

## Knowledge, attitude and practice of school teenagers in relation to the use of male condoms

## Conhecimento, atitude e prática de adolescentes escolares em relação ao uso do preservativo masculino

Joyce Mazza Nunes Aragão<sup>1</sup> 

Hiara Rose Moreno Amaral<sup>2</sup> 

Francisco Willian Melo de Sousa<sup>3</sup> 

Eliany Nazaré Oliveira<sup>4</sup> 

Maristela Inês Osawa Vasconcelos<sup>5</sup> 

<sup>1</sup>Corresponding author. Universidade Estadual Vale do Acaraú (Sobral). Ceará, Brazil. joycemazza@hotmail.com

<sup>2-5</sup>Universidade Estadual Vale do Acaraú (Sobral). Ceará, Brazil. hiara\_amaral@hotmail.com, williancarire123@gmail.com, eliany@hotmail.com, miosawa@gmail.com

**ABSTRACT | OBJETIVO:** Evaluate the knowledge, attitudes, and practices of school adolescents concerning the male condom as a contraceptive method of the first choice for adolescents. **METHODOLOGY:** A study with a quantitative approach carried out with 143 adolescents from a state high school during October and November 2019. As a data collection instrument, the Knowledge, Attitude, and Practice (CAP) survey was applied to using the male condom. **RESULTS:** It was evidenced that 133 (93%) of the adolescents presented inadequate knowledge, 105 (73.4%) inadequate attitude and 130 (90.9%) inadequate practice regarding the use of the male condom. These outcomes are worrisome since sexual activity in adolescence is increasingly precocious, generating greater exposure to risks such as STI / HIV / AIDS and unwanted pregnancy, mainly when this practice is performed without use or with the inappropriate use of condoms. **CONCLUSION:** The weaknesses in the information obtained by the adolescents, reflected in their inadequate knowledge, followed by the inadequate attitude and practice regarding the use of the male condom. Thus, there is a need to enhance educational strategies to expand adolescents' knowledge about the use of male condoms, and consequently, develop a good practice of this contraceptive method.

**DESCRIPTORS:** Adolescent Health. Condoms. Health Knowledge. Attitudes and Practice in health. Sexual behavior.

**RESUMO | OBJETIVO:** Avaliar conhecimentos, atitudes e práticas de adolescentes escolares em relação ao preservativo masculino como método contraceptivo de primeira escolha para os adolescentes. **MÉTODO:** Estudo com abordagem quantitativa, realizado com 143 adolescentes de uma escola estadual de ensino médio, no período de outubro a novembro de 2019. Para a coleta de dados, aplicou-se o inquérito Conhecimento, Atitude e Prática (CAP) sobre o uso do preservativo masculino. **RESULTADOS:** Evidenciou-se que 133 (93%) dos adolescentes apresentaram conhecimento inadequado, 105 (73,4%) atitude inadequada e 130 (90,9%) prática inadequada a respeito do uso do preservativo masculino. Esses desfechos se mostram preocupantes, uma vez que a atividade sexual na adolescência está cada vez mais precoce, gerando, também, maior exposição a riscos, como IST/HIV/Aids e gravidez indesejada, principalmente quando esta prática é realizada sem uso ou com uso inadequado do preservativo. **CONCLUSÃO:** As fragilidades nas informações obtidas pelos adolescentes refletem o conhecimento inadequado pela quase totalidade deles, seguidas pela atitude e prática inadequadas quanto ao uso do preservativo masculino. Dessa forma, visualiza-se a necessidade de potencializar estratégias educativas, com intuito de ampliar o conhecimento de adolescentes acerca do uso do preservativo masculino e, conseqüentemente, desenvolver prática adequada desse método contraceptivo.

**DESCRITORES:** Saúde do Adolescente. Preservativos. Conhecimentos. Atitudes e Prática em Saúde. Comportamento sexual.

## Introduction

Adolescence is a phase that represents the transition between childhood and adulthood, in which biopsico-social changes mark it. In the meantime, adolescents are constantly changing and discovering themselves, whether biological, in family, social and sexual relationships<sup>1</sup>. According to the World Health Organization (WHO), this period is between 10 and 19 years old. According to the Child and Adolescent Statute (ECA) in Brazil, this stage is defined between 12 and 18 years old<sup>2</sup>.

Among the changes in this phase, there are those related to sexuality and the psychological and bodily transformations resulting from puberty<sup>3</sup>. Besides, during this period, adolescents are subject to exposure to harmful health behaviors, such as alcohol use, smoking, poor eating habits, early and unprotected sexual activity, thus triggering risks and becoming ill with physical and mental health, in addition to conflicts in the inter-family and social relationships<sup>1</sup>.

For adolescents, the school is a space of social and strategic commitment for dialogue and guidance regarding aspects related to knowledge and behavior change, as the young person is a good part of the time in this place<sup>4</sup>. In this perspective, in the school environment, aspects of a biological, emotional, and psychological nature often arise in adolescents. Thus, the school is an ideal place for building human relationships, clarifying curiosities and doubts, and, among these, concerns about the body can be highlighted<sup>5</sup>.

Teenage pregnancy is another public health problem, given the risks that the pregnancy process in this phase can trigger in the mother/child binomial and being associated with the early onset of sexual activity and the chances of further future pregnancies<sup>6</sup>. In this perspective, among the negative consequences of this event for the adolescent, the following stand out: changing roles and behavior; early development and growth of the body; interruption of the educational process; and complications during and postpartum.

As for the baby, the risks arising from premature delivery are emphasized<sup>7</sup>.

Thus, despite the consequences that pregnancy causes in adolescence, it is evident that this event is growing nationwide. A study points out that the pregnancy rate of this group in Brazil is high for Latin America. In 2015, for example, 18% were children of adolescent mothers<sup>8</sup>. Among the factors that can contribute to this, there is a lack of knowledge about contraceptive methods, socio-cultural aspects, and the association with alcohol consumption and cigarette use<sup>3</sup>.

In this sense, the orientation on sexuality is fundamental for the adolescent public because, in many cases, they cannot even identify the changes that occurred during puberty. Also, it may be associated with the inability to recognize signs and symptoms of transmission of any Sexually Transmitted Infection (STI). Failure to recognize symptoms associated with a healthy appearance can influence sexual habits without proper prevention, increasing the chances of STI spread<sup>9</sup>.

A study carried out with adolescent students from public schools in Cuiabá / MT, regarding the knowledge of contraceptive methods and their use, showed a lack of knowledge about the use of male and female condoms, oral contraceptives, and the morning after pill<sup>10</sup>. Another study carried out with Colombian adolescents on this theme revealed that the condom was the method most used by the participants (54.7%), knew the contraceptive methods (65.6%), and that the lack of knowledge and beliefs such as side effects, weight gain, and infertility are triggering factors for not using the methods<sup>11</sup>.

In this context, studies point to gaps in the knowledge of adolescents about sexual and reproductive health and access to reliable guidance/information on this subject<sup>10-12</sup>. Thus, these aspects justify this study's development, which aimed to evaluate school adolescents' knowledge, attitudes, and practices about the male condom as a contraceptive method of the first choice for adolescents.

## Method

A study with a quantitative approach was carried out with 143 adolescents from a state high school, in Sobral-CE, Brazil, during October and November 2019.

We used non-probabilistic sampling for convenience, which was selected according to the following inclusion criteria: being in the adolescence phase, aged 10 to 19 years old as recommended by WHO, being duly enrolled in the school as mentioned above, and attending the first year of high school, in the morning or afternoon shifts. The students in this school grade were selected because they concentrate adolescents in the intermediate phase, that is, in the age group of 15 to 17 years<sup>13</sup> and because it is usually in this period that the occurrence of the first sexual intercourse is concentrated<sup>14</sup>. Adolescents who did not accept to participate in the study were excluded.

An initial meeting was held with all students of the classes involved, when they were informed about the study's nature and objectives, with clear and appropriate language for understanding, to invite them to participate in the study. After accepting, participation in an Informed Consent Form (ICF), signed by the legal guardian, was followed by the Term of Assent, signed by the adolescents. Only adolescents over 18 years of age signed the informed consent form.

Before starting data collection, a schedule was drawn up, together with school coordinators and teachers, to carry out data collection at the most appropriate times for students. Thus, the questionnaire was applied in person, by nursing academics members of the study's research team, in the classrooms of the six classes, three in the morning shift and three in the afternoon shift, lasting 30 minutes.

To identify the adolescents' knowledge, attitudes, and practices about the male condom, the Knowledge, Attitude and Practice Survey (CAP) was used concerning the male condom<sup>15</sup>. This instrument consists of eight questions: 1) have you heard about condoms? Do you know what the condom is for? 2) Name at least three precautions necessary for the correct use of condoms.

3) In your opinion, when should a condom be used during vaginal, oral, and anal intercourse? 4) Do you use a condom in your sexual relations? 5) Explain the reasons and occasions for not using it. 6) How do you use condoms during sexual intercourse? 7) Have you ever impregnated or impregnated your partner unwantedly? 8) Have you ever been diagnosed with a Sexually Transmitted Infection (STI)?

Knowledge is considered adequate when the adolescent has heard about the male condom, knows that it is to prevent STIs / HIV in general and unwanted pregnancies, and knows how to name at least three precautions necessary to correct the method's use. For the attitude to be considered appropriate, the adolescent must mention that it is always necessary to use the male condom in all sexual practices. For the practice to be considered adequate, the adolescent must refer to using a male condom always and from the beginning to the end of the sexual practices performed; not having impregnated or impregnated the partner unwantedly; not having been diagnosed with STI<sup>15</sup>.

CAP surveys make it possible to identify what a specific population knows, thinks, and how it does, in the face of a problem, through questionnaires on different variables, enabling behavior, in order to use effective interventions in the future, being able to adapt to diverse contexts, aiming to enhance health promotion plans<sup>16</sup>.

The adolescents also filled out another questionnaire, prepared by the authors, which included multiple-choice questions and data related to the sociodemographic and sexual behavior characterization (sociodemographic and sexual behavior profile), as well as the dialogue with parents and teachers about sexual and reproductive health, in order to get to know the participants better, drawing a profile of them.

A descriptive analysis of the data was carried out, using the Excel software, organizing the results in tables, when the frequencies and percentages were pointed out, according to the variables: knowledge about sexual and reproductive health, attitude, and practice about the use of the male condom, adolescent sexual behavior, and CAP classification.

The research complied with Resolution 466/201 of the National Health Council, which involves research with human beings, and was approved by the Research Ethics Committee (CEP) of the Universidade Estadual Vale do Acaraú, according to an opinion no. 3,432,975 and Certificate of Presentation for Ethical Appreciation n. 16237219.2.0000.5053.

## Results

As for the sociodemographic data of the study participants, it was evident that all participants were in the age group of 15 to 19 years old, with a predominance of male 77 (53.8%), self-declared brown 89 (62.2%), single and without a steady partner 78 (54.5%) and that the head of the family had completed elementary school and / or incomplete high school 44 (30.77%).

Regarding family income, 83 (58.0%) did not know what the family income was. Among those who knew, 22 (15.4%) reported being less than a minimum wage, and 19 (13.3%) stated income equal to the minimum wage. Regarding religion, 87 (60.8%) professed the Catholic religion. The majority, 122 (85.3%), lived with their parents and claimed to have heterosexual sexual orientation 117 (81.8%).

The adolescents' knowledge about sexuality, STI / HIV, and condoms was also investigated, and the dialogues with parents, teachers, and friends about sexual and reproductive health. These results are shown in Table 1.

Regarding the issues most addressed by parents with adolescents regarding sexuality, 52 (22.5%) reported being about pregnancy, while the content most addressed by teachers 85 (24.1%) reported being about sexuality/sex. Most 134 (93.7%) reported having heard about condom use, and 108 (75.5%) about both types (male and female). Regarding the person with whom they most talked about condom use, 49 (21.4%) adolescents mentioned their friends. Only 13 (5.7%) said they talked about this topic with health professionals (Table 1).

Still, concerning knowledge about sexual and reproductive health, primarily related to the use of male condoms, it is clear that this dialogue is more present at school, as it was the place where 80 (28.2%) adolescents reported having had more critical information. The highest frequency of students, 77 (53.9%), mentioned that the condom served to prevent STI / HIV / AIDS and pregnancy, although 97 (67%) did not know the care they should have for its use (Table 1).

**Table 1.** Knowledge about sexuality, Sexually Transmitted Infections (STI / HIV) and condom use among adolescents at a state high school, Sobral-Ceará 2019 (n = 143)

Variables	N	%
<b>Theme addressed by parents</b>		
Don't talk about it	66	28,6
Pregnancy	52	22,5
Condom use	51	22,1
Sexuality / sex	34	14,7
STI / HIV	28	12,1
<b>Theme addressed by teachers</b>		
Don't talk about it	86	24,4
Sexuality / sex	85	24,1
STI / HIV	82	23,3
Condom use	66	18,8
Pregnancy	33	9,4
<b>Have heard about condoms</b>		
Yes	134	93,7
No	9	6,3
<b>Type of condom you have heard of</b>		
Both (female and male)	108	75,5
Only male	26	18,2
Only female	9	6,3
<b>Who do you talk to most about condom use?</b>		
Friends	49	21,4
Mother	40	17,4
I don't talk this to anyone	32	14,0
Boyfriend / spouse	29	12,7
Teachers	29	12,7
Brothers	18	7,8
Dad	16	7,0
Health professionals	13	5,7
Others	3	1,3
<b>Where did you get information about condom use?</b>		
School	80	28,2
Friends	55	19,4
Family	51	18,0
Health Center	31	10,9
TV	22	7,7
Social networks on the internet	18	6,3
Internet Sites	15	5,3
Others	8	2,8
Magazines	4	1,4
<b>What is a condom for?</b>		
To prevent STI / HIV / AIDS and pregnancy	77	53,8
Just to avoid pregnancy	29	20,3
Just to prevent STIs / HIV	18	12,6
Do not know	11	7,7
For other purposes	8	5,6
<b>What are the precautions mentioned for the use of condoms?</b>		
Do not know	97	67,8
Do not tear	26	18,2
Do not open with the tooth	15	10,5
Tie and play in the proper place	5	3,5

Source: elaborated by the authors, 2020.

Table 2 shows the data regarding the adolescents' attitude regarding the use of the male condom.

The use of condoms during oral sex was considered necessary by only 49 (34.3%) adolescents. It was found that 113 (79.0%) adolescents considered it necessary to use condoms during vaginal sex, and slightly less than half, 68 (47.5%), stated the need to use them during anal sex.

**Table 2.** Attitude of adolescents from a state high school in relation to the use of male condoms, Sobral-Ceará, 2019. (n = 143)

Variables	N	%
<b>Condom use in vaginal sex</b>		
It is necessary	113	79,0
Has no opinion	20	14,0
It's unnecessary	9	6,3
Did not answer	1	0,7
<b>Condom use in oral sex</b>		
It's unnecessary	53	37,0
It is necessary	49	34,3
Has no opinion	40	28,0
Did not answer	1	0,7
<b>Condom use in anal sex</b>		
It is necessary	68	47,5
It's unnecessary	39	27,3
Has no opinion	35	24,5
Did not answer	1	0,7

Source: elaborated by the authors, 2020.

Table 3 shows the sexual behavior of adolescents in the study, with an emphasis on the practice of using the male condom.

The age of first sexual intercourse ranged between 12 and 17 years, with the majority, 29 (20.3%), beginning sexual activity at 15 years of age. The first sexual intercourse of the adolescents was mentioned by 46 (30.1%) who happened to the boyfriend/girlfriend, having used the male condom in the first sexual intercourse by 38 (26.6%), who still had no children for 128 (89.5%) and who had no relationship with people of the same sex by 66 (46.1%) of the participants (Table 3).

**Table 3.** Sexual behavior of adolescents from a state high school. Sobral-Ceará, 2019. (n = 143)

Variables	N	%
<b>Age of first sexual intercourse</b>		
Did not start sex life	60	41,9
At 15 years old	29	20,3
At 14 years old	23	16,1
At 12 years old	10	7,0
At 13 years old	9	6,3
At 16 years old	8	5,6
At 17 years old	2	1,4
Did not answer	2	1,4
<b>The person with whom you had the first relationship</b>		
<b>Sex life hasn't started yet</b>		
Sex life hasn't started yet	60	39,2
Boyfriend	46	30,1
I do not want to answer	18	11,8
Person you stayed with	17	11,1
Husband or partner	12	7,8
<b>Which contraceptive method is currently used</b>		
Did not start sex life	60	41,9
Male condom	38	26,6
Female condom	37	25,9
Contraceptive pill	1	0,7
I.U.D.	5	3,5
Withdrawal	2	1,4
<b>Children</b>		
No	128	89,5
Yes	15	10,5
<b>Last sexual partner</b>		
Sex life not initiated	60	41,9
Boyfriend/Girlfriend	42	29,4
Casual / staying partner	23	16,1
Other	13	9,1
Spouse or regular partner	5	3,5
<b>Have had sexual intercourse with a person of the same sex</b>		
Yes	14	9,8
No	66	46,1
Had no sex with any sex	60	42
I don't wanna answer	3	2,1

Source: elaborated by the authors, 2020.

Table 4 shows the results regarding the practice of condom use by participating adolescents. It was found that 60 (41.9%) adolescents had not yet had their first sexual intercourse. Only 23 (16.1%) reported using condoms in all sexual relations. Among the reasons for not using the male condom, the study found that 27 (18.9%) adolescents placed trust in their partner as the main reason.

Regarding the way to use condoms, the most significant frequency was students who used condoms only at the end of sexual intercourse 39 (27.3%), and only 29 (20.3%) used condoms from the beginning to the end of the sexual intercourse. The fact of "having the foreplay" was the most frequent response to not using a condom since the beginning of sexual intercourse 37 (25.9%). Regarding condom use in the last five sexual relations, eight (5.6%) said they had always used it, while 35 (24.5%) reported never having used it (Table 4).

**Table 4.** Practices in relation to condom use by adolescents from a state high school., Sobral-Ceará, 2019. (n = 143)

Variables	N	%
<b>Use a condom during sexual intercourse</b>		
Sometimes	27	18,9
Did not start sex life	60	41,9
I didn't want to answer	5	3,5
Never	28	19,6
Ever	23	16,1
<b>Reasons for not using</b>		
Did not start sex life	60	41,9
Partner does not like	12	8,4
Trust in the partner	27	18,9
Use another contraceptive method	12	8,4
The partner is known or fixed	14	9,8
Other	18	12,6
<b>How do you use the condom?</b>		
Only at the end of sexual intercourse	39	27,3
Only at the end of sexual intercourse	60	42
Did not start sex life	29	20,3
From beginning to end of sexual intercourse	15	10,4
<b>Reasons for not using a condom since the beginning of sexual intercourse</b>		
Did not start sex life	60	41,9
Because there are foreplay	37	25,9
I do not feel comfortable	26	18,2
Because it is not necessary	16	11,2
Ashamed to buy or ask at the health center	4	2,8
<b>In the last five sexual intercourses, how often was the condom used?</b>		
Never	35	24,5
Often	16	11,2
Sometimes	12	8,4
Rarely	12	8,4
Ever	8	5,6

Source: elaborated by the authors, 2020.

Table 5 shows the classification of the knowledge, attitude and practice of the participating adolescents about the male condom, according to the pre-established CAP criteria. In view of the findings, it was evidenced that almost all adolescents in the study, 133 (93.0%), presented inadequate knowledge regarding the male condom, as well as regarding attitude and practice, 105 (73.4%) and 130 (90.9%) adolescents, respectively.

**Table 5.** Classification of knowledge, attitude and practice of adolescents from a state high school about the male condom. Sobral-Ceará, 2019. (n = 143)

Variables	N	%
<b>Knowledge</b>		
Inappropriate	133	93,0
Adequate	10	7,0
<b>Attitude</b>		
Inappropriate	105	73,4
Adequate	38	26,6
<b>Practice</b>		
Inappropriate	130	90,9
Adequate	13	9,1

Source: elaborated by the authors, 2020.

## Discussion

Based on the results exposed, corroborating this research, another study carried out with school adolescents in Fortaleza, Ceará, in 2014, showed that the average age among them was 16 years old, both in private and public schools, and that the majority was single and heterosexual, in addition to living with their parents<sup>17</sup>. In this way, the results contribute to a better understanding of the student's profile in the study and the planning of health education actions.

It is clear that the dialogue with parents on the theme of sexuality is still taboo, thus representing a concern, because, in the middle of the 21st century, society still bears the mark of extreme prudery from past generations, in which talking about sex can awakening structures of guilt, shame, being better silent than teaching, which is discussed in another study that aimed to change the norms and attitudes regarding communication about sexuality within families<sup>18</sup>.

In this context, many factors can aggravate the phase of adolescence, because it is a phase of the beginning of the sexual activity, adolescents become more vulnerable to risks, such as STI / AIDS or unwanted pregnancies, since many do not have the necessary knowledge in regarding the risks that are subject and, consequently, are not adequately prevented<sup>19</sup>.

In general, adolescents rarely attend health services because they feel young and healthy, which is in line with a study carried out with adolescents aged 11 to 16. When asked about the Family Health Strategy concept, though it was designated only for the treatment of diseases, which generates limitations in the search for services by this public since they also consider that this field of health care is relevant only for these purposes<sup>20</sup>.

Thus, it was also noted that there is a lack in relation to information on sexual reproductive health by teachers. Thus, it is necessary to go further, considering that the majority are attending school at this phase. Therefore, this is an important place where there may be guidance. In this context, schools and teachers are configured as great allies so that the barriers of silence, fear, and guilt revolving around the topic of sexuality can be broken<sup>19</sup>. Thus, educational activity at school should be implemented and promoted to contribute to safe sexual practice in the future.

The findings are worrisome, given that there are several reasons indicated as responses to not using condoms, and awareness of these causes is still a significant challenge. Thus, the partnership between the areas of education and health is essential to replace these ideas with adequate knowledge to contribute to safe sexual activity. This articulation is very useful to prevent, in a more specific way, problems evidenced in this phase of life that is so prone to risks<sup>19</sup>.

It is worth mentioning that 27.3% of the adolescents in this study did not find it necessary to use condoms for anal sex. The literature points out that one of the forms of contagion and risk of contracting HIV / AIDS is through anal sex, mainly due to the low rates of condom use during this relationship, and even more so by the unconscious practice of HIV-positive people, making a serum negative is receptive in an unprotected way<sup>21</sup>.

A study carried out in a State Public Education Network in the Western Region of Goiânia, in 2015, with 210 adolescents, pointed out that they are more prone to vulnerabilities since the beginning of sexual activity is immature, providing participation relationships of different partners<sup>22</sup>.

An Essay performed in Europe and North America, Global School-Based Student Health Survey - GSHS, by WHO, in 2010, demonstrated that the practice of sexuality is performed, mainly at 15 years old and pointed out that 26% of students had already had sex in this age group<sup>23</sup>, which can be compared to the present study, which presented an almost similar result since 29% of adolescents had their first sexual practice at that age.

It is alerted that pregnancy in adolescence is an indication of concern, as it is at this phase of life that the individual is going through several bodily changes, is the period in which the body is preparing itself for various transformations as a result of its development. Besides, in these situations, adolescents are removed from school due to the emergence of other responsibilities. Furthermore, in many cases, personal projects are interrupted, thus generating social consequences, adding health risk, since before 18 years old, pregnancy is at high risk due to the development itself<sup>24</sup>.

Thus, the instructions for the initiation of sexual practice should be focused on public health policies, as according to the Pan American Health Organization, policies aimed at adolescence are still not enough, despite having an important history in which concerns actions aimed at providing sexual health care to adolescents. In this context, the objective is that alternatives can be created to expand this care, in a comprehensive and universal way, through international or intermediate agreements, by the Brazilian Ministry of Health<sup>20</sup>.

Narrative review on the use of male condoms in Brazil, in different population groups, and factors associated with use observed that although there is much information available on the topic of sexuality in adolescence, there is still a gap between knowledge and practice on condom use<sup>25</sup>, which corroborates with the current study that observed high rates of adolescents with inadequate knowledge, attitude and practice regarding the use of male condoms.

The results of the study are worrisome, given that adolescents in this stage of life start sexual practice earlier and earlier, still in an insecure manner, due to the non-use or inappropriate use of the male condom, being subject to STIs / HIV / AIDS and unwanted pregnancy. Therefore, adequate knowledge about the use of male condoms is essential for an adequate sexual practice. However, knowledge, in isolation, is not a determining factor, considering that behavior involves many other factors, such as social and cultural ones.

Among the limitations of the study, the questionnaires applied in a single meeting stand out, with little time available for completion, given that, during the period of data collection, the students were on an intense journey of studies for school tests. Thus, it may have led the participants to read the questionnaire quickly and with less focus on the questions, which may have resulted in the results obtained. It should be noted that with more time available for application in each room, there would be more tranquility in the marking of items, in addition, the increase in the number of meetings would facilitate the division of parts of the questionnaire, making reading less massive to resolve the issues.

There is also a possible information bias, as they are issues that address sexuality and, consequently, involve taboos, myths, fears and shame among adolescents.

## Conclusion

The study provided an opportunity to identify the knowledge, attitude, and practice of adolescent students about using male condoms. Through the results obtained, it was noticed that fragility in the dialogue between adolescents and parents about sexual and reproductive health. This dialogue was more frequent at school, but still, it is necessary to expand this discussion.

The weaknesses in the information obtained regarding the studied theme reflect the inadequate knowledge by almost all adolescents, followed by the inadequate attitude and practice regarding using the male condom. The adolescents were unaware of the care for using condoms and did not use them properly and frequently, thus evidencing a factor of concern for public health.

Given the above, educational practices in sexual and reproductive health for adolescents must be reinforced, privileging places where adolescents are inserted, especially schools. This practice should include multi-professional teams, such as teachers, coordinators, and links with health professionals, especially in primary health care, since it is the closest to the community.

Nurses' role in promoting guidance to parents on sexual and reproductive health is highlighted so that they can gradually break the barriers of fear, silence, and shame in dealing with this issue with their children.

Thus, the importance of further studies on the theme of sexual and reproductive health in the school context is emphasized, as the environment is opportune for dialogue with the adolescent and for carrying out health actions. Given this, there is an urgent need to enhance educational strategies to expand the knowledge, attitude, and practice of this public concerning the use of male condoms.

## Authors 'contributions

Aragão JMN participated in the conception of the project, design, search and analysis of research data, interpretation of results, writing and final review of the scientific article. Amaral HRM participated in collecting and analyzing research data, interpreting results, and writing the article. Sousa FWM participated in the search and analysis of research data, interpretation of results, and the scientific article's writing. Vasconcelos MIO and Oliveira EN participated in interpreting results, writing, and reviewing the scientific article.

## Competing interests

No financial, legal, or political competing interests with third parties (government, commercial, private foundation, etc.) were disclosed for any aspect of the submitted work (including but not limited to grants, data monitoring board, study design, manuscript preparation, statistical analysis, etc.).

## References

1. Cavalcante FML, Sousa FWM, Oliveira IKM, Amaral HRM, Rosa BSC, Gomes JS, et al. University extension activities: a look at health promotion of teenager. *Saúde Redes* [Internet]. 2019;5(3):305-15. Available from: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1116471>
2. Lei 8.069, de 13 de julho de 1990 (Brazil). Dispõe sobre o Estatuto da Criança e do Adolescente e dá outras providências. *Estatuto da Criança e do adolescente* [Internet]. Brasília: Ministério da justiça. 1990. Available from: <https://legislacao.presidencia.gov.br/atos/?tipo=LEI&numero=8069&ano=1990&ato=461cXRq1keFpW-T13a>
3. Kerntopf MR, Lacerda JFE, Fonseca NH, Nascimento EP, Lemos IZC, Fernandes GP. Sexuality in adolescence: a critical literature review. *Rev Adolesc. Saúde* [Internet]. 2016;13(suppl.2):106-13. Available from: [http://adolescenciaesaude.com/detalhe\\_artigo.asp?id=590](http://adolescenciaesaude.com/detalhe_artigo.asp?id=590)
4. Aragão JMN, Gubert FA, Torres RAM, Silva ASR, Vieira NFC. The use of Facebook in health education: perceptions of adolescent students. *Rev Bras Enferm.* 2018;71(2):265-71. <https://doi.org/10.1590/0034-7167-2016-0604>
5. Moraes GM, Schimin ES. Os desafios da escola pública paranaense na perspectiva do professor de PDE [Internet]. Vol 1. Paraná: Governo do Estado; 2016. Available from: [http://www.diaadiaeducacao.pr.gov.br/portals/cadernospde/pdebusca/producoes\\_pde/2016/2016\\_artigo\\_cien\\_unicentro\\_gildomarcosmoraes.pdf](http://www.diaadiaeducacao.pr.gov.br/portals/cadernospde/pdebusca/producoes_pde/2016/2016_artigo_cien_unicentro_gildomarcosmoraes.pdf)
6. Araújo RLD, Rodrigues ESRC, Oliveira GG, Sousa MO. Pregnancy in adolescence: consequences for women focused. *Temas em saúde* [Internet]. 2016;16(2):567-87. Available from: <https://temasemsaude.com/wp-content/uploads/2016/08/16231.pdf>
7. Silva JMB, Ferreira JA, Enders BC, Meneses RMV. Pregnant adolescents' perceptions of their pregnancy. *Revista Baiana de Enfermagem* [Internet]. 2011;25(1):23-32. Available from: <https://portalseer.ufba.br/index.php/enfermagem/article/download/5234/4324>
8. Azevedo AEI, Eisenstein E, Bermudez BEBV, Fernandes EC, Oliveira HF, Hagel LD, et al. Guia Prático de Atualização: prevenção da gravidez na adolescência. *Adolesc. Saude* [Internet]. 2018;15(1):86-94. Available from: <https://cdn.publisher.gn1.link/adolescenciaesaude.com/pdf/v15s1a11.pdf>
9. Almeida RAAS, Corrêa RGCF, Rolim TP, Hora JM, Linard AG, Coutinho NPS, et al. Knowledge of adolescents regarding sexually transmitted infections and pregnancy. *Rev Bras Enferm.* 2017;70(5):1087-94. <http://dx.doi.org/10.1590/0034-7167-2016-0531>
10. Molina MCC, Stoppiglia PGS, Martins CBG, Alencastro LCS. School teenager knowledge on contraceptive methods. *O Mundo da Saúde* [Internet]. 2015;39(1):22-31. Available from: [http://bvsms.saude.gov.br/bvs/periodicos/mundo\\_saude\\_artigos/Conhecimento\\_adolescentes\\_ensino.pdf](http://bvsms.saude.gov.br/bvs/periodicos/mundo_saude_artigos/Conhecimento_adolescentes_ensino.pdf)
11. Panneflex PL, Salazar DPA, Munive MV. Conocimientos, creencias y prácticas de los adolescentes de la cultura Caribe en anticoncepción. *Rev Cuid.* 2016;7(1):1204-9. <http://dx.doi.org/10.15649/cuidarte.v7i1.243>
12. Vieira EL, Pessoa GRS, Vieira LL, Carvalho WRC, Firmo WCA. Uso e conhecimento sobre métodos contraceptivos de estudantes da rede de ensino pública e privada do município de Bacabal-MA. *Revista Científica do ITPAC* [Internet]. 2016;9(2):88-107. Available from: [https://assets.unitpac.com.br/arquivos/Revista/78/Artigo\\_10.pdf](https://assets.unitpac.com.br/arquivos/Revista/78/Artigo_10.pdf)
13. Ministério da Saúde (Brazil), Secretaria de Atenção em Saúde, Departamento de Ações Programáticas Estratégicas. Diretrizes nacionais para a atenção integral à saúde de adolescentes e jovens na promoção, proteção e recuperação da saúde. / Ministério da Saúde [Internet]. Brasília: Ministério da Saúde; 2010. p.132. Available from: [https://bvsms.saude.gov.br/bvs/publicacoes/diretrizes\\_nacionais\\_atencao\\_saude\\_adolescentes\\_jovens\\_promocao\\_saude.pdf](https://bvsms.saude.gov.br/bvs/publicacoes/diretrizes_nacionais_atencao_saude_adolescentes_jovens_promocao_saude.pdf)
14. World Health Organization. Nutrition in adolescence - issues and challenges for the health sector: issues in adolescent health and development [Internet]. Geneva: World Health Organization; 2005. Available from: <https://apps.who.int/iris/handle/10665/43342>

15. Nicolau AI. Conhecimento, Atitude e Prática de presidiárias quanto ao uso do preservativo masculino e feminino [dissertation] [Internet]. Fortaleza: Universidade Federal do Ceará; 2010. Available from: <http://www.repositorio.ufc.br/handle/riufc/1917>
16. Ministério da educação (Brazil). Instituto nacional de desenvolvimento da Educação. Manual aplicador do estudo CAP. Brasília: Ministério da Saúde; 2002
17. Gubert FA, Vieira NFC, Costa RLC, Malta EFGD, Fonseca IS, Brito LLMS, et al. Social, demographic and sexual profile of sexually active adolescent schoolgirls in Fortaleza-CE. *Adolesc Saude* [Internet]. 2016;13(suppl.2):41-50. Available from: <https://cdn.publisher.gn1.link/adolescenciaesaude.com/pdf/v13s2a06.pdf>
18. Frederico M, Arnaldo C, Michielsen K, Decat P. Adult and young women communication on sexuality: a pilot intervention in Maputo-Mozambique. *Reprod Health*. 2019;16(144):1-12. <https://doi.org/10.1186/s12978-019-0809-3>
19. Sasaki RSA, Leles CR, Malta DC, Sardinha LMV, Freire MCM. Prevalence of sexual intercourse and associated factors among adolescents attending schools in Goiânia in the state of Goiás, Brazil. *Ciênc. saúde coletiva*. 2015;20(1):95-104. <https://doi.org/10.1590/1413-81232014201.06332014>
20. Alves MJ, Albuquerque GA, Silva AS, Belém JM, Nunes JF, Leite MF, et al. Factors involved in adolescent students' adherence to the family health strategy. *SANARE* [Internet]. 2016;15(2):37-46. Available from: <https://sanare.emnuvens.com.br/sanare/article/view/1036/582>
21. Dourado I, MacCarthy S, Reddy M, Calazan G, Gruskin S. Revisiting the use of condoms in Brazil. *Rev. bras. epidemiol.*, 2015;18(suppl.1):63-88. <https://doi.org/10.1590/1809-4503201500050006>
22. Soares LR, Cabero FV, Souto TG, Coelho RFS, Lacerda LCM, Matão LMELM. Assessment of sexual behavior among young people and adolescents at government schools. *Adolesc. Saude* [Internet]. 2015;12(2):76-84. Available from: [http://adolescenciaesaude.com/detalhe\\_artigo.asp?id=504](http://adolescenciaesaude.com/detalhe_artigo.asp?id=504)
23. Currie C, Zanotti C, Morgan A, Curie D, Looze M, Roberts C, et al. (Eds.). Social determinants of health and well-being among young people: Health Behaviour in School-Aged Children (HBSC) study: international report from the 2009/2010 survey [Internet]. Copenhagen: World Health Organization; 2012. Available from: [www.euro.who.int/\\_data/assets/pdf\\_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf](http://www.euro.who.int/_data/assets/pdf_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf)
24. Santos RCAN, Silva RM, Queiroz MVO, Jorge HMF, Brilhante AVM. Realities and perspectives of adolescent mothers in their first pregnancy. *Rev. Bras. Enferm.* 2017;71(1):65-72. <https://doi.org/10.1590/0034-7167-2016-0444>
25. Hiltabiddle SJ. Adolescent condom use, the health belief model, and the prevention of sexually transmitted disease. *J Obstet Gynecol Neonatal Nurs*. 1996;25(1):61-6. <https://doi.org/10.1111/j.1552-6909.1996.tb02514.x>