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SYSTEMIC ARTERIAL HYPERTENSION AND ITS PREVENTION IN THE SOCIAL REPRESENTATIONS OF ADOLESCENTS

HIPERTENSÃO ARTERIAL SISTÊMICA E SUA PREVENÇÃO NAS REPRESENTAÇÕES SOCIAIS DE ADOLESCENTES

HIPERTENSIÓN ARTERIAL SISTÉMICO Y SU PREVENCIÓN EN LAS REPRESENTACIONES SOCIALES DE LOS ADOLESCENTES

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ABSTRACT

Objetive: to analyze the social representations of adolescents on systemic arterial hypertension and its prevention. ***Method:*** an exploratory-descriptive study, with a qualitative approach, based on the theory of Social Representations. Twenty-one adolescents from a public institution in the northern district of Rio de Janeiro, Brazil, were participants. The data was collected by semi-structured interviews, submitted to the analysis of thematic-categorical content. ***Results:*** representations characterized SAH, mainly as blood disease, by the accumulation of lipids in arteries and sugar. Information was observed in RS regarding the involvement of lifestyle elements in SAH, especially food and physical activity. The role of families, the media, the health sector and schools was highlighted. ***Conclusion:*** RS of adolescents on hypertension include elements close to the reified universe and common sense, demanding more space for the topic in the media, in schools and in the health sector, with a focus on the peculiarities of adolescents. ***Descriptors*:** Adolescentes; Hypertension; Disease Prevention; Health Promotion; Nursing.

RESUMO

Objetivo: analisar as representações sociais de adolescentes sobre hipertensão arterial sistêmica e sua prevenção. ***Método*:** estudo exploratório-descritivo, de abordagem qualitativa, apoiado na teoria das Representações Sociais. Foram participantes 21 adolescentes de uma instituição pública de um município do norte fluminense, Rio de Janeiro, Brasil. Os dados foram coletados por entrevistas semiestruturadas, submetidas à análise de conteúdo temático-categorial. ***Resultados*:** as representações caracterizaram a HAS, principalmente, como doença do sangue, pelo acúmulo de lipídio nas artérias e açúcar. Observaram-se informações nas RS quanto ao envolvimento de elementos do estilo de vida na HAS, especialmente, alimentação e atividade física. Destacou-se o papel das famílias, da mídia, do setor saúde e das escolas. ***Conclusão*:** RS de adolescentes sobre HAS abarcam elementos próximos do universo reificado e do senso comum, demandando maior espaço ao tema na mídia, nas escolas e no setor saúde, com foco nas peculiaridades dos adolescentes. ***Descritores*:** Adolescência; Hipertensão; Prevenção de Doenças; Promoção da Saúde; Enfermagem.

RESUMEN

Objetivo: analizar las representaciones sociales (RS) de adolescentes sobre la hipertensión arterial sistémica (HAS) y su prevención. ***Método:*** estudio descriptivo exploratorio de enfoque cualitativo, basado en la teoría de las Representaciones Sociales. Fueron participantes 21 adolescentes de una institución pública en el municipio al norte de Río de Janeiro, Brasil. Los datos fueron recogidos por las entrevistas semiestructuradas, sometidas al análisis de contenido temático de categoría. ***Resultados:*** las representaciones caracterizan la HAS, principalmente, como enfermedad de la sangre, por la acumulación de lípidos en las arterias y el azúcar. Se observó informaciones en la RS con respecto a la participación de elementos del estilo de vida HAS, sobre todo, alimentación y la actividad física. Se destacaron el papel de las familias, de las tecnologías de información, del sector de salud y de las escuelas. ***Conclusión:*** RS de adolescentes sobre HAS abrangen elementos próximos del universo cosificado y el sentido común, exigiendo mayor espacio al tema en los medios de comunicación e información, en las escuelas y en el sector de la salud, centrándose en las particularidades de los adolescentes. ***Descriptores*:** Adolescentes; Hipertensión; Prevención de Enfermedades; Promoción de la Salud; Enfermería.

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INTRODUCTION

Adolescence is a period of life between puberty and adulthood. Marked by the intense biopsychosocial transformations, it is a phase that is located between childhood and adult life. In this rite of age, various problems related to adolescents' social integration, physical and mental integrity, the achievement of citizenship and health problems can occur.[1] According to the World Health Organization (WHO), this period chronologically covers the age group From 10 to 19 years of age.[2]

Adolescent health should receive a differentiated look, considering the development of actions to promote health and prevent injuries. It is a vital focus in the developmental process, bodily, behavioral and hormonal psychosocial changes at this stage of life. In addition, among adolescents, there is a low demand for health services, especially in the area of basic health care, among others, due to the lack of health units because they do not target this public.[3]

Among the concerns of the health field for this phase of life are chronic diseases. In this segment, the case of cardiovascular diseases, especially systemic arterial hypertension (SAH), is one of the main public health problems in Brazil and in the world. In addition, the presence of high blood pressure (BP) in the early stages of life has been shown to be significantly related to its incidence and repercussions in adulthood, and it is important to consider the associated risk factors.[4-5]

In this perspective, adolescents have been the focus of studies on hypertension, considering elements such as eating habits, sedentary lifestyle and obesity. According to a recent national study, 24% of adolescents in municipal schools with more than 100,000 inhabitants had high blood pressure (pre-hypertension or hypertension). [4] And, 10% of adolescents were effectively , classified as hypertensive, higher than that observed in previous studies, in which this value ranged from 2.3 to 8% .[4-5]

It should be pointed out that, with hypertension being the most frequent of cardiovascular diseases, it is also the main risk factor for more common complications, such as stroke and acute myocardial infarction, in addition to terminal chronic renal disease. It can, therefore, compromise the quality of life or, even, cause significant mortality.[6]

According to the Brazilian Ministry of Health, hypertension is defined as systolic blood pressure greater than or equal to 140 mmHg and diastolic blood pressure greater than or equal to 90 mmHg in individuals who are not taking antihypertensive medication. The overall cardiovascular risk estimated by the presence of risk factors, the presence of target organ damage, and associated co-morbidities should be considered in the diagnosis of hypertension in addition to blood pressure levels.[6] However, for children and adolescents, normality parameters have some nuances regarding blood pressure, since the reference values are defined according to gender, age and height percentiles.[7]

Therefore, primary hypertension has been associated in studies in children and adolescents, who are overweight, have reduced level of physical activity, inadequate intake of fruits and vegetables and excessive intake of sodium and alcohol, family history, race/ethnicity and diabetes mellitus. As in adults, adolescents with established SAH develop target organ damage, including left ventricular hypertrophy[4-5], as well as being able to affect their quality of life.

It is therefore necessary to invest in studies and actions for the promotion of health and the prevention of chronic diseases, such as hypertension, at this stage of life. Thus, in order to improve the quality of life and health among adolescents, as well as the possibility of contributing to the maintenance of these elements in adulthood.

In this perspective, it is thought that it can contribute with investigations regarding the understanding of information, images and attitudes regarding the aggravation, as ruled in the Social Representation Theory (SRT) framework. The SRT defines social representations (SR), as "a form of socially elaborated and shared knowledge, with a practical objective, and that contributes to the construction of a common reality to a social set." [8: 22]

It is understood then that:

[...] if we want to transform health practices, it is necessary to think of them in their objective and subjective expression, once the health intervention strategies are carried out by people, who act according to their representations of the real and second their representations of the possible. Transforming actions, therefore, means transforming the representations that guide them.[9: 137]

Thus, it is presented, as an object of study, the social representations of adolescents on hypertension and its prevention. On the other hand, the objective of the research is:

- To analyze the social representations of adolescents on systemic arterial hypertension and its prevention.

METHOD

An exploratory-descriptive study, with a qualitative approach, with theoretical reference to SRT.[8-10]

The participants of the study were 21 adolescents, with inclusion criteria being between 15 and 19 years of age, in adolescence itself.[2] The sampling was of a non-probabilistic type, for convenience, and the participants were recruited for the study according to availability ordering for participation, according to the days in which the researcher was in the study scenario. The exclusion criteria were: adolescents who attend or attended professional courses in the health area; And/or who were aware of having SAH, considering the specificities of the experiences already acquired in these cases. The delimitation of the total of interviewees had as a criterion the principle of data saturation.

The participation of the adolescents in the study met the aspects set forth in Resolution 466 of the National Health Council, and the research project was approved by the Ethics and Research Committee, with CAAE 2583516.2.0000.5699 and opinion no. 1,432,908. Free and informed consent was obtained from parents or guardians of adolescents under 18 years of age, as well as adolescents over 18 years of age, duly registered on their own terms. Free and informed consent was obtained from participants under the age of 18, also, in writing, by means of a term.

The data collection site was a public institution of education with only average level, constituting a College of Application (CAp) of a university headquartered and maintained by a municipality in the northern region of Rio de Janeiro. It is noteworthy that this CAp conducts a selective process for the admission of its students, thus coming from different districts of the city.

For the collection of data, semi-structured interviews were used, therefore, based on their own script. This way of obtaining data allows a flexible organization and enlargement of the questions as the information is provided by the interviewee, and it is ideal to follow as closely as possible the line of reasoning of the study participants themselves.[11] The interviews were conducted individually in a room assigned by the headmaster of the school. The discursive productions of the deponents were recorded on an MP3 recorder and recorded at the end of each fieldwork day. Data collection took place between March and June 2016.

The data was analyzed for socio-demographic data and variables for health and object of study, through descriptive statistics, and are represented in the table. For the data from the interviews, the content analysis was carried out[12], following the operational processes of a thematic-categorical methodological proposal.[13]

Thus, the analysis of the interviews followed the following steps: floating reading of the set of interviews, which consisted of the corpus of analysis; Determination of the registration units (RU), being, in this case, the themes (rule of cut of meanings expressed in the testimonies), with marking in the text of each RU; Definition of the units of the themes, with thematic analysis of the RUs; Categorical analysis, with the construction of empirical categories of the study; Treatment and presentation of the results, with descriptions of the findings and their exemplification with participants' testimonials; And discussion of the results and return to the object of study.

RESULTS

Regarding the characteristics of the participants, 61.9% of the 21 adolescents were female and 38.1%, were male. The age range ranged from 15 to 18 years, the majority being 17 years old. As for schooling, the majority (42.8%) were in the second grade of High School (HS). With regard to marital status, all were single, only studied and reported not being carriers of any disease, showing themselves as supposedly healthy. However, 76.2% reported a family history of SAH or Diabetes Mellitus. The same number is repeated for adolescents who reported never having used or tried alcohol and/or tobacco. The family income was concentrated between three to five minimum wages, despite the fact that the majority (47.6%) stated that they could not specify this information (Table 1).

Table 1. Sociodemographic and health characteristics of the study participants. Macaé (RJ), Brazil, 2016.

Variables	n	%
Male	8	38,1
Female	13	61,9
Age		
15 years	1	4,7
16 years	7	33,3
17 years	11	52,3
18 years	2	9,5
Marital Status		
Single	21	100
Occupation		
Student	21	100
Family income		
1 minimum salary	1	4,7
3 to 5 minimum salaries	6	28,6
4 to 6 minimum salaries	3	14,3
10 to 12 minimum salaries	1	4,7
Did not know	10	47,6
Supposedly healthy	21	100
Family history for SAH or DM	16	76,2
Use of alcohol and / or tobacco use	5	23,8
Checked blood pressure (BP) in the health sector	15	71,4
Remember the values of BP	7	33,3
Changes in BP values	1	6,2
Knows BP value considered normal	5	25
Total	21	100

Considering the process of scrutiny of the corpus of research data, the analysis of content of thematic-categorical type generated six empirical categories, described in the sequence, and whose illustration is shown in figure 1, with the respective relative distributions of their RU.

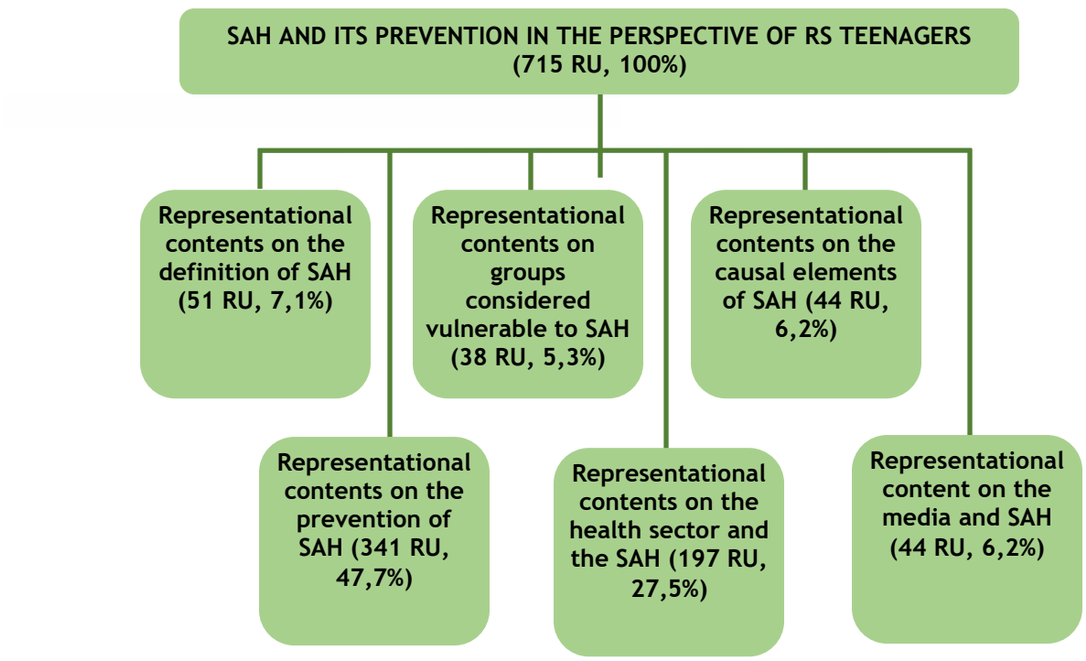

Figure 1. Schematic of the empirical categories of the surveys and their relative representations of RU. Northern Fluminense Municipality, 2016.

♦ Representational contents on the definition of systemic arterial hypertension

In this first category, which included 54 RU, totaling 7.5%. Thus, the representational content of the adolescents on the SAH is arranged, most of them being gathered around the meaning of the relationship of said complaint with the bloodstream. Thus, there was an expression of SAH as a blood disease in general, but also, specific records occurred, presenting it as something related to the action of sugars, salt or the accumulation of lipids in the blood. As a result of this last aspect, the perspective of hypertension was also identified as being overweight. In this sense, we observed that there were still elements relating hypertension with blockade in the blood circulation.

> *Oh, I think of blood disease! It's the only thing that comes to my head like this. (E10)*
>
> *An image of the bloodstream with sugar. (E2)*

It is, too much salt, who eats a lot of salt, more or less. (E14)

The only thing that comes to mind is the vein that is clogged up. (E11)

Representational contents also emerged associating hypertension with cardiac functioning and the transcendence of the condition. In the first case, that complaint is described as the heart in fast beats or, in general, as something related to blood pressure. As for the second case, some participants refer to SAH as a milder disease compared to other contemporary ones, with less impact and even something common in urban space.

The heart beats too fast. (E1)

Hypertension is directly related to blood pressure, right? (E5)

That's why it's kind of softened, compared to the problems they currently have. (E5)

I think that in the city we live in now, it's becoming a normal picture, everyone, most of us may be heading for hypertension. (E9)

♦ Representational contents on groups considered vulnerable to SAH

In this category it covered 34 RU, with a total of 4.7%. Thus, it was possible to note that there was a predominance in the social representations in question such as adults conceived as the group most affected by SAH. However, adolescents emerged as the second group assessed as more affected among these subjects themselves. And, among the representational contents, how much they expressed as motivations for such vulnerability in adolescence: low demand of these to the health sector, for being evaluated less vulnerable to the changes in health status; Difficulties in healthy eating and sedentary lifestyle, due to access to entertainment and communication technologies; or by understanding that they need greater care.

It is most hit between 25, 25 up. (E5)

I think so, not health-related issues such as SAH and diabetes. People relate more to older people, at age 50. (E19)

The adolescents, because nowadays they do not practice exercises because of the technology and the feeding is not controlled. (E8)

For adolescents, as well as the elderly, one needed to take better care. Teenagers always think that they are strong, that don't need to go to the doctor. (E5)

♦ Representational contents on the causal elements of SAH

In this category, 44 RU, were also included, with a total of 6.0%. And possible causal elements of SAH in adolescents' social representations were identified as: heredity; non-adherence to physical activity practices (sedentary lifestyle); inadequate feeding; stress associated with lifestyle; the use of licit drugs (alcoholism and smoking), although, to a lesser extent, some have expressed not knowing if there would be a relationship between cigarette and alcohol consumption with the problem in question. And, only one participant reported believing that there was no relationship between the latter habits and SAH.

Food, stress, as I said, lack of physical activity (E6); Lifestyle, genetic predisposition, if she smokes, bad food, things like that. (E17)

I think if, for example, if the mother is hypertensive, there is a great possibility that the child will also be. And, sedentary lifestyle. Now I do not know about smoking, I think overeating, I think so. (E8)

♦ Representational contents on the prevention of SAH

In this category, we obtained 343 RU, with a total of 48.0%. Through this analysis, the adolescents' view on the existence of a possible prevention of hypertension was revealed, considering changes in lifestyle and the feasibility of control, including medication use.

If the person deprives her/himself of eating too much sodium, even in restaurants, because, she/he has the bags of salt, and that should be salt all day, and we throw salt in potatoes, in the salad ... she/he does not do physical activity, As I'm not doing at the moment. And investing in this part, you can prevent. I do not know if there are other methods. (E15)

You have control over medicine. So much that medicine has medicine to treat, to go on. (E5)

Allied to prevention, the family has been shown to play an important role in adolescents, especially in the management of food, in the encouragement and custom of practicing a more varied menu with vegetables and legumes, avoiding fried foods and fats. In addition, it is associated with the possibility of stimulating, from home, habits of regular practice of physical activity.

Because without the support of the family, it can lead to several problems in which the person may feel scruffy and somewhat sloppy and harming their health. So, the family is essential at this point. (E5)

Obesity that is growing nowadays, parents could help their children up in food, in support. In high blood pressure, diabetes, in such things so, the paramount is the parents help. (E6)

Yes, enough, because, it is very important, because if it is only the teenager alone, it will not change. I think that with the family, intervening, their help would change a lot. (E 8)

Me and my father, we go for a walk along the beach, not for the whole beach, but for a large part. (E1)

It was also identified that prevention can occur by adolescents by the configuration of food, considering it necessary to avoid or limit the consumption of fast-foods and industrialized foods, by seeing them with compositions that are harmful to health. There were representational contents with reference to the importance of maintaining a balanced diet, due to the concern to avoid alterations in the value of blood pressure, even in the condition of not having previous commitment of the health by the aggravation. In order to do so, we observed reports regarding the follow-up of specific diets and consultations with the nutritionist.

I also avoid these fast-food foods, the guys put everything in it. (E1)

I eat well, I do not eat a lot of bullshit. I like to have a good diet, it is difficult for me to eat something industrialized and from time to time as fast-food. I would say that my food is more upright, with vegetables, and such things. (E13)

But if you eat more balanced food during the week and you eat one thing or the other at the end of the week, I think it gets better enough. (E8).

The need and benefits of physical activity were also significantly listed by adolescents, being this mode of prevention to SAH. Nonetheless, there was the presence of representational contents, also, with record of the difficulty in adhering to this practice.

Most adolescents go towards high blood pressure [...] for a long time without physical exercise. (E10)

Exercise always. (E14)

[...] does not do physical activity, as I'm not doing at the moment. And investing in this part, you can prevent. (E15)

There were also contents of representation with reference to the evaluation of non-existence of possibility of prevention of hypertension, in cases in which it has a cause considered genetic or hereditary. It was observed, albeit in a minority way, the presence of expressions of participants as to whether they did not know and what it means to prevent hypertension *SAH*.

But in case, if it's genetic, you cannot! (E4)

If it is not hereditary, it can be prevented. (E14)

I'm not aware of it, but I think so. I cannot say how. (E18)

It was also observed, among the representational contents on the prevention of hypertension, the expression of recognition and occurrence of some public initiatives aimed at adolescents, such as sports and the availability of physical exercise devices. Nevertheless, such collective actions, for the group were still considered infrequent, especially in view of the themes of chronic non-communicable diseases, such as hypertension and Diabetes Mellitus.

Ah, here [city], there are designs for the sport. I even did it when I could not train, I did in the square. There are some projects. (E10)

It even has places that offer some types of exercises for free. Swimming, in some places, has for free, struggle. But, it is not very common, it is rare to see. (E2)

I think it exists, not geared towards health itself, such as SAH and diabetes. (E19)

The government does not encourage, should encourage through more social projects. (E10)

In addition, we could note, in this category, the presence of representational contents related to the prevention of hypertension and the role of educational institutions, when the participants reported to the place of study to which they were linked at the time of the research, but sometimes, to previously attended institutions. Thus, it was highlighted the possibility of preventing the aggravation in question in the school environment, through the encouragement and promotion of healthy habits and other actions involving the application of certain health technologies, notwithstanding the signaling of some participants that they would be still incipient approaches. It is also important to note the importance of the school's relationship with projects coming from the health sector.

I was studying there, the school is private. There was a program, Health level 10. There they did, they talked about pressure, they did several exams, even vision. (E6)

Yes, in college there was a lot going on, both the school projects and the nursing groups that went there straight. (E7)

Here you eat right, do not give you bullshit. They know I have to give healthy things too. So, we do not eat a lot of bullshit. (E8)

A little, it is addressed in class sometimes, but it is very little. (E21)

The presence of food made available by the school in a varied and balanced manner by a nutritionist was present in the interim of the social representations in question. This was considered positive because, for most of the

day, the students are in the school unit, and may even be rated as more appropriate than at home. However, it was also mentioned the possibility of having at times access to other foods available for sale in the school canteen.

> *Here at school is even better than at home. At home it is freer, not as much, greenery. (E17)*
>
> *And at home, I do not have much regulated food like I have here. Here is a follow-up with nutritionist, who makes the menu and not at home. (E5)*
>
> *Here you eat right, do not give you bullshit. They know I have to give healthy things too. So we do not eat much bullshit. Unless you want to eat salty, she also offers you, in the canteen. (E8)*

Regarding health education focused on the themes of SAH and related in the school space, it emerged among the representational contents analyzed that, in a general way, the approach was not systematic, being punctual and still little explored. They are more present in some dynamics related to physical education classes and as a response to the demands of the adolescents themselves during the teaching of contents related to biology.

> *Already had physical education teachers, a speech, about it, it is dangerous to be overweight and these things like that. They made us measure, what is it like? Height times weight? (E8)*
>
> *Those who comment are the teachers. For example, when we go into that part of systems and such, teachers, from questions of the students, begin to comment on this. (E2)*
>
> *[...] Only last year I studied in the College, there it was State. No worries. (E6)*

The representational content encompasses the perspective that educational approaches at school focus on what is at stake in society, such as the risk of infection and the consequences of Zika Virus, dengue, as well as some aspects related to sexuality, such as the use of Condoms and teenage pregnancy.

> *The adolescent is more cautious in school about sexual protection. (E12)*
>
> *No, for health it is sometimes geared towards teenage pregnancy, not related to SAH. (E17)*
>
> *In my old school and here at school have dengue prevention and such things. (E20)*

In this sense, it was also observed, in the representational contents analyzed, that conversations took place with the friends in the school universe regarding the subjects of health, in general, but, not being present in the subject of these communications the question of SAH.

♦ Representational contents on the health sector and the SAH

In this category, 197 RU were obtained, totaling 27.6%. And from this, however, representational content of the participants was identified, with the expression of low demand, in general, of the adolescents to the health sector. And that, generally, the contact of these subjects is only for possible routine exams, health problems or emergency cases. It has been shown as an uncommon attitude the search for health services in a permanent way to solve doubts about one's own health or individual or collective educational activities.

> The last time I went to the doctor, was ... a long time ago. It must be about 3 years old. (E1)
>
> I'm a type, dermatologist and general practitioner. But the general practitioner goes more because of the sinusitis. (E4)
>
> Usually it is by check up. (E6)
>
> There are those cases that I have with fever, something like that, I'm going to emergency room. (E2)
>
> Only when I'm sick. (E7)

It was pointed out, among the representational contents analyzed, that the health sector could be concerned about hypertension, but, they would be converted into quantitative actions less than necessary, especially considering the different specificities coming from the adolescent public. It was observed, in the reports, the recognition of health actions linked, as a priority, to specific programs, some of which have an impact on the prevention of hypertension and adolescence and others that are more focused on national infectious issues, such as the example of combating *Aedes Aegypti*. It is also indicated the need to increase health-related actions in the context of the school.

> *I think they even have the concern, but they end up not reporting or leaving some things without priorities. (E7)*
>
> *I think there are but, as I said, related to the epidemics. (E20); I think in general yes, it would be little. For teenagers, mainly. (E16)*
>
> *Sometimes it has, had the campaigns in relation to the Aedes soon, has the relation of the school menu, of the health food, still has a nutritionist because of this. I think there might be more, but there is. (E21)*
>
> *Look! I know of many people's events going to the beach to do exercises and such. But I think it's not focused on teenagers, I think it's overall, for everyone. (E8)*

Most adolescents reported that they had had experience measuring blood pressure, including those who did so out of curiosity at

home, with the device of a family member or other area outside the health sector. However, most reported having done so within the health sector.

As for this experiment, it was considered as common, except for specificities related to the steps of the technique. However, some adolescents also expressed anxiety about the value of blood pressure. And still, some of them did not know how to report the measured parameters.

> *Oh, I was anxious to know, what was the result (E2); I cannot remember when. (E7)*
>
> *It was a feeling of relief, because I eat many snacks, like that. (E5)*
>
> *It was normal for me! The strange thing is when he puts the device on his arm and inflates. (E6)*

Among the adolescents presented experience of measurement of hypertension with health professionals, there was contrast, by a similar proportion, in the representational expressions between such a fact to have occurred with medical professional or nursing professional. Some participants, however, expressed not knowing how to describe the professional involved.

> *It was the pediatrician. (E5)*
>
> *Usually I think it's the nurse. (E6)*
>
> *I do not remember no, but I think he was a clinician. (E3)*
>
> *I cannot tell who did it. (E13)*

♦ Representational content on the media and SAH

Through this category, 44 RU, were sequenced with a total of 6.2%.

In the analyzed social representations of the group of adolescents, it was possible to perceive that the SAH has little approach in the media in general. And, from this perspective, the use of the Internet as a source of information was pointed out as the one most used by the deponents, only when there is the desire to do some specific search of content. There was the expression in the research group that, eventually, there are television programs that cover health issues, in general, but, they would not be satisfactory for that one. And, among the motivations for the thematic targeting of health, in television media, the occurrence of notorious social facts.

> *Rarely! On television, not much! It's ... When I hear or see about it, I want to search about it. Then I go to the Internet and search. (E2)*
>
> *Oh, very little. There's that show from that broadcaster that he tackles. And magazine, depends, only if it is very specific. (E12)*
>
> *I see some things on TV when there is some fact that is serious, then they go on TV. Another fact that usually indicates about health is the most on the Internet (E19).*

DISCUSSION

Considering the representational contents about SAH in relation to its characterization as a blood disease, having as constituents involved the accumulation of fat in the arteries, the participation of salt and sugar, it can be said that it configures, to a greater extent, its image dimension in the social representations studied for the participating adolescents. It is also thought to correspond to the objectification of such representations, together with the expressions of SAH as cardiac functioning and its transcendence. It is, therefore, the way in which the group of adolescents proceeds in the appropriation of available elements on this theme and its social construction in a consensual familiar object and, therefore, with practical sense in the daily life.

Thus, it can be stated that there are aspects of the reified or formal universe[15] in the social representations studied, since blood pressure can cause damage to the blood vessels, as well as a more immediate relationship with cardiac function, considering its flow rate. [16] However, there is a gap and distortions regarding components related to the phenomenon, as, respectively, its predominantly asymptomatic facets and the reference to veins clogging. It is understood that these findings regarding the imaging dimension of the social representations of SAH for adolescents as relevant and original, since no other studies with such targeting were found.

Regarding representational content on groups vulnerable to hypertension, it is interesting to note the supervision given to adults, but, also, the registry for the possible vulnerabilities of the adolescent, being in line with the epidemiological information about it. Thus, the estimated prevalence of SAH in Brazil is currently, 35% of the population over 40 years old. This represents, in absolute numbers, a total of 17 million patients with the disease.[17] And, some studies present pre-hypertension and hypertension in children and adolescents in 24 %.[4]

Although the incidence is higher in adults, the number of new cases in children and adolescents has increased, but often asymptomatic and easily unnoticed. It is necessary to take a close look of health professionals emphasizing the importance of preventive care and, also, the therapeutic

attention, if necessary, among children and adolescents.[16,18] In this perspective, the conception of the health problem is more related to the adult universe and may even constitute additional vulnerability to it.

Regarding the causal factors, the representational contents were related to the physical activity, adequate feeding, as well as the lifestyle of that person, that play an important role in increasing the risks of chronic non-communicable diseases. Inheritance was also taken into account by adolescents. As mentioned above, risk factors inserted in the lifestyle of adolescents that contribute to the occurrence of arterial hypertension may already be evidenced.[16,18] However, it is believed that the difficulties expressed in the representations between drug use and hypertension are worth highlighting and related educational actions.

Regarding the main problems detected in adolescent feeding, there are also contents found in the empirical corpus of research, mainly, replacement of main meals for snacks, high daily consumption of foods with high caloric density, low intake of fruits and vegetables. To justify this, the main causes for altering blood pressure at younger ages would be a sodium-rich diet, especially in the current fast food, overweight, insulin resistance, dyslipidemias, lifestyle factors such as sedentary lifestyle, hours in front of the computer and video game, without considerable energy expenditure.[18]

In this context, it is thought that the school can also influence the selective construction and schematization of the contents involved in the process of subjecting adolescents to hypertension and related aspects. It is also emphasized that this finding of contemporary recognition of the role of food in human hygiene reinforces the fact that it has emerged as a probable central nucleus in the study of the social representations of health among university students.[20]

Thus, an important initiative in Nutrition in Public Health was the inclusion of fruits and vegetables and the reduction of fatty foods in school feeding.[1] Thus, important nutritional strategies to reduce the risk of non-communicable chronic diseases in adolescent students include decreased intake of Fried foods, processed foods high in cholesterol and fat, sugars, soda, sweets and confectionery, as well as the adoption of a nutritious breakfast, and increased intake of fruits, vegetables and a rich and diverse diet.[1]

And, regarding the reference of the influences of canteens in the food configuration in the school space, it is worth mentioning a recent initiative of the Ministry of Health called "Healthy School Canteens". This action aims to promote the awareness of people involved in the marketing of food items in schools as to its potential for a favorable or unfavorable impact on the health of schoolchildren, with guidelines for the provision of healthy food.[21]

Regarding the representational contents related to the prevention of hypertension, in addition to the previously mentioned aspects, emphasis should be placed on the need for physical activities. It is thought that this aspect is relevant, since it is one of the most important means to avoid the development of obesity and coronary diseases. However, it is a practice that has not yet been experienced in the school phase, especially, for females.[22]

In this sense, the promotion of the regular practice of physical activities, from the school universe, has been positively associated with the improvement of glycemic control, as well as an increase in cardiovascular functions and body composition. These initiatives are important to reduce time spent watching television and to increase daily energy expenditure through sports, physical and recreational activities essential in preventing obesity in children and adolescents.[1] Nevertheless, it is worth noting the representations of study participants when considering the approach to the set of themes related to hypertension as something not yet systematic in the daily school life, which demands investment in health education, based on the determinant aspects of this finding.

Regarding the importance of family influence in the process of SAH prevention due to the possibility of adolescent adherence to healthy practices, individually or collectively, is a relevant finding. This, as evidenced in this facet, in relation to the striking literature on adolescence, reveals its characteristic of changing from normative social reference of the family, to the network of pairs in the same age group, in an attempt to affirm identity and its acceptance in some groups.[23]

Regarding the representational contents of the health sector and the hypertension, the question of the existing lags for the closer ties between adolescents and health services is observed, since this group has a reduced presence in the daily life of the units, even in the attention it is thought that this influences the circumscribed aspects in the object of this research, since it tends to the non inclusion of adolescents in the discussions and activities about their own promotion to health. Thus, it is necessary to incorporate adolescence into

its various facets and specificities in the health sector, considering its needs and language. And, in this context, it has made contributions to reduce this gap in the Ministry of Health's Health Program in School (HPS).

Despite this distance, in general, between professionals and health services and adolescents, it is worth highlighting the result found in the majority of the participants of this research about having tried blood pressure measurement in the health sector. In this sense, it should be emphasized that every duly qualified health professional, can perform the aforementioned procedure, which is compulsory annually as early as age three.[24]

With regard to the expression found in the research of a smaller supply of health promotion actions by this sector with a focus on the adolescent, it must be considered that, despite their relevance of universal character, they require adaptation for each group, due to their typical traits and characteristics [16]. And, in this sense, the nurse, as manager of the primary care unit, has as its duty the approximation of adolescents through the school.[24] Still, this professional needs to be able to reach the main focus, which is prevention, as well as the Health education, which have proven to be very effective in intervention for the prevention of hypertension in children and adolescents.[16]

Another relevant aspect of the representational content described in the present research was the participation of the media in the dissemination of information about the object under study, given the role that it can play in the construction of social representations. Thus, the adolescents pointed out that the presence of content regarding SAH, in general, in traditional means of mass communication, is not very expressive, despite the perception of the transmission of some television programs that approach certain health topics. From the perspective of the research participants, this gap tends to be even more pronounced in relation to content aimed at adolescents, and the internet is the most accessed medium to have access to the desired information.

In this perspective, together with prevention practices, the media can help to disseminate health information. In fact, the proposal of the media would be to enable the democratization of health information, through professional training, digital inclusion, communication strategies and goal setting. Health information, should be guided, in a way that leads to a discursive inclusion, giving voice to more than one social actor, [25] and it is also evaluated that this medium can be used positively or negatively to convey information. In this sense, the media, in its varied forms of content dissemination on the subject, directly or indirectly influence the population.[26] In this way, the mass media becomes an important vehicle for strengthening and diffusion of specific ideologies, with great Power of reach.[26] With this, it is possible, for the health sector and its professionals, to use these traditional but, especially, the most current or digital tools of social communication for the dissemination of information on hypertension, its adapted prevention and health promotion in the language and interest of adolescents.

Regarding the possible limitations of the study, it is considered the fact that the participants of the research integrate a college of application of a higher education institution, and, therefore, cannot be representative of the reality of other school adolescents. And, also, convenience sampling can introduce bias in the data collected. However, as regards the first aspect, because it is an original study, it is thought that the implementation of similar research in different scenarios is necessary to demonstrate the existence of possible specificities. And for the latter, it is thought that there was compensation for it by following recruitment procedures already described in the topic of methods.

CONCLUSION

This study aimed to analyze information, images, attitudes and practices of adolescents in relation to hypertension and its prevention, considering its implications for health promotion and nursing. In this sense, the imaging dimension, to be highlighted in the social representations in question, was associated with the idea of blood disease, considering the elements of fats in the blood vessels and consumption of salt and sugar. It was interesting to note, also, a component of trivialization in contemporary times.

The SAH was represented as something preponderant of adults, but, it also affects adolescents, by the lifestyle and psychosocial characteristics of this phase of life. And, the emergent aspects related to prevention were related, more significantly, to food and physical activity, there being lags regarding the participation of drugs, such as tobacco and alcohol. Also, the family universe was highlighted in the configuration of adherence to prevention practices and the role of the school as an important scenario for this, despite the need for a greater approach to

aspects related to health promotion in its schedules.

The health sector also emerged as a relevant element in the representational contents studied, considering the little expressive presence of its actions on the representational object in question geared specifically to the adolescent. And, most of the participants in this study expressed remembrance that their blood pressure was measured at this locus.

And, when considering the ways of accessing information about the aggravation and its prevention, adolescents expressed the low participation of television, especially in approaches to them. And with this, the internet was identified as the main means in the search for content about it.

In this perspective, the findings are considered to have demonstrated an original approach, both in relation to the comprehensive approach to the theme and the theoretical framework used. And, it is believed that the resulting findings have provided reinforcement and subsidies for the approach to health promotion and, more specifically, the programmatic and educational strategies for the prevention of hypertension in adolescence, being pertinent, to the field of health in general, and nursing . This is because the nurse is a professional with possibilities in order to avoid that this problem can be extended to adulthood, through health actions in the school, strengthening the bond with the adolescent and thus achieving that the more frequent the health service and take greater care of you.

Thus, the said professional should start the practice of health promotion and, therefore, the prevention of hypertension, earlier, avoiding potential complications. And, through acting together with the family, schools and others in environments in which this public is inserted, it can, considering the understanding about the social representations elaborated and shared by this, contribute to the establishment of healthy habits of life.

In contrast, the reality of the profile of the subjects of the school in question follows as a limitation found in the study, because it is a college of application. There, students go through a selection process, which selects students with a good student performance and charges, these students, the interest in the study. In addition to the socioeconomic profile, which allows a differentiated diet, next to the practice of sports even with the family.

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