.
34. Garcia RWD. Representações sociais da alimentação e saúde e suas repercussões no comportamento alimentar. *Physis* 1997; 7(2):51-68.
35. Abric JC. A abordagem estrutural das representações sociais. In: Moreira ASP, Oliveira DC, organizadores. *Estudos interdisciplinares de representação social.* 2. ed. Goiânia: AB Editora; 2000. p. 27-38.
36. Brasil. Ministério da Saúde. Portaria nº 1.820, de 13 de agosto de 2009. Dispõe sobre os direitos e deveres dos usuários da saúde. *Diário Oficial da União* 14 ago. 2009; Seção 1:80.

Received: March 29, 2017

Reviewed: June 19, 2017

Accepted: September 5, 2017

