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Sexual behaviors and condom use in the Brazilian population: analysis of the National Health Survey, 2019

Comportamento sexual e uso de preservativos na população brasileira: análise da Pesquisa Nacional de Saúde, 2019

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ABSTRACT : ***Objective:*** The objective of this research was to describe the sexual behaviors and condom use in the Brazilian population. ***Methods:*** This is a cross-sectional, descriptive study, which used data from 88,531 individuals aged 18 years old or older, who answered the second edition of the National Health Survey carried out in 2019. Prevalence was estimated with the respective 95% confidence intervals for each sexual behavior indicator and condom use according to gender, age, race/skin color, educational level, and region of residence. ***Results:*** The majority of the Brazilian population has had sexual intercourse at some point in their lives (93.9%). Mean age of initiation was 17.3 years. Prevalence of consistent condom use was only 22.8%, being even lower among women (20.9%). Moreover, 59% of the population reported not having used a condom in the past 12 months, the main reason being trusting their partner (73.4%). The use of health services to obtain condoms was only 10.7%. It was observed that women, individuals with a higher age group, less education, and income had worse results in relation to the analyzed indicators, in addition to regional disparities. ***Conclusion:*** Low prevalence of condom use was observed in the Brazilian population. In addition, important socioeconomic and demographic disparities were observed, pointing out the need to revisit, strengthen and expand public policies in the sexual and reproductive health field in order to prevent risky sexual behaviors and promote condom use, including double protection.

Keywords: Condoms. Sexual behavior. Sexual and reproductive health. Sexually transmitted diseases. Disease prevention. Health surveys.

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RESUMO : ***Objetivo:*** O objetivo desta pesquisa foi descrever os comportamentos relacionados à atividade sexual e ao uso de preservativos na população brasileira. ***Métodos:*** Trata-se de estudo transversal, descritivo, que utilizou dados de 88.531 indivíduos com 18 anos ou mais que responderam à segunda edição da Pesquisa Nacional de Saúde realizada em 2019. Foram estimadas as prevalências, com os respectivos intervalos de 95% de confiança, para cada indicador relativo ao comportamento sexual e ao uso de preservativos de acordo com sexo, idade, raça/cor, nível de escolaridade e região de moradia. ***Resultados:*** A maioria da população brasileira já teve relação sexual alguma vez na vida (93,9%), e a idade média de iniciação foi de 17,3 anos. A prevalência do uso consistente de preservativos foi de apenas 22,8% e ainda menor entre as mulheres (20,9%). Ainda, 59% da população referiu não ter usado preservativo nenhuma vez nos últimos 12 meses, sendo o principal motivo do não uso confiar no parceiro (73,4%). O uso dos serviços de saúde para obter preservativos foi de apenas 10,7%. Observou-se que mulheres, indivíduos com faixa etária maior, com menor escolaridade e renda apresentaram piores resultados em relação aos indicadores analisados, além das disparidades regionais. ***Conclusão:*** Observou-se baixa prevalência do uso de preservativos na população brasileira, além de importantes disparidades socioeconômicas e demográficas, o que aponta a necessidade de revisitar, fortalecer e ampliar as políticas públicas no campo da saúde sexual e reprodutiva com vistas à prevenção de comportamentos sexuais de risco e à promoção abrangente do uso do preservativo, incluindo a dupla proteção.

Palavras-chave: Preservativos. Comportamento sexual. Saúde sexual e reprodutiva. Infecções sexualmente transmissíveis. Prevenção de doenças. Inquéritos epidemiológicos.

INTRODUCTION

Brazil has remaining challenges in the field of sexual and reproductive health, such as syphilis, the cesarean rate, prematurity, and neonatal mortality[1]. In addition, despite the increased access to contraception in the country[1-3], several studies have shown that unplanned pregnancy rates exceed 50%[4,5], and that it remains an obsolete contraceptive mix when compared to developed countries[2], revealing problems in quality of access and assistance in reproductive planning. Other important public health problems to be faced in this field are the increase[6] and maintenance[7] of teenage pregnancy rates.

Added to all this are the growing rates of sexually transmitted infections (STIs), which are increasingly occurring in the younger population, especially the human immunodeficiency virus — HIV/AIDS. Comparing AIDS detection rates between 2008 and 2018, there was an increase in young male populations between 15 and 19 years of age, which went from 3.7 to 6.0/100 thousand inhabitants; between 20 and 24 years from 18.4 to 35.8 /100 thousand inhabitants; and between 25 and 29 years from 41 to 50.9/100 thousand inhabitants[8]. Another example is the growing increase in syphilis detection rates in pregnant women and acquired syphilis[9,10], which can be a sentinel event for the high rates of disease circulation in the general population. The same has been observed for other diseases such as chlamydia and gonorrhea[10].

Population surveys about sexual and reproductive health in the country took place every decade and mainly monitored maternal and child health and also women's health from different perspectives. This trend was interrupted, and the last survey was carried out in 2006. Regarding epidemiological surveillance and monitoring of STIs, in addition to the Information System for Notifiable Diseases (*Sistema de Informação de Agravos de Notificação* – SINAN), specific surveys on sexual behavior were conducted in the country in 1998, 2005, 2008, and 2013, which included representative samples of the Brazilian population aged 15–65 years old[11].

In general, these studies[11] showed a low prevalence of condom use, in addition to a reduction in their use in stable relationships, socioeconomic inequalities, and gender inequalities, but there are few studies that cover the entire Brazilian population[11-14]. There is a greater number of studies in specific groups, such as adolescents, young people, women of reproductive age, individuals with HIV/AIDS, men who have sex with men, drug users, and sex workers[11,15], which limits the orientation of health policies to contemplate the promotion of condom use in the general population.

In 2013, as part of the monitoring and surveillance of chronic non-communicable conditions in the Brazilian population, the National Health Survey (*Pesquisa Nacional de Saúde* – PNS) addressed some specific questions about women's sexual and reproductive health. In an unprecedented way, it included in its new edition, in 2019, the specific objective of "estimating the prevalence of some communicable diseases and behaviors related to sexual activity and the use of condoms"[16].

Thus, the objective of this research was to describe behaviors related to sexual activity and condom use in the Brazilian population, according to socioeconomic and demographic characteristics.

METHODS

This is a cross-sectional, descriptive study that used data from the PNS 2019. The PNS sample was selected by clusters in three stages. In the first, the primary sampling units (PSU) were selected, in the second, the households, and finally, the residents aged 15 years old and older, all by simple random sampling. The minimum size defined for the sample was 108,525 households and data were collected from 94,114 households. Only individuals aged 18 years old or older answered the "Sexual Activity" questionnaire, totaling 88,531 adults[16].

In the present study, the information from "Module Y – Sexual Activity" of the questionnaire was analyzed, with the following indicators: having had sexual intercourse at some point in life; average age of sexual initiation; condom use in all sexual relations in the last 12 months; reason for not having used a condom in the last sexual intercourse; and use of the health service to obtain a condom in the last 12 months.

The socioeconomic and demographic variables used were: gender (male and female); age (18–29 years, 30–39 years, 40–59 years, and 60 years old or older); education level (no

education and incomplete elementary / middle school, complete middle school and incomplete high school, complete high school and incomplete higher education and complete higher education); race / skin color (white, black, and brown); household income per capita in minimum wages (no income up to ¼, ¼–½, ½–1, 1–2, 2–3, 3–4, and more than 5); and finally the housing regions (North, Northeast, Southeast, South, and Midwest). It is noteworthy that due to the small number of observations and high coefficient of variation, the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística* – IBGE) does not release data on yellow and indigenous races / skin colors separately, although they are contained in the total numbers.

For data analysis, prevalence and 95% confidence intervals (95%CI) were estimated for each indicator related to sexual behavior and condom use. These same estimates were made according to socioeconomic and demographic variables. Analyzes were performed using the Stata 14.0 statistical software, considering the effect of the sampling plan, non-response rates, and post-stratification weights.

The PNS was approved by the National Research Ethics Committee of the National Health Council under opinion No. 3.529.376 on August 23rd, 2019. Participation in the research was voluntary, the confidentiality of information was guaranteed, and all participants signed the informed consent[17].

RESULTS

Table 1 shows that 93.9% of the Brazilian population reported sexual intercourse at some point in their lives, with the highest prevalence among men (94.8%) and in the South region (95.3%). The analysis of this indicator according to gender showed that men from the North (94.4%) and Northeast (94.7%) regions had a higher prevalence than women (92.2 and 92.3%, respectively) (data not shown). It was observed that the prevalence of sexual intercourse at some point in life was lower among individuals aged 18–29 years (88.3%) (Table 1).

The average age of sexual initiation in the Brazilian population aged 18 years old or older was 17.3 years, and the average age at first sexual intercourse was lower among men (16.4 years) (Table 1), observing maintenance of this pattern for all regions (data not shown). Furthermore, it was observed that the average age of sexual initiation was higher in older age groups. Individuals from the North region had lower mean age at first sexual intercourse (16.4 years) (Table 1), both for men (15.7 years) and for women (17.0 years) (data not shown). The population in the Southeast region had the highest average age (17.6 years) (Table 1). Also in this region, women had a higher mean age at first sexual intercourse (18.5 years) compared to others (data not shown). It was observed that the higher the level of education (18.3 years) and income (18.1 years), the higher the average age at first sexual intercourse among Brazilians (Table 2). In addition, white people (17.7 years) also had a higher mean age of sexual initiation (Table 1).

Table 1. Prevalence and 95% confidence intervals of sexual behavior and condom use in the Brazilian adult population in the last 12 months, according to sociodemographic variables — National Health Survey, 2019.

Sociodemographic characteristics		Having had intercourse ever in life	Mean age of sexual initiation	Consistent condom use	Use of health services to obtain condoms
		% (95%CI)	Mean	% (95%CI)	% (C95%CI)
Gender	Male	94.8 (94.3–95.3)	16.4 (16.3–16.4)	24.4 (23.6–25.3)	13.2 (12.6–13.8)
	Female	93.0 (92.6–93.4)	18.1 (18.1–18.2)	20.9 (20.1–21.7)	8.5 (8.0–8.9)
Age in years	18–29	88.3 (87.3–89.2)	16.0 (16.0–16.1)	36.5 (35.0–38.0)	15.8 (14.8–16.8)
	30–39	96.9 (96.4–97.3)	16.8 (16.7–16.9)	21.7 (20.6–22.8)	13.7 (12.9–14.6)
	40–59	96.0 (95.4–96.5)	17.7 (17.6–17.7)	17.9 (17.1–18.8)	10.1 (9.5–10.7)
	60 or more	93.2 (92.6–3.7)	18.8 (18.7–18.9)	11.6 (10.5–12.7)	3.5 (3.1–3.9)
Color/ race	White	93.8 (93.3–94.3)	17.7 (17.6–17.8)	21.6 (20.6–22.5)	8.4 (7.8–8.9)
	Black	93.9 (93.1–94.7)	17.1 (17.0–17.3)	25.2 (23.4–27.1)	12.7 (11.6–13.9)
	Brown	93.9 (93.4–94.4)	17.0 (17.0–17.1)	23.2 (22.3–24.0)	12.4 (11.8–13.0)
Regions	North	93.3 (92.5–94.0)	16.4 (16.3–16.5)	28.0 (26.4–19.6)	14.1 (13.2–15.2)
	Northeast	93.4 (92.9–93.8)	17.3 (17.3–17.4)	21.8 (21.0–22.6)	11.4 (10.9–12.0)
	Southeast	93.7 (93.0–94.4)	17.6 (17.5–17.7)	23.3 (22.2–24.5)	10.2 (9.5–11.0)
	South	95.3 (94.7–95.8)	17.3 (17.2–17.5)	20.3 (19.1–21.5)	9.0 (8.2–9.8)
	Midwest	94.2 (93.3–94.9)	17.0 (16.9–17.0)	22.2 (20.8–23.6)	10.5 (9.6–11.5)
Total		93.3 (93.5–94.2)	17.3 (17.3–17.4)	22.8 (22.2–23.4)	10.7 (10.3–11.1)

Assessing the use of condoms in all sexual relations in the 12 months prior to the interview, the prevalence for the Brazilian population was 22.8% and higher among men (24.4%) than among women (20.9 %) (Table 1). This pattern was maintained among individuals from the North, Northeast, and Southeast regions (Figure 1A/ Supplement 1). Regarding the results by Federal Units (FU), only in Acre, Amapá, and Rio de Janeiro the prevalence was higher among women. Still in Figure 1A/ Supplement 1, the prevalence of condom use in all sexual relations ranged from 20.3% in the South region to 28% in the North region. Regarding the age group, there was a higher prevalence of use in the 18–29 age group (36.5%) and a lower prevalence in the more advanced age groups, with 11.6% in the population over 60 years of age. A lower prevalence was also observed among people with education up to complete middle school (17.2%) (Table 2), as well as among those who declared themselves white (21.6%) (Table 1).

Table 2. Prevalence and 95% confidence intervals of sexual behavior and condom use in the Brazilian adult population in the last 12 months, according to education and household income — National Health Survey, 2019.

Socioeconomic and sociodemographic characteristics		Having had intercourse ever in life	Mean age of sexual initiation	Consistent condom use	Use of health services to obtain condoms
		% (95%CI)	Mean	% (95%CI)	% (95%CI)
Education	Up to incomplete elementary/ middle school	93.7 (93.1–94.3)	17.3 (17.3–17.4)	17.2 (16.4–18.1)	9.5 (8.9–10.1)
	Middle school to incomplete high school	94.3 (93.5–95.0)	16.6 (16.5–16.8)	23.5 (22.1–25.1)	14.6 (13.5–15.8)
	High school to incomplete higher education	93.0 (92.4–93.6)	17.2 (17.1–17.3)	26.2 (25.2–27.3)	12.5 (11.8–13.2)
	Complete higher education	95.7 (95.1–96.1)	18.3 (18.2–18.4)	23.3 (21.8–24.8)	5.7 (5.1–6.4)
Per capita income in minimum wages	No income up to 1/4	93.1 (92.1–94.0)	16.5 (16.4–16.7)	23.6 (21.9–25.3)	16.7 (15.6–18.0)
	1/4–1/2	92.4 (91.5–93.2)	16.8 (16.6–16.9)	22.4 (21.0–24.0)	14.6 (13.5–15.8)
	1/2–1	92.9 (92.3–93.4)	17.2 (17.2–17.3)	22.6 (21.5–23.7)	11.5 (10.8–12.2)
	1–2	94.5 (93.8–95.1)	17.5 (17.4–17.6)	23.4 (22.2–24.6)	9.5 (8.8–10.3)
	2–3	95.7 (94.7–96.4)	17.7 (17.5–17.8)	20.8 (19.1–22.7)	7.2 (6.3–8.4)
	3–5	95.5 (94.3–96.4)	17.9 (17.7–18.1)	23.5 (21.3–25.9)	6.1 (5.1–7.3)
	More than 5	96.2 (95.2–97.0)	18.1 (17.9–18.3)	22.4 (20.1–24.8)	4.0 (3.1–5.2)
Total		93.3 (93.5–94.2)	17.3 (17.3–17.4)	22.8 (22.2–23.4)	10.7 (10.3–11.1)

Regarding condom use, most of the Brazilian population reported not having used it at all (59%) in their sexual relations in the last 12 months, with this prevalence being higher for women (60.5%) and lower for the age group aged 18–29 years (34.2%) (Table 3).

The main reason reported for not using a condom in the last sexual intercourse was trusting the partner (73.4%), with a higher prevalence among men (78.6%), followed by the use of another method to avoid pregnancy (12.3%), the most frequent answer among women (16.8%), and for not liking to use condoms (8.4%), with a higher prevalence among men (9.8%) (Table 4).

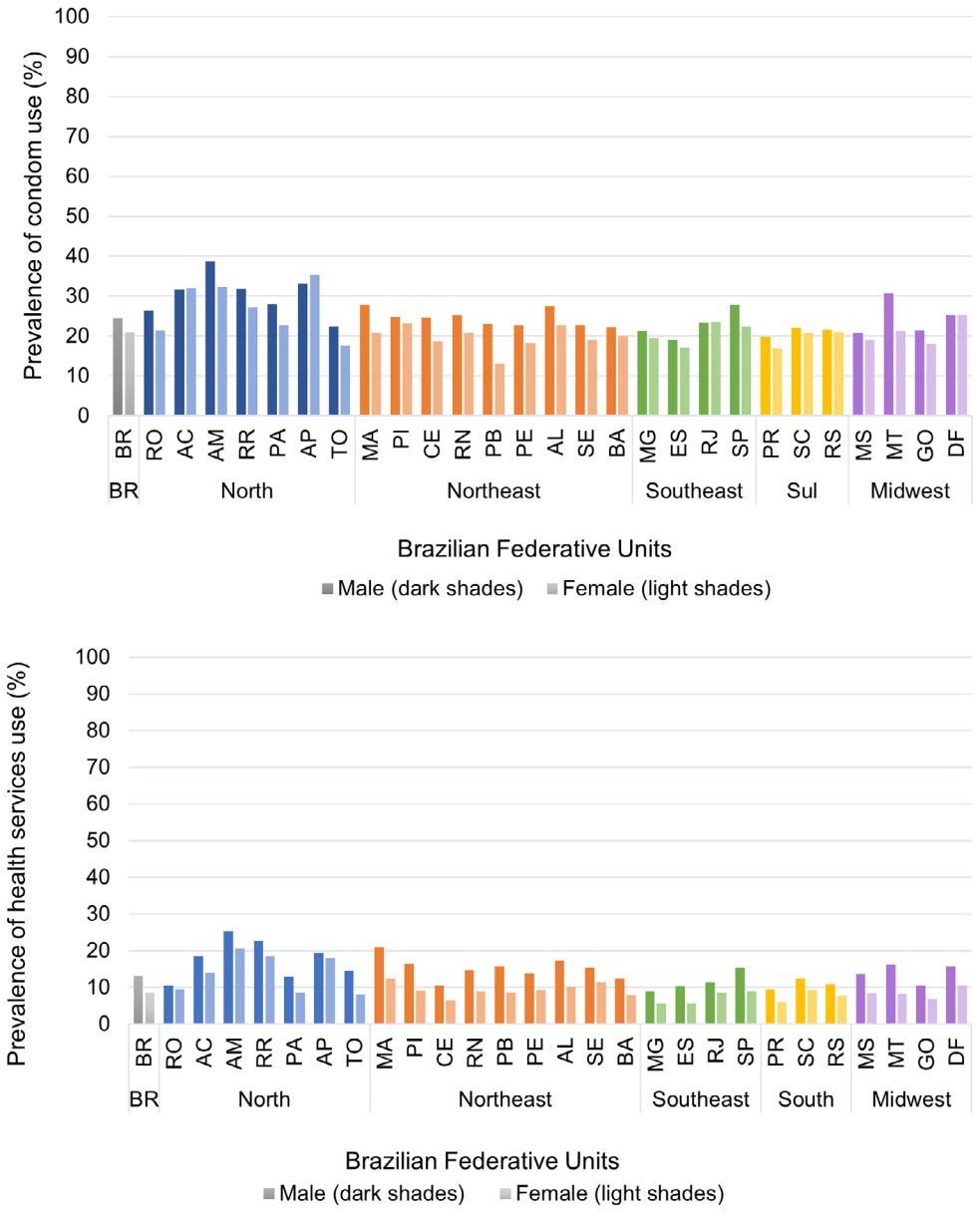

Figure 1. Prevalence of condom use by the adult Brazilian population in all sexual relations: (A) use of public health services to obtain condoms; (B) by Federal Unit and gender – PNS, 2019.

Only 10.7% of the population uses public health services to obtain condoms. This prevalence was higher among men (13.2%) (Table 1) and in the North (14.1%), a pattern observed in all FUs (Figure 1B / Supplement 1). It was observed that the population aged 18–39 (15.8%), with secondary education (elementary / middle school to incomplete higher education)

Table 3. Prevalence and 95% confidence interval of frequency of condom use in sexual intercourse in the last 12 months, by gender and age — National Health Survey, 2019.

Sociodemographic characteristics		Frequency of condom use in sexual intercourse in the last 12 months			
		Always	Sometimes	Never	Refused to answer
		% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)
Gender	Male	24.4 (23.6–25.3)	16.7 (16.0–17.4)	57.7 (56.8–58.6)	1.1 (0.9–1.3)
	Female	20.9 (20.1–21.7)	17.4 (16.6–18.3)	60.5 (59.5–61.5)	1.2 (1.0–1.4)
Age	18–29 years	36.5 (35.0–38.0)	28.2 (26.8–29.7)	34.2 (32.7–35.6)	1.1 (0.9–1.5)
	30–39 years	21.7 (20.6–22.8)	19.7 (18.6–20.8)	57.7 (56.3–59.2)	0.9 (0.7–1.1)
	40–59 years	17.9 (17.1–18.8)	11.6 (10.9–12.2)	69.2 (68.2–70.2)	1.3 (1.1–1.6)
	60 years or more	11.6 (10.5–12.7)	5.2 (4.5–6.0)	82.0 (80.7–83.4)	1.2 (0.8–1.7)
Total		22,8 (22,2–23,4)	17.1 (16.5–17.6)	59.0 (58.4–59.7)	1.1 (1.0–1.3)

Table 4. Prevalence and 95% confidence interval of reasons for not using a condom in the last sexual intercourse, by gender — National Health Survey, 2019.

Reason for not using a condom in the last sexual intercourse	Total	Gender	
		Male	Female
	% (95%CI)	% (95%CI)	% (95%CI)
Trusts the partner	73.4 (72.5–74.3)	78.6 (77.5–79.7)	68.0 (66.7–69.3)
Does not like to	8.4 (7.9–8.9)	9.8 (9.0–10.6)	7.0 (6.5–7.7)
The partner did not want to	1.2 (1.0–1.4)	0.4 (0.3–0.6)	2.0 (1.6–2.4)
Used another contraceptive method	12.3 (11.7–13.0)	8.0 (7.3–8.9)	16.8 (15.8–17.8)
Wants children	2.3 (2.0–2.5)	1.6 (1.4–2.0)	2.9 (2.5–3.3)
Other reasons*	2.4 (2.1–2.7)	1.5 (1.2–1.8)	3.3 (2.9–3.8)

*Did not have time, does not know, another reason and refused to answer.

(14.6%), black (12.7%), and with lower income (16, 7%), is the one that most uses the public health service to obtain condoms (Tables 1 and 2).

DISCUSSION

The results show that only one in five Brazilians used a condom in all sexual relations, while more than half of the population with a sexual life did not use a condom in any relation in the 12 months prior to the survey. The increasingly precocious sexual initiation is

also highlighted, as well as the fact that only one in ten Brazilians used public health services to purchase condoms, which may elucidate the need to revisit, strengthen, and expand policies of sexual and reproductive health in Brazil. In addition, important regional, gender, sociodemographic, and economic disparities were observed in relation to the analyzed indicators, which allowed us to identify which groups with greater social vulnerability are at greater risk of STIs and unplanned pregnancies.

It is known that the use of condoms plays a crucial role in reducing the incidence of STIs, HIV/AIDS, morbidity, mortality, and unintended pregnancies[18,19]. In addition, they are of low cost, easy to use and store, do not require prescriptions from professionals or direct provision of health services, and can be used by anyone[19]. In Brazil, in the 1980s, at the beginning of the HIV epidemic, condoms were only distributed on specific dates, such as Carnival and the "World Day to Fight Aids", or through research projects, but in 1994 their distribution became wider and systematic by the Unified Health System (*Sistema Único de Saúde* – SUS)[11], which facilitated the population's access to this resource.

A study that evaluated the trend of condom use in the Brazilian population between 1998 and 2005 showed an increase in condom use in the 12 months prior to the interview, reaching 28.1% in 2005 in the last sexual intercourse[12]. However, in 2008, the survey called "Survey on Knowledge, Attitudes, and Practices in the Brazilian Population" (*Pesquisa de Conhecimentos, Atitudes e Práticas na População Brasileira*) showed a prevalence of 25.5% of condom use in all sexual relations[13]. The same survey, in 2013, showed a prevalence of 23.5% of consistent condom use, with a reduction compared to previous research[12,14], corroborating the findings of the present study, which demonstrate the maintenance of this prevalence at low levels.

In this context, it is noteworthy that, although Brazil is internationally recognized as a model in the management of STIs, especially HIV/AIDS, high rates of infection have still been recorded[20]. Between 2008 and 2018, there was an increase of more than 62% in the AIDS detection rate among young people aged 15–24 years, and in 2018 the highest detection rate was 50.9 cases/100,000 inhabitants in young males, in the age group of 25–29 years[9]. The increased incidence of other STIs, such as chlamydia, gonorrhea, and syphilis, is also noteworthy[10]. A study that evaluated the trend of syphilis cases in the country between 2007 and 2017 showed a substantial increase in acquired syphilis (12.3 cases/100,000 to 81.4), syphilis in pregnant women (2.2 cases/1,000 live births to 16.9), and congenital syphilis (2.2 cases/thousand born children to 8.8), representing a crude growth rate of 561, 660, and 338%, respectively[21]. Therefore, this increase of STIs in the country may be a reflection of the low prevalence of condom use, as verified in this study.

Globally, consistent condom use rates range from 4 to 52.4% among young and sexually active individuals[22], and among women of reproductive age this prevalence was 51.2%, ranging from 2.7% in Nigeria to 89% in Greece[23]. Furthermore, a study that evaluated the impact of condom use in reducing unplanned pregnancies and STIs in 83 countries identified a difference between current and desired use of 10.9 billion condoms; if this demand were met by 2030, these countries could avoid 240 million disability-adjusted life years (DALYs)[24],

thus highlighting the long-term consequences for sexual and reproductive health, particularly for the younger population.

The reasons for inconsistent condom use are known to include: the idea that condoms reduce sexual pleasure[11,22,25]; personal perception of low risk of contracting STIs[11,22,25]; misconceptions about condom use[11,22,25]; lack of social support[22,25]; condom fatigue[11,22]; low negotiating power of use[22,25]; and stable partnerships[11,12,22,25]. In Brazil, the lower use of condoms by the Brazilian population, among these factors, could also be explained in part by the types of partnerships established throughout life, as studies have shown that people with stable partners are the ones who use condoms the least[12-14]. This fact corroborates the results of the present study, which, despite not evaluating the type of partnership, showed that older age groups had less use of condoms, and the rate of stable partnerships tends to grow with advancing age[26]. In addition, our findings point to trust in the partner as the main reason for not using condoms, which reinforces the influence of the type of partnership in the use of condoms, since many couples believe that monogamy guarantees the partner's fidelity and the reduction of STI risk[27].

Another result of the present study was the increasingly precocious sexual initiation in the Brazilian population, with a lower average age of male individuals, with lower income, less education, and living in the northern region of the country, which evidences important social inequalities and corroborates the findings of previous studies[28-30]. The earlier occurrence of sexual initiation in men can be explained by social pressure, as it is considered a proof of masculinity and a gender differential[28]. Several studies have pointed to low education as a risk factor for risky sexual behaviors and practices[10,12,31,32], which is possibly related to less access to information about the mechanisms of prevention and transmission of STIs. Additionally, studies have pointed to early sexual initiation as a predisposing factor to other risky sexual behaviors, such as multiple sexual partners and the practice of unprotected sex[28-30]. This increases the occurrence of STIs[20] and unplanned pregnancies, especially in adolescents[33], which contributes to the perpetuation of poverty cycles from one generation to the next[34].

Still regarding social vulnerabilities, it is highlighted that, in this study, individuals who lived in the North region had a higher prevalence of consistent use of condoms and an earlier mean age of sexual initiation. Previous studies have shown that, despite the higher prevalence of condom use in this region, a higher occurrence of casual partners was also observed: 74.1% of individuals had more than one casual partner, while 49.5% reported more than ten casual partners in the last year[13,14], which suggests a higher occurrence of risky sexual behaviors in this population. Also in relation to this finding, data from the PNS 2013 with women aged 18–49 years on the use of contraceptives showed that condoms were the most used method among women living in the North and Northeast, but when considering the use of double protection, these women were the ones who practiced it the least. This may be related to the ease of use and access to condoms in relation to other contraceptives and may be an indicator of social vulnerability[3] and corroborating the findings of this study on the greater use of public health services for acquiring condoms among the most

socioeconomically vulnerable population, such as residents of the North region, Blacks and Browns, with lower income and median education.

As for the lower use of condoms found in the female population, previous studies have also shown gender inequalities[12,13]. Although the male condom is the third most used contraceptive method by Brazilian women[3], it has a high rate of discontinuity and is mainly replaced by hormonal contraceptives[35], which suggests that the establishment of stable partnerships implies the adoption of other contraceptives and the abandonment of condoms. In the present study, the second most cited reason for not using condoms was the use of another method to prevent pregnancy, elucidating the lack of concern about the occurrence of STIs. In other words, the use of condoms would be more related to the prevention of an unplanned pregnancy, as shown by previous studies[3].

Therefore, the importance of the simultaneous use of condoms and another contraceptive method is highlighted, since the adoption of this measure provides greater protection against unplanned pregnancies, but mainly prevents STIs in a context of persistent challenges in coping with these diseases in the country. In Brazil, some studies have indicated a low prevalence (10–11%) of dual protection among women of reproductive age[3,36], which is in line with the worrying increase in STIs in recent years[9,10,21]. Another relevant fact is the reduction in condom use observed after the adoption of other contraceptives[32,35,37,38], thus reiterating the greater exposure to STIs.

Gender inequality in this context is based on the greater susceptibility of women to STIs due to biological disadvantage and the greater difficulty in negotiating with their partner about condom use[32], which is more aggravated among women in stable relationships, with low-income, low education, aged over 45 years old, and living in regions with greater socioeconomic disparities[32,39], corroborating the results of the present study.

Finally, these estimates point to the need for greater investments and the resumption of policies and programs in the field of sexual and reproductive health in the country, which has been a challenge, given the growing conservatism and the setbacks observed in this area, as already pointed out by previous studies[3,40-42], in addition to the freezing of spendings on education and health provided for by the proposed amendment to the Constitution — PEC 241/2016[43].

The ongoing need to strengthen the role of primary care in the field of sexual and reproductive health is also highlighted, in addition to implementing effective health promotion, education and communication policies and qualifying professionals in the area for a more comprehensive approach to sexual health[31]. Systematic review of interventions to promote condom use among adolescents and young adults were effective in changing attitudes, social norms, and beliefs in favor of condom use[19]. Another aspect that must be considered is the partnership between the areas of health and education, as the school can be strategic for health education actions and interventions that promote information on the mechanisms of prevention and transmission of STIs[39,44], especially for adolescents, who are starting their sexual life and whose behaviors adopted during this period can consolidate and affect their health over the years.

As limitations of the study, one can mention the lack of information on types of partnership and type of condoms, which may be included in future investigations, in addition to the exclusion of people under 18 years of age. On the other hand, other surveys and research show that the male condom is the most commonly used condom. In addition, it emphasizes the relevance of population-based surveys for monitoring the sexual behaviors and practices of the Brazilian population, which constitute a fundamental tool for planning strategic actions and policies for the prevention and control of STIs, as well as the reduction of inequities observed in the present study. Additionally, it emphasizes the need to standardize the indicators evaluated, which will allow for future comparability of data, in addition to monitoring the temporal evolution of these indicators.

This study pointed out the low prevalence of condom use in the Brazilian population. In addition, important socioeconomic and demographic disparities were observed, reinforcing the need to revisit, strengthen, and expand public policies in the field of sexual and reproductive health, with a view to preventing risky sexual behavior and the comprehensive promotion of condom use and double protection.

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