

ORIGINAL ARTICLE



Demand and use of health services by Brazilian adolescents, according to the National School Health Survey 2019

Procura e utilização dos serviços de saúde por adolescentes brasileiros, segundo a Pesquisa Nacional de Saúde do Escolar de 2019

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ABSTRACT

Objective: To analyze the demand and use of health services by Brazilian adolescents, according to sociodemographic characteristics. **Methods:** Cross-sectional study with data from the 2019 National School Health Survey, that assessed 124,898 adolescents aged 13 to 17 years. The crude and adjusted prevalence ratios (RPaj) by sex, age, and school administrative status and their 95% confidence intervals (95%CI) were calculated for the variables “search for a service or health professional”, “search for a Basic Health Unit” and “assistance at the Basic Health Unit”, using Poisson regression with robust variance. **Results:** The demand for a health service was reported by 56.56% (95%CI 55.82–57.29) of the adolescents and was lower among male students (RPaj: 0.95; 95%CI 0.94–0.95); those with black skin color (RPaj: 0.95; 95%CI 0.94–0.97), brown skin color (RPaj: 0.97; 95%CI 0.96–0.98), yellow skin color and indigenous ethnicity (RPaj: 0.95; 95%CI 0.94–0.97); public school students (RPaj: 0.90; 95%CI 0.89–0.90); and rural residents (RPaj: 0.96; 95%CI 0.94–0.98). A Basic Health Unit was the service sought by 74.08% (95%CI 73.21–74.94) of adolescents, more frequently among students of brown skin color (RPaj: 1.06; 95%CI 1.03–1.08), from public schools (RPaj: 1.32; 95%CI 1.29–1.35) and residing in rural areas (RPaj: 1.05; 95%CI 1,01–1,09). The main reason for seeking the Basic Health Unit was vaccination (27,93%; 95%CI 27,07–28,81). **Conclusion:** More than half of the adolescents searched for a health service, which means that this group has a high demand. However, health inequalities still persist and point to the importance of health care planning, reception conditions, and the quality of care provided. **Keywords:** Adolescent health. Health services accessibility. Unified health system. Health promotion.

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INTRODUCTION

Individuals go through a dynamic and complex process of maturation and physical, hormonal, psychic and social transformations during adolescence, which can predispose them to new experiences and health-risky behaviors^{1,2}.

Every year, thousands of adolescents die from preventable causes³, which reinforces the need for a comprehensive health care and access to individual and collective health promotion actions, as well as disease and injuries prevention programs^{4,5}. In order for adolescents to be fully cared for, an organized, planned network with the participation of social actors and health professionals trained to assist them is needed; one that considers, above all, socio-economic and cultural contexts⁶.

The search for a health service can be defined as the entry of an individual into the health system, while use comprises the interaction between professionals and users, be it direct contact, such as consultations and hospitalizations, or indirect contact, such as performing exams⁷.

The demand and use of health services can be influenced by social determinants, once low-income, socially disadvantaged or marginalized adolescents are less likely to seek health services. On the other hand, white adolescents, enrolled in private schools and with high maternal educational level seek health services and professionals more often^{8,9}. This is added to the difficulty of professionals in providing comprehensive care to adolescents, which impairs reception, bonding and the quality of care offered⁴.

Studies using data from the National School Health Survey (PeNSE) showed that 48.0% (95%CI 47.6–48.5) of adolescents looked for a health service or professional in 2012⁸ and 56.7% (95%CI 55.2–58.3) in 2015⁹, which shows an increase over the years. However, the monitoring of demand and use of health services must be continuous to enable decision-making, improve management and public policies and recognize the demands of this population, while identifying factors that influence the relationship with services and health professionals. Thus, it is expected that continuous, coordinated and guided care to adolescents will be promoted and improved, ensuring their rights and reducing health inequalities.

Therefore, this study aimed to analyze the demand for and use of health services by Brazilian adolescents, according to sociodemographic characteristics.

METHODS

Study design

This is a cross-sectional study that used data from the PeNSE 2019 survey.

Scenario

PeNSE is a survey carried out with adolescents in school age, conducted by the Brazilian Institute of Geography and

Statistics (IBGE) in partnership with the Ministry of Health and supported by the Ministry of Education. It is part of the Surveillance System for Risk and Protection Factors for Chronic Noncommunicable Diseases (NCDs) in Brazil and was the first national survey to address various aspects of adolescents' lives, such as habits, care, risk and protection factors for health¹⁰.

The sampling plan was by conglomerates in two stages, in which schools corresponded to the first stage of selection and the groups of students enrolled corresponded to the second stage. The set of students from selected classes formed the sample. The plan was designed to estimate population parameters for students aged 13 to 17 years who were enrolled and regularly attending public and private schools, for the following geographic levels: Brazil, major regions, Federation Units (FU), capital cities and the Federal District. Details on the sampling process are provided in the PeNSE official publication¹⁰.

In 2019, data were collected at 4,242 schools, 6,612 classes, from 189,857 students enrolled and 183,264 attending students, 159,245 valid questionnaires and 125,123 questionnaires analyzed¹⁰.

PeNSE's database and questionnaires are available in public domain and for use on the IBGE website: <https://www.ibge.gov.br/estatisticas/sociais/saude/9134-pesquisa-nacional-de-saude-do-escolar.html?edicao=31442&t=results>.

Participants

Adolescents aged 13 to 17 years old, enrolled and regularly attending the 7th to 9th grade of elementary school and the 1st to 3rd grades of high school, including technical courses with integrated high school and normal/teaching courses, participated in the research; participants were from all shifts, from public and private schools in Brazil¹⁰.

Data collection

Data were collected from April to September 2019 by means of the mobile collection device, which corresponds to a smartphone with the structured survey questionnaires. The IBGE technician distributed the devices to students present on the day of the interviews and instructed them on how to handle them. The student's questionnaire was self-administered and had specific fill-in instructions¹⁰.

Study variables

This study included variables related to demand and use of health services and sociodemographic features that are described below.

Search for a health service or professional: prevalence of adolescents who sought a health service or professional to care for their health. "In the last 12 months, have you sought any health service or professional to care for your own health?" Answer options: yes; no.

Most frequently sought service: proportion of type of health service sought most frequently by adolescents to

care for their health. "In the last 12 months, which health service did you visit most often?" Response options: Basic Health Unit (BHU); doctor's office or private clinic; hospital; others (dental office; office of other health specialty; medical specialty services or polyclinic; emergency room, Emergency Care Unit; laboratory or clinic for complementary tests; home care service; pharmacy).

Search for a BHU: proportion of adolescents who sought a BHU to care for their health in the last 12 months. "In the last 12 months, have you sought any BHU (Health Center or Family Health Unit/Family Health Strategy — FHS)?" Answer options: yes; no.

Assistance at the BHU: proportion of adolescents who were assisted when they sought a BHU. "Did you receive care the last time you went to a BHU (Health Center or Family Health Unit — FHS)?" Answer options: yes; no.

Reason for looking for a BHU: proportion of main reason adolescents sought a BHU. "What was the main reason for your visit to the BHU (Health Center or Family Health Unit — FHS) this last time?" Answer options: weight management support (gain or lose); accident or injury, rehabilitation or physical therapy; dentist or other oral health professional; psychologist or other mental health professional; vaccination; illness; others (support to smoking cessation; contraceptive methods; HIV, syphilis or hepatitis B test; prenatal care/pregnancy test; request for a medical certificate).

Figure 1 shows the flow of the PeNSE questionnaire regarding the aforementioned indicators.

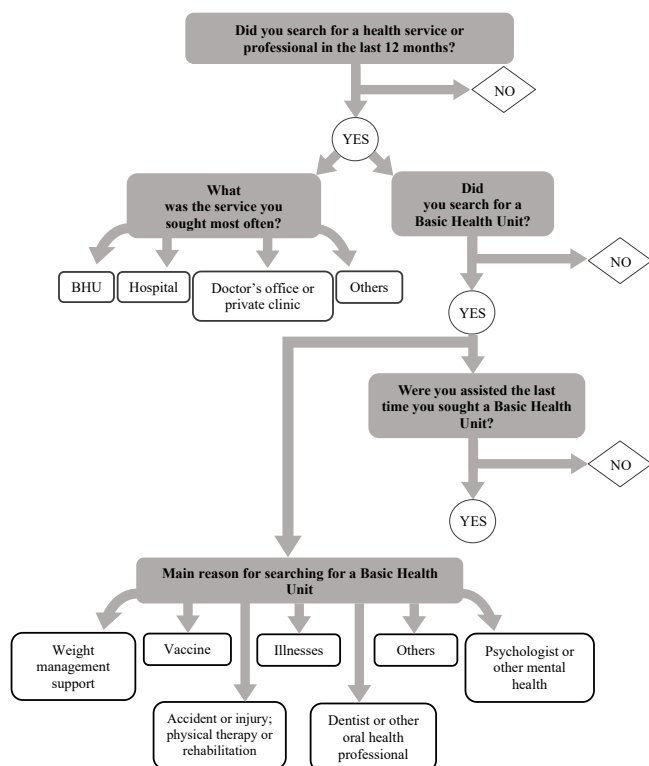


Figure 1. Flowchart of questions related to the search for and use of health services by students aged 13 to 17 years. PeNSE, Brazil, 2019.

The sociodemographic variables were: biological sex (male and female); age range (from 13 to 15; 16 and 17 years old); skin color (white, black, brown and others — yellow and indigenous); school network (private and public), and area of residence (urban and rural).

Data analysis

Prevalence values and respective 95% confidence intervals (95%CI) were estimated. For the variables "search for a health service or professional", "search for a BHU" and "assistance at the BHU", proportions were calculated according to sociodemographic variables and crude and adjusted prevalence ratios (PRc and PRa) by sex, age and school network^{8,9} and respective 95%CI, using Poisson regression models with robust variance. Results with p-value lower than or equal to 0.05 were considered significant. For all analyses, post-stratification weights were considered.

Analyses were performed using Data Analysis and Statistical Software (Stata), version 14.2, by means of the survey module, which considers post-stratification weights.

Ethical aspects

The students who agreed with the Free and Informed Consent Form, displayed on the first page of the questionnaire in the mobile collection device, participated in the research.

PeNSE was approved by the National Committee on Ethics in Research for Human Beings of the Ministry of Health (Opinion No. 3,249,268, of April 8, 2019).

RESULTS

A total of 124,898 adolescents aged between 13 and 17 years were evaluated. Of these, most were females (50.7%; 95%CI 49.9–51.4); aged between 13 and 15 years (64.7%; 95%CI 63.2–66.01); with brown skin color (43.6%; 95%CI 42.8–44.3), followed by white (36.0%; 95%CI 35.1–36.8), black (13.6%; IC95% 13.0–14.1), yellow skin and indigenous ethnicity (6.9%; 95%CI 6.5–7.2); living in the urban area (92.4%; 95%CI 90.6–93.6); and enrolled in public schools (85.5%; 95%CI 85.1–85.9).

The search for a health service or professional to care for their health was reported by 56.56% (95%CI 55.82–57.29) of the adolescents and was lower among males (PRa: 0.95; 95%CI 0.94–0.95); those whose skin was black (PRa: 0.95; 95%CI 0.94–0.97), brown (PRa: 0.97; 95%CI 0.96–0.98), yellow, and those who were indigenous (PRa: 0.95; 95%CI 0.94–0.97); those enrolled in public schools (PRa: 0.90; 95%CI 0.89–0.90); and living in rural areas (PRa: 0.96; 95%CI 0.94–0.98). On the other hand, demand was higher among adolescents aged 16 and 17 years (PRa: 1.03; 95%CI 1.02–1.04) (Table 1).

Regarding the type of health service most frequently sought by adolescents, the results indicated that 35.97% (95%CI 34.98–36.97) looked for the BHU. It is noteworthy

that public school students sought the BHU more frequently (40.75%; 95%CI 39.56–41.95) and those from private schools sought a doctor's office or private clinic (38.49%; 95%CI 37.52–39.46) (Figure 2).

When asked specifically about searching for a BHU, 74.08% (95%CI 73.21–74.94) of the adolescents sought care at this service, mainly brown-skinned students (PRa: 1,06; IC95% 1,03–1,08), from public schools (PRa: 1.32; 95%CI

Table 1. Search for a health service or professional to care for their own health, according to sex, age, skin color, school status and place of residence. National School Health Survey, Brazil, 2019.

	Search for a health service or professional		PRc (95%CI)	PRa (95%CI)
	Yes % (95%CI)	No % (95%CI)		
Total	56.56 (55.82–57.29)	43.44 (42.71–44.18)		
Sex				
Female	60.72 (59.85–61.58)	39.28 (38.42–40.15)	*	*
Male	52.23 (51.27–53.19)	47.77 (46.81–48.73)	0.95 (0.94–0.95)	0.95 (0.94–0.95)
Age (years)				
13–15	55.12 (54.08–56.14)	44.88 (43.86–45.92)	*	*
16–17	59.20 (58.28–60.12)	40.8 (39.88–41.72)	1.03 (1.02–1.04)	1.03 (1.02–1.04)
Skin color				
White	61.25 (60.16–62.34)	38.75(37.66–39.84)	*	*
Black	51.45 (49.64–53.25)	48.55 (46.75–50.36)	0.94 (0.93–0.95)	0.95 (0.94–0.97)
Brown	55.03 (54.03–56.02)	44.97 (43.98–45.97)	0.96 (0.95–0.97)	0.97 (0.96–0.98)
Others	51.93 (49.57–54.27)	48.07 (45.73–50.43)	0.94 (0.93–0.96)	0.95 (0.94–0.97)
Status				
Private	71.55(70.73–72.36)	28.45 (27.64–29.27)	*	*
Public	54.02 (53.16–54.87)	45.98 (45.13–46.84)	0.90 (0.89–0.90)	0.90 (0.89–0.90)
Residence area				
Urban	57.27 (56.50–58.04)	42.73 (41.96–43.5)	*	*
Rural	47.9 (45.13–50.68)	52.1 (49.32–54.87)	0.94 (0.92–0.96)	0.96 (0.94–0.98)

*Reference group for calculating the prevalence ratio. %: prevalence; 95%CI: 95% confidence interval; PRc: crude prevalence ratio; PRa: prevalence ratio adjusted for sex, age and school status

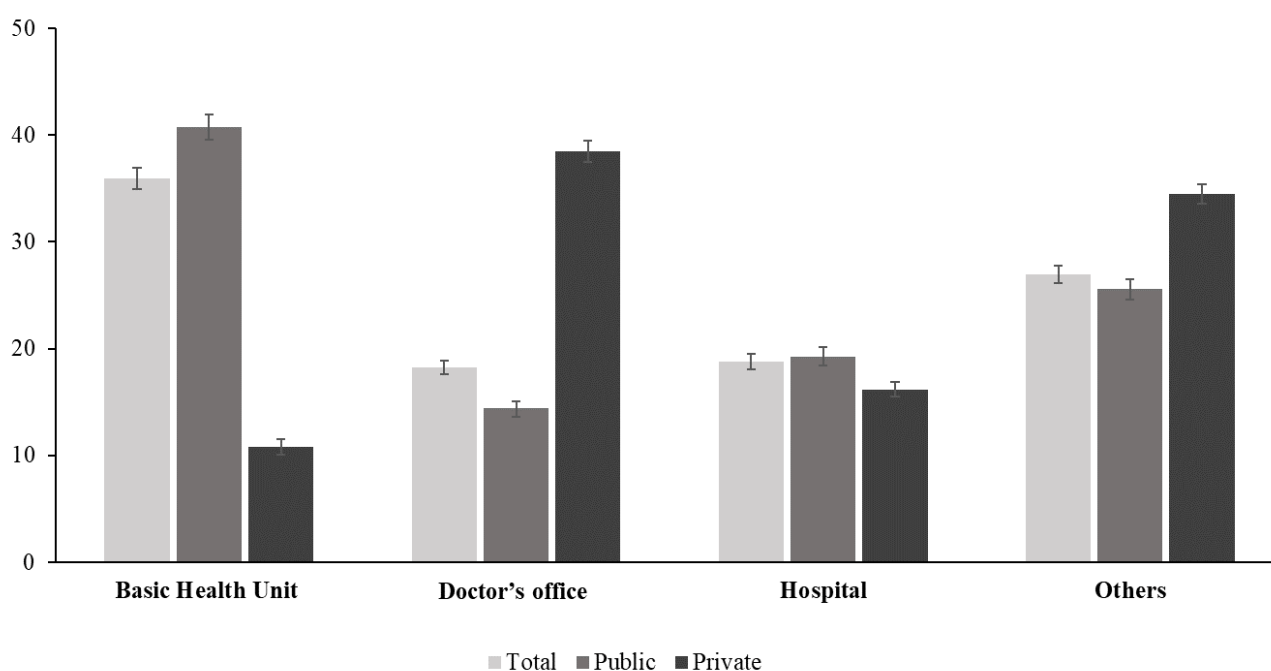


Figure 2. Type of service sought most frequently by students aged 13 to 17 years for care related to their own health, according to administrative status. National School Health Survey, Brazil, 2019.

1.29–1.35) and residing in rural areas (PRa: 1.05; 95%CI 1.01–1.09). By contrast, the BHU was less sought by males (PRa: 0.94; 95%CI 0.92–0.96). We found no difference according to age group (Table 2).

Among the adolescents who sought a BHU, 88.61% (95%CI 88.05–89.14) were seen, however the proportion was lower among males (PRa: 0.98; 95%CI 0.97–0.99) and those with black skin color (PRa: 0.98; 95%CI 0.95–0.99) (Table 3).

Table 2. Schoolchildren aged 13–17 years old who searched for a Basic Health Unit, according to sex, age, skin color, school status and area of residence. National School Health Survey, Brazil, 2019.

	Searched for a Basic Health Unit		PRc (95%CI)	PRa (95%CI)
	Yes % (95%CI)	No % (95%CI)		
Total	74.08 (73.21–74.94)	25.92 (25.06–26.79)		
Sex				
Female	76.17 (75.12–77.2)	23.83 (22.8–24.88)	*	*
Male	71.53 (70.34–72.69)	28.47 (27.31–29.66)	0.94 (0.92–0.96)	0.94 (0.92–0.96)
Age (years)				
13–15	74.03 (72.98–75.06)	25.97 (24.94–27.02)	*	*
16–17	74.17 (72.79–75.51)	25.83 (24.49–27.21)	1.00 (0.98–1.02)	0.99 (0.97–1.01)
Skin color				
White	70.7 (69.4–71.97)	29.3 (28.03–30.6)	*	*
Black	72.94 (70.48–75.27)	27.06 (24.73–29.52)	1.03 (1.00–1.07)	0.99 (0.96–1.03)
Brown	77.27 (76.06–78.44)	22.73 (21.56–23.94)	1.09 (1.07–1.12)	1.06 (1.03–1.08)
Others	75.0 (72.24–77.57)	25.0 (22.43–27.76)	1.06 (1.02–1.10)	1.03 (0.99–1.07)
Status				
Private	58.5 (57.41–59.58)	41.5 (40.42–42.59)	*	*
Public	77.04 (76.02–78.04)	22.96 (21.96–23.98)	1.32 (1.29–1.35)	1.32 (1.29–1.35)
Residence area				
Urban	73.65 (72.73–74.54)	26.35 (25.46–27.27)	*	*
Rural	79.86 (76.86–82.55)	20.14 (17.45–23.14)	1.08 (1.04–1.13)	1.05 (1.01–1.09)

*Reference group for calculating the prevalence ratio. %: prevalence; 95%CI: 95% confidence interval; PRc: crude prevalence ratio; PRa: prevalence ratio adjusted for sex, age and school status

Table 3. Assistance to students aged 13 to 17 years who sought the Basic Health Unit, according to sex, age, skin color, school status and area of residence. National School Health Survey, Brazil, 2019.

	Assisted at Basic Health Unit		PRc (95%CI)	PRa (95%CI)
	Yes % (95%CI)	No % (95%CI)		
Total	88.61 (88.05–89.14)	11.39 (10.86–11.95)		
Sex				
Female	89.31 (88.54–90.03)	10.69 (9.972–11.46)	*	*
Male	87.73 (86.8–88.6)	12.27 (11.4–13.2)	0.98 (0.97–1.00)	0.98 (0.97–0.99)
Age (years)				
13–15	88.59 (87.9–89.24)	11.41 (10.76–12.1)	*	*
16–17	88.65 (87.71–89.52)	11.35 (10.48–12.29)	1.00 (0.99–1.01)	1.00 (0.99–1.01)
Skin color				
White	89.04 (88.14–89.87)	10.96 (10.13–11.86)	*	*
Black	86.89 (85.12–88.48)	13.11 (11.52–14.88)	0.98 (0.95–1.00)	0.98 (0.95–0.99)
Brown	88.84 (87.98–89.65)	11.16 (10.35–12.02)	1.00 (0.98–1.01)	1.00 (0.98–1.01)
Others	87.82 (85.64–89.71)	12.18 (10.29–14.36)	0.99 (0.98–1.01)	0.99 (0.96–1.01)
Status				
Private	88.81 (88.11–89.47)	11.19 (10.53–11.89)	*	*
Public	88.57 (87.92–89.19)	11.43 (10.81–12.08)	1.00 (0.99–1.01)	1.00 (0.99–1.01)
Residence area				
Urban	88.65 (88.07–89.19)	11.35 (10.81–11.93)	*	*
Rural	88.17 (85.65–90.3)	11.83 (9.70–14.35)	0.99 (0.97–1.02)	1.00 (0.97–1.02)

*Reference group for calculating the prevalence ratio; %: percentage; 95%CI: 95% confidence interval; PRc: crude prevalence ratio; PRa: prevalence ratio adjusted for sex, age and school status.

The main reasons why adolescents sought the BHU were: vaccination (27.93%; 95%CI 27.07–28.81); disease (19.98%; 95%CI 19.21–20.79); dental care (8.65%; 95%CI 8.15–9.17); accident or injury, physical therapy or rehabilitation (77.0%; 95%CI 6.56–7.46); support for weight control (6.29%; 95%CI 5.84–6.77); looking for a psychologist or mental health professional (3.36%; 95%CI 3.06–3.68); and other types of assistance, which included support to smoking cessation; contraceptive methods; HIV, syphilis or hepatitis B test; prenatal care/pregnancy test; request for a medical certificate (26.79%; 95%CI 25.93–27.66).

DISCUSSION

This study identified that 56.56% of adolescent students sought a health service or professional to care for their own health. This demand was lower among males, with black, brown, yellow skin color and indigenous ethnicity, enrolled in public school and who resided in rural areas. The most frequently sought type of service was the BHU. Of the adolescents who sought BHUs, 88.61% were assisted and vaccination was the main reason for this demand.

More than half of the adolescents looked for some health service or professional, which shows a high demand in this age group. This highlights the importance of planning, reception and the quality of services provided to this public¹¹. The priority actions of services for the comprehensive care of adolescents should include health education, immunization, nutrition and psychological support, considering their biological, emotional and social development, which is also fundamental for the success of the sustainable development agenda^{12,13}.

This study showed that male adolescents sought health services less frequently than female ones. Sociocultural issues make it difficult to adhere to care and practices for health promotion and prevention of diseases and injuries^{14,15}. Historically, men are seen as virile, invulnerable and strong, and demanding for health services can be associated with weakness, fear and insecurity¹⁶. Therefore, the importance of expanding and improving access to and quality of health services is reinforced to serve them in their plurality and in a resolute way, contributing to the acceptance and adherence to services and health promotion actions¹⁷. The importance of raising awareness about the demand for health services and professionals and the early encouragement of the development of healthy habits is added to this, as it will have repercussions in adult life¹⁸.

The search for and use of health services are also determined by situations of social vulnerability¹⁹. In this study, adolescents with black, brown, yellow skin color and indigenous ethnicity, enrolled in public schools and living in rural areas were the ones who least sought health services or professionals. This reflects the gaps in care due to socioeconomic and housing inequalities, as well as poor infrastructure, lack of transportation and difficulties for the

State to cover all health demands in the most remote areas²⁰. According to the 2019 National Health Survey (PNS), health care demand was lower among the low-income population and higher among those people with white skin and complete higher education²¹. A study with data from the National Household Sample Survey (PNAD) also showed that the use of health services is uneven and higher socioeconomic classes have better access²².

It is important to mention that students from private schools sought mainly doctors' office or private clinics, which can be explained by better socioeconomic conditions, having a health insurance plan and greater access to private health services by the higher-income population²³. Hence the importance of investing and prioritizing the Unified Health System (Sistema Único de Saúde — SUS) to expand the offer and improve the quality of health services and its infrastructure, ensuring the principles of universalization, equity and integrality.

The broad access to primary health services by adolescents is a finding similar to those of other studies^{11,18}, which represents a step forward for the SUS, as it expands comprehensive health care and acts preventively. In this context, the BHUs, together with the Family Health Strategy teams, reorient the health care model and develop actions at the individual and collective levels, encompassing health promotion and protection, prevention of diseases and injuries, diagnosis, treatment, rehabilitation and health maintenance, being the population's first point of contact with the health system²⁴. The BHU is also a primordial space for continuous, coordinated and oriented care for adolescents, which enables encounters and intersubjective exchanges that can produce dialogic relationships and promote care networks²⁵. The improvement and expansion of the Primary Health Care network has a positive impact on the promotion of comprehensive health of Brazilian adolescents.

So, the present study showed that students from public schools seek BHUs more often and most of them are assisted, which shows the BHUs' role in guaranteeing the health rights of different population groups²⁶, in addition to fulfilling the principle of universality, in which everyone has the right to health actions and services. Despite the expansion of coverage and improvement of the quality of Primary Health Care services in Brazil, there are still challenges that require a continuous capacity for innovation in the formulation and implementation of health policies, models and practices²⁷. Added to this, the underfunding of the SUS and the implementation of austerity policies such as the approval of Constitutional Amendment 95/2016, which reduced investments in social and health policies, contribute to the reduction in supply of services, the worsening of health indicators and the increase of inequalities²⁸.

Changes are also needed to improve the care offered to adolescents, including training of professionals to deal with and meet their needs, and the inclusion of practices that advocate dialogue, considering real demands of this public

and ensuring their rights. Available appointment dates on the service's schedule and qualified reception without prejudice are expected elements of a comprehensive, effective and ethical Primary Health Care⁴.

Among the various individual and collective actions carried out at the BHUs, vaccination is one of the leading services. The SUS, through the National Immunization Program (PNI), guarantees the vaccination of the entire Brazilian population with equity, effectiveness, efficiency and safety, in addition to offering, in the National Vaccination Calendar, all vaccines recommended by the World Health Organization and special immunobiologicals for groups at higher risk²⁹. Vaccination actions in Brazil are an important tool to promote the principles of SUS, enabling the poorest municipalities in Brazil to comply with the same vaccination schedule as the richest ones³⁰.

It is highlighted that schools are important for health promotion actions, for creating healthy environments and for consolidating public policies. As an example, there is the Health at School Program (PSE), created in 2007, consolidated as an important strategy for health promotion and disease prevention, having a positive impact on quality of life, learning conditions, and building citizenship. School health promotion initiatives are effective and can be enhanced by the active participation of Family Health teams³¹.

The development of actions that encourage the engagement of adolescents in continuous disease prevention and health promotion activities, with dynamic and proactive approaches, enables them to form autonomy and makes them co-responsible for their health³².

Some of the limitations of the study were memory bias and the self-administered questionnaire, which can lead to incorrect interpretations of questions by students and underestimations or overestimations of indicators. However, PeNSE was based on the main international surveys, such as the Global School-Based Student Health Survey, the Health Behavior in School-Aged Children and the Youth Risk Behavior Surveillance System, whose questionnaire was validated with satisfactory results in the reproducibility and validity analyses. Also, the research investigated students regularly enrolled and attending Brazilian education networks, excluding adolescents who do not have this educational bond and who may be more vulnerable. However, PeNSE also covers schools located in indigenous areas and places with remote access, with an increase in the sample of the 2019 edition, which made it possible to disaggregate it by large regions, FUs and municipalities within capitals. Therefore, even with limitations, the research represents the reality of adolescents aged 13 to 17 who attend school.

The results showed that adolescents search for and use health services, but that health inequalities still persist, mainly due to socioeconomic issues. This reinforces the need for investment in public policies, in Primary Health Care and in the SUS, in addition to expanding the offer and improving the quality of services, especially

among adolescents, as they are in a phase of important psychobiological and social transformations, which makes them a strategic group for health promotion and prevention of diseases and injuries. Thus, adolescent care should encompass counseling, health promotion and disease prevention actions, considering their particularities, vulnerabilities, as well as the familial, social, economic and cultural context they are in.

REFERENCES

1. Arain M, Haque M, Johal L, Mathur P, Nel W, Rais A, et al. Maturation of the adolescent brain. *Neuropsychiatr Dis Treat* 2013; 9: 449-61. <https://doi.org/10.2147/NDT.S39776>
2. Ross DA, Hinton R, Melles-Brewer M, Engel D, Zeck W, Fagan L, et al. Adolescent well-being: a definition and conceptual framework. *J Adolesc Health* 2020; 67(4): 472-6. <https://doi.org/10.1016/j.jadohealth.2020.06.042>
3. Strong KL, Pedersen J, Johansson EW, Cao B, Diaz T, Guthold R, et al. Patterns and trends in causes of child and adolescent mortality 2000–2016: setting the scene for child health redesign. *BMJ Glob Health* 2021; 6(3): e004760. <http://doi.org/10.1136/bmjgh-2020-004760>
4. Silva RF, Engstrom EM. Atenção integral à saúde do adolescente pela Atenção Primária à Saúde no território brasileiro: uma revisão integrativa. *Interface (Botucatu)* 2020; 24(Supl 1): e190548. <https://doi.org/10.1590/Interface.190548>
5. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas e Estratégicas. Proteger e cuidar da saúde de adolescentes na atenção básica [Internet]. Brasília: Ministério da Saúde; 2017 [cited on Apr 27, 2022]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/proteger_cuidar_adolescentes_atencao_basica.pdf
6. Barros RP, Holanda PRCM, Sousa ADS, Apostolico MR. Necessidades em saúde dos adolescentes na perspectiva dos profissionais da Atenção Primária à Saúde. *Ciênc Saúde Colet* 2021; 26(2): 425-34. <https://doi.org/10.1590/1413-81232021262.40812020>
7. Travassos C, Martins M. Uma revisão sobre os conceitos de acesso e utilização de serviços de saúde. *Cad Saúde Pública* 2004; 20(suppl 2): S190-S198. <https://doi.org/10.1590/S0102-311X2004000800014>
8. Oliveira MM, Andrade SSCA, Campos MO, Malta DC. Fatores associados à procura de serviços de saúde entre escolares brasileiros: uma análise da Pesquisa Nacional de Saúde do Escolar (PeNSE), 2012. *Cad Saúde Pública* 2015; 31(8): 1603-14. <https://doi.org/10.1590/0102-311X00165214>
9. Oliveira MM, Andrade SSCA, Stopa SR, Malta DC. Procura por serviços ou profissionais de saúde entre adolescentes brasileiros, segundo a Pesquisa Nacional de Saúde do Escolar de 2015. *Rev Bras Epidemiol* 2018; 21(suppl 1): e180003.supl.1. <https://doi.org/10.1590/1980-549720180003.supl.1>
10. Instituto Brasileiro de Geografia e Estatística. Pesquisa nacional de saúde do escolar: 2019 [Internet]. Rio de Janeiro:

- IBGE; 2021 [cited on Apr 27, 2022]. Available from: <https://biblioteca.ibge.gov.br/visualizacao/livros/liv101852.pdf>
11. Nunes BP, Flores TR, Duro SMS, Saes MO, Tomasi E, Santiago AD, et al. Utilização dos serviços de saúde por adolescentes: estudo transversal de base populacional, Pelotas-RS, 2012. *Epidemiol Serv Saúde* 2015; 24(3): 411-20. <https://doi.org/10.5123/S1679-49742015000300007>
 12. Laski L, Expert Consultative Group for Every Woman Every Child on Adolescent Health. Realising the health and wellbeing of adolescents. *BMJ* 2015; h4119. <https://doi.org/10.1136/bmj.h4119>
 13. Sheehan P, Sweeny K, Rasmussen B, Wils A, Friedman HS, Mahon J, et al. Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents. *Lancet* 2017; 390(10104): 1792-806. [https://doi.org/10.1016/S0140-6736\(17\)30872-3](https://doi.org/10.1016/S0140-6736(17)30872-3)
 14. Levorato CD, Mello LM, Silva AS, Nunes AA. Fatores associados à procura por serviços de saúde numa perspectiva relacional de gênero. *Ciênc Saúde Colet* 2014; 19(4): 1263-74. <https://doi.org/10.1590/1413-81232014194.01242013>
 15. Szwarcwald CL, Stopa SR, Damacena GN, Almeida WS, Souza Júnior PRB, Vieira MLFP, et al. Changes in the pattern of health services use in Brazil between 2013 and 2019. *Ciênc Saúde Colet* 2021; 26(suppl 1): 2515-28. <https://doi.org/10.1590/1413-81232021266.1.43482020>
 16. Gomes R, Nascimento EF, Araújo FC. Por que os homens buscam menos os serviços de saúde do que as mulheres? As explicações de homens com baixa escolaridade e homens com ensino superior. *Cad Saúde Pública* 2007; 23(3): 565-74. <https://doi.org/10.1590/S0102-311X2007000300015>
 17. Pereira J, Klein C, Meyer DE. PNAISH: uma análise de sua dimensão educativa na perspectiva de gênero. *Saúde Soc* 2019; 28(2): 132-46. <https://doi.org/10.1590/S0104-12902019170836>
 18. Martins MMF, Aquino R, Pamponet ML, Pinto Junior EP, Amorim LDAF. Adolescent and youth access to primary health care services in a city in the state of Bahia, Brazil. *Cad Saúde Pública* 2019; 35(1): e00044718. <https://doi.org/10.1590/0102-311X00044718>
 19. Andrade MV, Noronha KVMS, Menezes RM, Souza MN, Reis CB, Martins DR, et al. Desigualdade socioeconômica no acesso aos serviços de saúde no Brasil: um estudo comparativo entre as regiões brasileiras em 1998 e 2008. *Econ Apl* 2013; 17(4): 623-45. <https://doi.org/10.1590/S1413-80502013000400005>
 20. Arruda NM, Maia AG, Alves LC. Inequality in access to health services between urban and rural areas in Brazil: a disaggregation of factors from 1998 to 2008. *Cad Saúde Pública* 2018; 34(6): e00213816. <https://doi.org/10.1590/0102-311X00213816>
 21. Instituto Brasileiro de Geografia e Estatística. Pesquisa nacional de saúde 2019: informações sobre domicílios, acesso e utilização dos serviços de saúde. Brasil, grandes regiões e unidades da federação [Internet]. Rio de Janeiro: IBGE; 2020 [cited on Apr 27, 2022]. Available from: <https://biblioteca.ibge.gov.br/visualizacao/livros/liv101748.pdf>
 22. Politi R. Desigualdade na utilização de serviços de saúde entre adultos: uma análise dos fatores de concentração da demanda. *Econ Apl* 2014; 18(1): 117-37. <https://doi.org/10.1590/1413-8050/ea379>
 23. Souza Júnior PRB, Szwarcwald CL, Damacena GN, Stopa SR, Vieira MLFP, Almeida WS de, et al. Health insurance coverage in Brazil: analyzing data from the National Health Survey, 2013 and 2019. *Cien Saude Colet* 2021; 26(suppl 1): 2529-41. <https://doi.org/10.1590/1413-81232021266.1.43532020>
 24. Giovanella L, Franco CM, Almeida PF. National Primary Health Care Policy: where are we headed to? *Cien Saude Colet* 2020; 25(4): 1475-82. <https://doi.org/10.1590/1413-81232020254.01842020>
 25. Fernandes ESF, Santos AM. Mismatches between professional education and care needs of the adolescents in Primary Health Care. *Interface (Botucatu)* 2020; 24: e190049. <https://doi.org/10.1590/Interface.190049>
 26. Giovanella L. Basic health care or primary health care? *Cad Saude Publica* 2018; 34(8): e00029818. <https://doi.org/10.1590/0102-311X00029818>
 27. Tasca R, Massuda A, Carvalho WM, Buchweitz C, Harzheim E. Recomendações para o fortalecimento da atenção primária à saúde no Brasil. *Rev Panam Salud Pública* 2020; 44: e4. <https://doi.org/10.26633/RPSP.2020.4>
 28. Silva AG, Teixeira RA, Prates EJS, Malta DC. Monitoramento e projeções das metas de fatores de risco e proteção para o enfrentamento das doenças crônicas não transmissíveis nas capitais brasileiras. *Ciênc Saúde Coletiva* 2021; 26(4): 1193-206. <https://doi.org/10.1590/1413-81232021264.42322020>
 29. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância Epidemiológica. Programa Nacional de Imunizações (PNI): 40 anos [Internet]. Brasília: Ministério da Saúde; 2013 [cited on Apr 27, 2022]. Available from: https://bvsmis.saude.gov.br/bvs/publicacoes/programa_nacional_imunizacoes_pni40.pdf
 30. Domingues CMAS, Maranhão AGK, Teixeira AM, Fantinato FFS, Domingues RAS. The Brazilian National Immunization Program: 46 years of achievements and challenges. *Cad Saúde Pública* 2020; 36(suppl 2): e00222919. <https://doi.org/10.1590/0102-311X00222919>
 31. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção básica. Saúde na escola [Internet]. Brasília: Ministério da Saúde; 2009 [cited on Apr 27, 2022]. Available from: https://bvsmis.saude.gov.br/bvs/publicacoes/cadernos_atencao_basica_24.pdf. Acesso em: 9 dez. 2021.
 32. Viegas SMF, Sampaio FC, Oliveira PP, Lanza FM, Oliveira VC, Santos WJ. Vaccination and adolescent knowledge: health education and disease prevention. *Cien Saude Colet* 2019; 24(2): 351-60. <https://doi.org/10.1590/1413-81232018242.30812016>

RESUMO

Objetivo: Analisar a procura e a utilização dos serviços de saúde por adolescentes brasileiros, segundo características sociodemográficas. **Métodos:** Estudo transversal com dados da Pesquisa Nacional de Saúde do Escolar de 2019. A amostra foi composta de 124.898 adolescentes de 13 a 17 anos. Foram calculadas as razões de prevalência bruta e ajustada (RPaj) por sexo, idade e dependência administrativa e seus intervalos de confiança de 95% (IC95%) das variáveis “procura por algum serviço ou profissional de saúde”, “procura por alguma Unidade Básica de Saúde” e “atendimento na Unidade Básica de Saúde”, utilizando a regressão de Poisson com variância robusta. **Resultados:** A procura por algum serviço de saúde foi relatada por 56,56% (IC95% 55,82–57,29) dos adolescentes, sendo menor entre o sexo masculino (RPaj: 0,95; IC95% 0,94–0,95); aqueles com cor da pele preta (RPaj: 0,95; IC95% 0,94–0,97), parda (RPaj: 0,97; IC95% 0,96–0,98), amarela e indígena (RPaj: 0,95; IC95% 0,94–0,97); estudantes de escolas públicas (RPaj: 0,90; IC95% 0,89–0,90) e residentes da zona rural (RPaj: 0,96; IC95% 0,94–0,98). A Unidade Básica de Saúde foi procurada por 74,08% (IC95% 73,21–74,94) dos adolescentes e foi mais frequente entre aqueles de cor da pele parda (RPaj: 1,06; IC95% 1,03–1,08), de escolas públicas (RPaj: 1,32; IC95% 1,29–1,35) e residentes da zona rural (RPaj: 1,05; IC95% 1,01–1,09). O principal motivo da procura pela Unidade Básica de Saúde foi a vacinação (27,93%; IC95% 27,07–28,81). **Conclusão:** Mais da metade dos adolescentes procurou algum serviço de saúde, mostrando elevada demanda dessa população. Contudo, ainda persistem as desigualdades, o que nos alerta sobre a importância do planejamento, do acolhimento e da qualidade da atenção prestada aos adolescentes. **Palavras-chave:** Saúde do adolescente. Acesso aos serviços de saúde. Sistema único de saúde. Promoção da saúde.

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