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Original article

Health promotion behaviors of school adolescents

Comportamentos de promoção da saúde de adolescentes escolares

Comportamientos de promoción de la salud de adolescentes escolares

Francisco Ayslan Ferreira Torres[I], **Paloma Loiola Leite**[I], **Leonarda Marques Pereira**[I], **John Carlos de Souza Leite**[II], **Maria Rocineide Ferreira da Silva**[II], **Lucas Dias Soares Machado**[I]

[I] Regional University of Cariri, Iguatu, Ceará, Brazil
[II] State University of Ceará, Iguatu, Ceará, Brazil

Abstract

Objective: to identify the health promotion behaviors of school adolescents. **Method:** cross-sectional study, conducted with 60 adolescents, in 2020, using a sociodemographic questionnaire and the Brazilian version of the Adolescent Health Promotion Scale. Descriptive and inferential statistical analysis. **Results:** health promotion behaviors were identified in a frequency lower than "sometimes", with a Global Score of 2.93. Dimension appreciation of life presented the lowest scores, while the physical exercise dimension showed the best. Female participants obtained higher global scores and in the dimensions nutrition and physical exercise. The bivariate correlations between the scale dimensions recognized associations between 0.20 and 0.59. **Conclusion:** the behavior of adolescents for health promotion surrounds attitudes of median frequency in the dimensions nutrition, social support, responsibility for health, appreciation of life, physical exercise, stress control, strategies capable of empowering and ensuring the protagonism in their own health.

Descriptors: Adolescent; Health Promotion; Adolescent Behavior; Adolescent Development; Adolescent Health

Resumo

Objetivo: identificar os comportamentos de promoção da saúde de adolescentes escolares. **Método:** estudo transversal, realizado com 60 adolescentes, em 2020, utilizando-se questionário sociodemográfico e versão brasileira da *Adolescent Health Promotion Scale*. Análise estatística descritiva e inferencial. **Resultados:** identificou-se comportamentos de promoção da saúde em uma frequência menor que "algumas vezes", com Escore Global de 2,93. Dimensão valorização da vida apresentou os menores escores, ao passo que a dimensão exercício físico demonstrou os melhores. Participantes do sexo feminino obtiveram maiores escores globais e nas dimensões

nutrição e exercício físico. As correlações bivariadas entre as dimensões da escala reconheceram associações entre 0,20 e 0,59. **Conclusão:** o comportamento de adolescentes para promoção da saúde circunda atitudes de frequência mediana nas dimensões nutrição, suporte social, responsabilidade pela saúde, valorização da vida, exercício físico, controle de estresse, apontando a necessidade de estratégias promotoras da saúde capazes de empoderar e assegurar o protagonismo na própria saúde.
Descritores: Adolescente; Promoção da Saúde; Comportamento do Adolescente; Desenvolvimento do Adolescente; Saúde do Adolescente

Resumen

Objetivo: identificar los comportamientos de promoción de la salud de adolescentes escolares. **Método:** estudio transversal, realizado con 60 adolescentes, en 2020, utilizándose cuestionario sociodemográfico y versión brasileña de la *Adolescent Health Promotion Scale*. Análisis estadístico descriptivo e inferencial. **Resultados:** se identificaron comportamientos de promoción de la salud en una frecuencia menor que "algunas veces", con Escore Global de 2,93. Dimensión valoración de la vida presentó los puntales más pequeños, mientras que la dimensión ejercicio físico demostró los mejores. Las participantes femeninas obtuvieron mayores puntuaciones globales y en las dimensiones nutrición y ejercicio físico. Las correlaciones bivariadas entre las dimensiones de la escala reconocieron asociaciones entre 0,20 y 0,59. **Conclusión:** el comportamiento de adolescentes para promoción de la salud circunda actitudes de frecuencia mediana en las dimensiones nutrición, apoyo social, responsabilidad por la salud, valoración de la vida, ejercicio físico, control de estrés, señalando la necesidad de estrategias promotoras de la salud capaces de empoderar y asegurar el protagonismo en la propia salud.
Descriptores: Adolescente; Promoción de la Salud; Conducta del Adolescente; Desarrollo del Adolescente; Salud del Adolescente

Introduction

Health promotion consists of a field of theories and practices that opposes the biological, hospital-centered model, contributing to better living and health conditions. It consists of empowering individuals and their communities to act on their living and health conditions, including greater participation in this process.[1] It is a paradigm that mobilizes the holistic understanding of people and the macrodeterminants of the health-disease-care process.[1] It transcends disease prevention and the biological gaze on the other, focusing on the mobilization of positive resources that give meaning to life.[2]

Among the relevant fields for health promotion, attention to the period of adolescence, transition phase between childhood and adult life, delimited for the purposes of planning public health policies, such as age between 10 and 19 years, according to the Ministry of Health, stands out. Characterized as a phase of the life cycle, adolescence is marked by biological, social, psychological and cultural transformations

relevant to human development, full of peculiarities, uncertainties and which is considered as transitory between childhood and adult life, requiring specific care.[3]

Given the influences of the social, cultural and economic environment on adolescence, it is necessary to include adolescents in health promotion propositions, recognizing their potential and favoring protagonism and collaboration with other actors, such as young people and health professionals, through dialogical attitudes.[3]

Moreover, adolescence is still marked by several risk behaviors that contribute to the main causes of morbidity and premature mortality. They are behaviors such as abusive use of alcoholic beverages and illicit drugs, smoking, prostitution, exposure to sexually transmitted infections, violence, unplanned pregnancy, sedentary lifestyle, poor diet, among others, lacking the implementation of public health policies that contemplate this vital temporality.[4-5]

In this sense, holistic adolescent care is relevant, considering the intrinsic relationship between nutrition, social support, responsibility for health, appreciation of life, physical exercise and stress control and health promotion, as they converge on the social determinants of health and their manifestations on the health-disease-care process.[4]

Since adolescence is a phase manifested by discoveries, experiences, identity construction and changes, both in body and mind, it is in this environment that it is necessary to seek strategies to promote health, limiting the experience of occasions of helplessness and avoidable problems, aiming at a healthy development.[5]

Thus, it starts from the assumption that the health promotion of adolescents helps in the reduction and development of diseases in this age group, making it necessary to develop strategies anchored in the recognition of adolescent behaviors resulting from biological maturation and interaction of social dimensions, and relationships with peers and environment.[4] Health promotion demonstrates relevance, potentiation of living with quality and health.

Thus, the objective was to identify the health promotion behaviors of school adolescents.

Method

This is a cross-sectional epidemiological study with a quantitative approach conducted with adolescent students from the state school system in a city in the Mid-South of Ceará, from September to November 2020. This was the stage of diagnosis of behaviors to support the construction of an educational technology developed by the university extension project "*Coisa de Adolescente*", it is characterized as a moment of rapprochement with adolescents and recognition of health needs.

Therefore, the study locus was a school of the state school network, which offers vocational high school to young people and adolescents, providing technical training in administration, computing and nursing courses. The choice was the partnership signed with the pedagogical core for the development of teaching, research and extension actions.

For data collection, the coordinating researcher of the extension project in question, identified three students of the Nursing graduate course, members of the project for data collection. At the time, the researchers-students were trained on the contact, presentation of the proposal, use of the terms of consent and consent, availability of the instrument and withdrawal of doubts. Then, they contacted the coordination of the educational institution with the purpose of presenting the proposal, requesting authorization for the application of the data collection instrument and agreeing to the logistics front of the pedagogical adaptations experienced in the pandemic context caused by COVID-19.

The social distancing valued in facing the ongoing pandemic during this study involved the execution of remote classes and low adherence of adolescents in the proposed activities. Thus, it was estimated with the coordination of the school that of 440 students enrolled, about 30% (n=132) was regularly following the teaching activities. From this quantitative, the sample calculation was performed using G*Power 3.1.9.7, defining the values of 0.05 for the sampling error, 0.95 for the confidence level and 0.50 for the estimated effect. The sample was 54 adolescents, reaching the participation of 60 students.

The eligibility criteria were: being a teenager in the age group between 10 and 19 years, regularly enrolled and monitoring the school activities remotely. Adolescents who did not return the questionnaire answered within the period of data collection or returned incompletely were treated as loss.

The acquisition of participants took place online, respected the epidemiological and sanitary framework of the pandemic and according to pedagogical logistics adopted by the educational institution. Under these conditions, the data collection instrument was adapted for remote application through the Google Forms® tool.

The contact with the students occurred through the Virtual Learning Environment adopted by the state school network for remote continuity of activities, as well as social networks used for interaction between teachers and students of the institution. The proposal was presented to teachers and the link to access the questionnaire was provided along with a short video recorded by the researchers, directed to adolescents, in which the objective of the study was clarified and the guidelines for parental consent were carried out, consent of the participants and completion of the instrument. The questionnaire link, Informed Consent Form and Assent Form were sent to each class at 10-day intervals, corresponding to three cycles of invitations to participate.

In addition to this route, printed copies of the forms and questionnaire were made available to adolescents who so desired. This measure sought to optimize the reach of the defined sample.

The data collection questionnaire was structured in questions of characterization of participants composed of the variables age, sex, race and marital status; and the Adolescent Health Promotion Scale (AHPS). The Brazilian version of the AHPS is composed of 34 items divided into six dimensions related to health promotion: (a) nutrition, (b) social support, (c) responsibility for health, (d) appreciation of life, (e) physical exercise and (f) control of stress. By its scalar structure, the respondent indicates the degree that most applies to his case between five points (1 = never; 5 = always). In the Brazilian validation study, the AHPS presented adequate internal consistency (Cronbach's alpha> 0.70 for all subscales), as well as adequate adjustment indexes tested by means of ratio between chi-square and degrees of freedom ($\chi 2/gl$), Comparative Fit Index (CFI), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI) and Root Mean Square Residual (RMSR) ($1< \chi 2/gl < 3$, CFI, GFI e AGFI ≥ 0,9; RMSR ≤ 0,08).[4] The AHPS score was taken as the outcome variable of interest.

For data analysis, descriptive statistics were used for the variables sex, color/race, religion, marital status and age, using absolute and relative frequency. For each variable,

absolute frequency, relative frequency, mean and standard deviation of the health promotion behavior score were attributed.

The Mann-Whitney test was performed in order to investigate the extent to which the scores of health promotion behaviors were equivalent among adolescents regarding sex and marital status, as well as Kruskal-Wallis test with the same purpose for age variables, color/race and religion. Both tests were used to verify the equivalence of the scores of the AHPS dimensions between the categories of sociodemographic variables.

As for the scale in use, mean, standard deviation, asymmetry and kurtosis of the items and score of each dimension were calculated. The overall score was calculated according to the mean of the scores of the dimensions. The normality of the dimensions data was evaluated using the Kolmogorov-Smirnov test. The results showed that these presented normal distribution ($p>0.05$).

Cronbach's alpha coefficient and bivariate inter-dimensional correlations were calculated to determine the internal consistency of the scale applied to this context ($\alpha= 0.907$). Statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS), version 20.

The research was conducted in accordance with the ethical standards required (Resolutions 466/2012 – 510/2016 – 580/2018, of the Ministry of Health), with approval by the Research Ethics Committee of the Regional University of Cariri, under the opinion 4.205.242 on August 11, 2020.

Results

The study included 60 adolescents, mostly female (n = 37; 61.7%), with a mean age of 16.73 years (SD = 1.02) and prevalence of brown race (n = 40; 66.7%) and single (n = 50; 83.3%). In relation to religion, most were Catholic (n = 24; 40%), while 28.3% reported not having religion (n = 23), 16.7% evangelical (n = 10) and 5% other religion (n = 3), as shown in Table 1.

Table 1 – Sociodemographic characteristics of adolescents related to the global score of health promotion behaviors. Iguatu, Ceará, Brazil, 2020 (n=60)

Variables	n* (%†)	μ‡ (SD§)	p-value
Sex			
Male	23 (38.3)	2.61 (0.66)	0.007||
Female	37 (61.7)	3.36 (0.51)	
Age			
14	1 (1.7)	2.56 (-)	
15	6 (10)	2.82 (0.72)	
16	17 (28.3)	2.97 (0.63)	0.782¶
17	20 (33.3)	3.00 (0.62)	
18	16 (26.7)	2.86 (0.54)	
Color/Race			
Brown	40 (66.7)	2.78 (0.58)	
Black	5 (8.3)	3.32 (0.66)	
White	12 (20)	3.16 (0.46)	0.95¶
Yellow	2 (3.3)	3.50 (0.52)	
Indigenous	1 (1.7)	3.36 (-)	
Religion			
No religion	23 (38.3)	2.94 (0.53)	
Catholic	24 (40)	2.89 (0.67)	0.742¶
Evangelical	10 (16.7)	2.90 (0.60)	
Other	3 (5)	3.32 (0.54)	
Marital status			
Single	50 (83.3)	2.90 (0.59)	0.351||
Married/living with a partner	10 (16.7)	3.10 (0.59)	

*Absolute frequency; †relative frequency; ‡mean; §standard deviation; ||Mann-Whitney; ¶Kruskal-Walis.

In relation to the behavior score for health promotion, female adolescents have a higher score of health promotion behaviors when compared to male adolescents (*U* = 249,000, z = -2,684, p<0.05). Other variables did not show statistically significant differences between their categories.

From the global score, which refers to all dimensions, the manifestation of health promotion behaviors was less than sometimes. This profile is similar in the dimensions of nutrition (2.72), stress control (2.74) and appreciation of life, the lowest of the scores (2.41).

In the nutrition dimension, eating three meals daily and drinking at least 1.5 liters of water per day are far from the mean, corresponding to a few times. Similarly, worrying about other people had the lowest scores of the social support dimension. In contrast, in this dimension, there is a greater inclination to talk to other people about their problems, although still in the margin of response sometimes.

The dimension of responsibility for health brings together the best scores, identifying a greater willingness to talk to professionals about their health, select foods without preservatives and read the labels on the packaging when buying food.

The dimension valuing life, in turn, with the lowest of scores, brings together the items seeks to correct your defects and seeks to identify what is important to yourself, highlighted among the smallest of the scale, related to attitudes and rarely manifested. Therefore, lower scores related to psychosocial aspects of adolescents are recognized.

The physical exercise dimension was more promising among the others, with higher rates of stretching every day and vigorous physical exercise for at least 30 minutes, three times a week. Meanwhile, participation in physical education classes at school was not more frequent than the general mean – sometimes.

Finally, the dimension of stress control permeates the Mean of the overall score of this scale, as explicit in Table 2.

Table 2 - Descriptive statistics equivalent to the Adolescent Health Promotion Scale (AHPS) items. Iguatu, Ceará, Brazil, 2020 (n=60)

Item	Mean	Standard Deviation	Asymmetry	Kurtosis
D1 - Nutrition	**2.72**			
Eat three meals a day	2.18	1.20	0.60	-0.75
Prefer low-fat foods	3.07	1.32	-0.39	-1.00
Include fiber-rich foods in your diet	2.75	1.21	0.03	-0.98
Drink at least 1.5 liters of water a day	2.38	1.29	0.51	-0.75
Include five food groups in meals	3.23	1.11	-0.51	-0.58
D2 - Social Support	**3.00**			
Share your feelings with others	3.45	1.03	-1.10	1.02
Worry about other people	1.92	0.86	0.48	-0.75
Talk about your concerns with other people	3.55	0.98	-0.75	0.64
Enjoy interacting with family members	2.60	1.29	0.01	-1.43
Talk about your problems with others	3.48	1.12	-0.61	-0.01
D3 - Health responsibility	**3.36**			
Read packaging labels when buying food	3.55	1.35	-0.67	-6.87
Worry about maintaining body weight	3.03	1.49	-0.18	-1.38
Talk to professionals about your health	4.30	0.85	-1.31	2.30
Observe/analyze your body at least once a month	2.78	1.43	0.14	-1.25
Read health information	2.95	1.24	0.09	-0.91
Select foods without preservatives	3.57	1.33	-0.61	-0.68
D4 - Life appreciation	**2.41**			

Like yourself	2.37	1.48	0.52	-1.22
Feel happy and satisfied	2.62	1.39	0.21	-1.29
Usually thinks positively	2.72	1.12	0.21	-0.56
Understand and accept your strengths and weaknesses	2.40	1.31	0.40	-1.07
Seek to correct your defects	2.00	0.92	0.67	-0.28
Try to identify what is important to you	2.15	1.23	0.71	-.55
Feel interested and challenged every day	2.72	1.19	0.02	-0.81
Believe that life has a purpose	2.32	1.35	0.48	-1.13
D5 - Physical exercise	**3.37**			
Do stretching exercises every day	3.77	1.39	-0.84	-0.56
Perform 30 min of vigorous exercise three times a week	3.88	1.48	-1.07	-0.37
Participate in physical education classes at school	2.63	1.54	0.18	-1.57
Warm up before doing vigorous exercise	3.23	1.61	-0.29	-1.50
D6 - Stress control	**2.74**			
Dedicate some time daily to relax	2.67	1.24	0.12	-1.04
Try to identify the causes of your stress	2.97	1.31	-0.02	-1.16
Pay attention to mood swings	2.62	1.27	0.10	-1.27
Sleep 6 to 8 hours a night	2.62	1.46	0.19	-1.41
Make plans and set priorities	2.73	1.35	0.08	-1.23
Try not to lose control when something unfair happens to you	2.83	1.36	0.06	-1.20
Global Score	**2.93**			

Regarding the equivalence of scores in the dimensions of AHPS between the characteristics sex, age, religion, color/race and marital status, statistical significance was identified between sex and the dimensions Nutrition (*U*=187,000, z=-3,640, p<0.001) and Physical Exercise (*U*= 229,500, z= -2,990, p<0,003), pointing out that females retain scores higher than males. The levels of the Health Responsibility dimension score were different between races (*H*(4)= 11.756, p<0.05), in which the yellow and black races presented higher scores than the others (Table 3).

Table 3 – Distribution of health promotion behavior scores in adolescents by dimension according to sex, age, religion, ethnicity/country and marital status. Iguatu, CE, 2020 (n=60)

Characteristics	Dimensions of the *Adolescent Health Promotion Scale* (μ* /DP†)					
	D1	D2	D3	D4	D5	D6
Sex						
Male	2.26 (0.63)	3.04 (0.63)	3.29 (0.87)	2.21 (0.77)	2.82 (1.09)	2.49 (0.82)
Female	3.01 (0.73)	2.97 (0.66)	3.41 (0.78)	2.54 (1.00)	3.73 (0.93)	2.90 (0.82)
p-value‡	0.000	0.630	0.709	0.254	0.003	0.065
Age						
14	2.80 (-)	2.60 (-)	2.50 (-)	1.38 (-)	3.75 (-)	2.33 (-)
15	2.5 (0.72)	2.73 (0.79)	3.17 (0.83)	2.40 (0.74)	3.29 (1.16)	2.81 (1.02)
16	2.80 (0.91)	3.12 (0.51)	3.42 (0.72)	2.44 (0.87)	3.34 (1.17)	2.71(0.91)
17	2.77 (0.77)	3.06 (0.68)	3.39 (0.71)	2.68 (1.06)	3.50 (1.14)	2.73 (0.88)
18	2.66 (0.74)	2.93 (0.71)	3.40 (1.05)	2.11 (0.81)	3.28 (1.01)	2.78 (0.72)
p-value§	0.949	0.620	0.743	0.308	0.915	0.974
Color/race						
Brown	2.60 (0.67)	2.87 (0.62)	3.12 (0.78)	2.30 (0.90)	3.16 (1.10)	2.63 (0.81)
Black	3.20 (1.21)	3.28(0.91)	4.03 (0.99)	2.68 (1.29)	3.70 (1.02)	3.07 (1.08)
White	2.77 (0.91)	3.27(0.59)	3.71 (0.59)	2.49 (0.92)	3.94 (0.88)	2.81 (0.90)
Yellow	3.50 (0.42)	3.20 (0.57)	4.17 (0.24)	3.06 (0.27)	3.50 (1.77)	3.58 (0.12)
Indigenous	3.40 (-)	3.20 (-)	4.00 (-)	3.25 (-)	3.50 (-)	2.83 (-)
p-value§	0.150	0.285	0.019	0.472	0.210	0.258
Religion						
No religion	2.70 (0.93)	3.19 (0.66)	3.33 (0.84)	2.51 (0.86)	3.36 (1.10)	2.57 (0.69)
Catholic	2.70 (0.68)	2.88 (0.68)	3.43 (0.90)	2.20 (0.87)	3.34 (1.15)	2.78 (0.94)
Evangelical	2.80 (0.73)	2.78 (0.48)	3.25 (0.61)	2.45 (1.04)	3.23 (0.99)	2.93 (0.99)
Other	2.80 (0.87)	3.20 (0.40)	3.44 (0.79)	3.17 (1.38)	4.33 (0.38)	3.00 (0.60)
p-value§	0.990	0.156	0.928	0.342	0.360	0.590
Marital status						
Single	2.68 (0.79)	2.96 (0.66)	3.38 (0.79)	2.35 (0.90)	3.31 (1.00)	2.73 (0.85)
Married/living with a partner	2.92 (0.74)	3.18 (0.52)	3.30 (0.97)	2.69 (1.05)	3.75 (1.44)	2.78 (0.82)
p-value‡	0.365	0.324	0.976	0.366	0.258	0.781

*Mean; †: standard deviation; D1: Nutrition; D2: Social support; D3: Health responsibility; D4: Life appreciation; D5: Physical exercise; D6: Stress control; ‡Mann-Whitney; §Kruskal-Walis; -standard value equal to zero.

Mean values ranged from 2.41 to 3.37, with standard deviations from 0.64 to 1.08 (Table 4). The reliability of the scale applied in this context is attested by the distancing of the dimensional scores from the extreme possible response values (1 or 5).

Table 4 – Descriptive statistics, Cronbach's alpha coefficient and bivariate correlations between the dimensions of the Adolescent Health Promotion Scale (AHPS). Iguatu, Ceará, Brazil, 2020 (n=60)

Dimensions	μ*	SD†	α‡	Nutrition	Social Support	Health Responsibility	Life Appreciation	Phsical Exercise
Nutrition	2.723	0.780	0.745					
Social Support	3.000	0.644	0.794	0.200				
Health Responsibility	3.363	0.814	0.746	0.548	0.253			
Life Appreciation	2.410	0.923	0.735	0.396	0.495	0.332		
Physical Exercise	3.379	1.081	0.762	0.545	0.179	0.521	0.420	
Stress Control	2.738	0.836	0.760	0.381	0.225	0.424	0.593	0.284

*Mean; †standard deviation; ‡Cronbach's alpha.

The bivariate correlations between scales presented values between 0.20 and 0.59. In turn, the Cronbach's alpha coefficient ranged from 0.73 to 0.79, indicating homogeneity between the dimensions and desirable indexes of internal consistencies.

Discussion

Acting under the logic of health promotion concerns coping with guilt and individual responsibility, encompassing training and fostering autonomy to make assertive and positive health decisions. In adolescence, promoting health should consider that habits, beliefs and attitudes can last into adulthood and, therefore, should be oriented towards health.[6]

The rapid and complex transformations experienced by adolescents contribute to the vulnerability of this public, including poor eating habits, sedentary lifestyle, self-esteem problems and neglect of themselves and the environment around them. Thus, an adequate follow-up of the health-disease-care process of these young people is necessary, identifying and monitoring health promotion behaviors capable of helping to reduce the onset and development of diseases in the short and long term.[4,7-8]

The AHPS, in its global score, allows an analysis of the behavior to promote the health of adolescents, being available to take care of itself from an absolute absence to present and continuous care.[4] Participants in the study demonstrated not having health

as a priority in living, prevailing median behaviors of health promotion in the dimensions of nutrition, social support, responsibility for health, appreciation of life, physical exercise and stress control.

These findings are related to the characteristics of this audience. Adolescents tend to relate to similar groups, relationships that carry cultural identity, whether in the ways of dressing or eating. These common behaviors mark the guarantee of acceptance in the group and in social relations.[9]

Social support is an important correlate in adolescence, being manifested essentially in the form of social support to the choices, demands and attitudes of these adolescents. It is eminent the positive association of social support of friends, as well as the importance of this reinforcement by the family. However, it is recommended to consider positive reinforcement in interventions, since recognition by the family tends to expand the self-efficacy of the activities and feelings expressed by adolescents.[10]

The family is considered a primary social agent for the development of adolescents, since they help them mobilize skills, as well as point out beliefs that can help shape attitudes and behaviors.[11]

However, it is worth emphasizing that, conversely, the lack of support and/or excessive pressure by relatives may favor the development of low self-esteem, considering that at this stage adolescents lack affection, support and family presence.[12] In this study, the relationship of 30% of adolescents with their families, as self-reported, makes it possible to reflect on the construction of fragile bonds that cause parental instabilities and exposes these adolescents to risks due to lack of dialogue.

In the nutrition dimension, regarding the choice of healthy foods and amount of daily meals, most adolescents eat more than five times a day, but preferring foods such as sweet biscuits, sweets, fried foods and canned foods. Several factors can influence the eating habits of adolescents, such as those related to the individuals themselves (biological factors) or those related to the family and social environment, the context in which the family plays an important role in the adoption of healthy eating habits.[13] In addition to recognizing the relevance of meals in the construction of a healthy diet and that meets the caloric and nutritional needs of these adolescents, there is a social

dimension, not investigated in this study, which allows recognizing access to meals, a crucial aspect for health promotion.

The eating pattern of adolescents today is greatly influenced by social media. It is observed that dissatisfaction with body image is found in most adolescents, both overweight and underweight. Thus, they seek their own dietary patterns, without professional help, which end up generating bad habits and becoming frustrated because they cannot achieve their goals.[14] This prerogative is confirmed by the deficit of access to qualified, direct, objective and dynamic information, capable of involving the adolescent public supplying their curiosities and doubts without, however, relying on sensationalism and fake news.

The restlessness of adolescents to aim for the body pattern closer to those established by society is frequent, who seek an appearance seen as adequate, with specific characteristics for each sex. However, apprehension can sometimes be perceived as beneficial if used correctly, because adolescents with underweight body weight perception have more initiatives to gain weight and those who see themselves as overweight have more initiatives to reduce weight.[15] Thus, When these concerns are well oriented and supported through social support and network of health and education professionals, it is possible to provide transformative measures consistent with the health, well-being and desire of adolescents, convergently.

The search for guidance with professionals, reported as frequent by the participants of this study, It represents an advance in the aspects identified in the literature that recognize that this public does not have the habit of reading health information and does not seek professionals to receive such information, preferring to use technological means for this, but not from reliable sources. For more effective measures, educational actions aimed at this population are necessary, as well as adoption of participatory strategies, in order to insert adolescents in the sharing of experiences motivating positive learning. Thus, the insufficiency of health education strategies in plaster, non-participant and vertical hierarchical character is reaffirmed.[1,8,16]

Regarding the sleep pattern, this is often affected by inadequate life habits, providing a shorter sleep time to these individuals. This shorter duration and, in some cases, worse sleep quality, is associated with less healthy behavioral factors, such as

higher intake of fatty and sugary foods, alcohol consumption, smoking, less physical activity and long time in front of screens.[17]

A study conducted with 1,471 students showed that a large part of them participate in physical education classes, 56.4%. However, the non-adherence to these classes is given more by students of private schools, showing as a reason the exacerbated use of technological means such as television, video games, smartphones, computers and notebook.[18]

However, regarding the performance of vigorous physical exercises for at least three times a week, lasting 30 minutes, these adopt healthier behaviors and reveal better levels of emotional stability and general self-concept. In addition to feeling good about themselves and having greater self-esteem.[19] Constancy in physical activities is often associated with self-worth and the social environment in which this adolescent is inserted.

In addition to physical health, physical exercise also contributes to mental health because it is related to benefits for brain function, in order to provide feelings of joy, satisfaction and well-being and reduce anxiety.[20]

Regarding the value of life, adolescents have lower levels of behavior than the global score, emphasizing that the transformations that occur in this phase significantly affect emotional well-being, possibly being a reflection of self-criticism, and especially associated with their image, the degree to which they undergo physical changes.[21]

The analysis of the relationship between self-esteem, resilience and the various behavioral forms of risk among adolescents showed that negative self-esteem tends to develop an important role in the risk behavior of these adolescents. Therefore, the recognition of their own strengths and weaknesses determine their values and beliefs, and enable the process of acceptance of their own mistakes, in order to promote and develop positive conditions and capabilities of healthy human development. Among these positive capacities is well-being, which promotes pleasant experiences for people, with a better view of themselves and others.[22-23]

Stress is defined as a real or imaginary threat to the mode of stability of the human organism that has the competence to intervene in the most appropriate and expected responses in certain situations, being considered an agent harmful to health and well-being in adolescence. This feeling is present routinely, because this population

does not seek to identify the causes of this stress, as well as do not dedicate time to relax, being always busy with extra activities.

The adolescent needs planning in their activities, as well as moments of relaxation to reduce stress levels, since this is described by phases, and in some of them the symptoms can be more severe.[24] It is essential to establish goals and priorities in the daily routine of these adolescents so that they can control these feelings and do not reach psychological problems.

The loss of control at this stage is common, because sometimes these adolescents go through often excessive charges by parents and/or teachers in relation to good school performance and professional success. Nevertheless, these charges in some scenarios become incentives, since these adolescents are in a period of taking responsibility and entering adulthood. Therefore, monitoring the development and decision-making of adolescents can contribute positively to their personal and professional training.[25]

Finally, recognizing the behaviors for health promotion of adolescents offers subsidies to the planning of micro level, parents, health teams and school; macro level, such as the implementation of public policies concerning the valorization of youth and adolescent empowerment.

The epidemiological and sanitary conjuncture experienced parallel to the accomplishment of this study is characterized as a limiting factor of its conduction. The absence of a larger sample is also a limitation of the study for making other statistical inferences impossible.

The discussions allow approximation with the behavior of adolescents, fundamental for the action based on scientific evidence and directed to the health-disease-care process and its determinants, providing opportunities as contributions of the study.

Conclusion

The behavior of adolescents for health promotion surrounds attitudes of median frequency in the dimensions nutrition, social support, responsibility for health, appreciation of life, physical exercise, stress control and, therefore, in a general way.

Understanding the demands and health needs of adolescents can help in the development of strategies for improving care, involving the young person as the protagonist. It is important that adolescents are active agents of their own change, being part of the actions implemented for their integral development and ensuring more effective health promotion actions.

Finally, the application of the scale in contexts other than the school can be useful in capturing other nuances of adolescence necessary to promote their health.

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Authorship contributions

1 – Francisco Ayslan Ferreira Torres
Corresponding Author
Nursing Student - E-mail: ayslantorresj1@gmail.com
Conception and/or development of the research and/or writing of the manuscript, review and approval of the final version.

2 – Paloma Loiola Leite
Nursing Student - E-mail: ploiolaleite@gmail.com
Conception and/or development of the research and/or writing of the manuscript, review and approval of the final version.

3 – Leonarda Marques Pereira
Nurse - leonardamarques73@gmail.com
Conception and/or development of the research and/or writing of the manuscript, review and approval of the final version.

4 – John Carlos de Souza Leite
Nurse, MSc in Health - E-mail: johncarlosleite@hotmail.com
Review and approval of the final version.

5 – Maria Rocineide Ferreira da Silva
Nurse, PhD in Collective Health - E-mail: rocineideferreira@gmail.com
Review and approval of the final version.

6 – Lucas Dias Soares Machado
Nurse, MSc in Nursing - E-mail: lucasdsmachado@hotmail.com
Conception and/or development of the research and/or writing of the manuscript, review and approval of the final version.

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