Original Article

Condom use: the reality of adolescents and young adults from an urban settlement

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ABSTRACT

This study aimed to estimate the prevalence and factors associated with the use of male condoms in adolescents and young adults from urban settlement areas in a city of central-western Brazil. This is a cross-sectional investigation with 105 adolescents and young students aged 12 to 24 years, which used a structured questionnaire. Of the total number of interviewees, 61 (58.1%) had started their sexual life; of these, only 38.3% reported regular condom use. Education over six years (p=0.02), access to sexuality information with parents (p=0.05) and at school (p=0.04) were factors associated with condom use. The results confirm the importance of investing in health policies that invest in working together among healthcare professionals, families and educational institutions, in order to minimize the vulnerability to Sexually Transmitted Infections.

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INTRODUCTION

Reaching adolescence is marked by intense physical, psychic and personal changes, in which individuals consolidate values and concepts based on cultural, family, spiritual and the media influences and, above all, social issues[1]. It is a phase of human development with a constant search for autonomy, through personal self-determination, in which they build their social and gender identity[1-2].

It is also characterized by the onset of sexual life due to the body's development, followed by the discoveries of human sexuality, and it can be a period of vulnerability for diseases exposure, since adolescents

and young adults in general consider themselves in full health and intact youth, thus adopting unsafe sexual behaviors[1-3].

Although there is still a wide disparity between conceptions about the age group of adolescence and youth, considering the socio-historical, economic, cultural and relational construction, this period of transition between childhood and adulthood is marked by behaviors and attitudes that potentialize their vulnerabilities. Thus, regardless of the age group, this population group has experienced a process of social invisibility that places them on the margins of public health policies[3].

Individuals' vulnerability is related to an interdependent plane of determination of individual, social and programmatic character, which integrate values, beliefs, desires, knowledge and behaviors (individual scope); life contexts and moral values (social scope); education, culture and health (programmatic scope), which will interfere with the exposure and/or prevention of diseases, such as Sexually Transmitted Infections (STIs), thus becoming the target of prevention and control campaigns for STIs by different governmental organizations[4]. In terms of prevention, male condoms are recognized as the most effective barrier method for STIs, as well as for unplanned pregnancies; however, it is known that their use among the young population is still unsatisfactory[5-6].

Therefore, studying condom use is important, particularly among adolescents and young adults in settlement areas since this is an emerging group with vulnerability to health problems, especially those related to human sexuality, and there are still few studies on the theme, with the few being available for individuals with informal urban settlement[7-8]. In addition, the knowledge of the reality that guides these individuals favors the development of actions and specific health policy capable of acting on their needs, providing prevention against STIs and unplanned pregnancy, with visibility and equity in relation to the young population's health, in their diverse social contexts.

Based on these arguments, this study aimed to estimate the prevalence and factors associated with the regular use of male condoms among adolescents and young students from settlement areas.

MATERIAL AND METHODS

This is a cross-sectional, analytical study with 105 adolescents and young students aged 12 to 24 years, of the 192 enrolled in a single Educational Institution and living in formal urban settlement in the periphery of a city in the Brazilian Midwest.

This settlement was designed to serve families who lived in informal settlements, being deprived of paving, sewage network, public security, and leisure areas. The settlement has only one Educational Institution.

As inclusion criterion, adolescents or young adults between 12 and 24 years participated in the study, to meet the established conceptions about the age group of adolescence and youth[3], resident in the settlement under study and enrolled and attending the educational institution of the settlement. Thus, 54.7% of the total number of students enrolled in the Educational Institution was eligible for the study.

Data were collected from August to November 2013 using questionnaires containing open and closed questions. All the adolescents and young adults were invited to participate in the study in their educational institution and a new meeting together with the parents and/or responsible for the minors was scheduled. The data collection took place in the Basic Health Unit (BHU) of the region and in the school to which the adolescents were enrolled. The interview occurred in a reserved area in both places, by researchers and previously trained research assistants, who previously oriented the participants regarding the seriousness and anonymity of the answers.

The interview addressed questions about sociodemographic characteristics: sex, age, education, civil status, time in the settlement, family income, religion and factors for condom adherence: first sexual intercourse, tattoo, piercing, illicit drug use and alcoholic beverage, access to information about sexuality with parents, at school and in health services and type of assistance at BHU.

The regular use of the male condom in sexual relations was the outcome variable, and the condom use in any and all sexual relations, whether with fixed partner or not, was considered regular.

The data were analyzed using software. For the continuous variables, means and standard deviation were calculated. In order to verify the associations between the outcome and the other variables, a univariate analysis was performed, obtaining the odds ratio and the respective confidence intervals (95% CI). The χ^2 and Fisher exact tests were used to test the differences between the proportions. Values of $p < 0.05$ were statistically significant.

The Research Ethics Committee of the Federal University of Góias evaluated and approved the project (n. 365/11). Before starting the collection, the responsible for the participant under 18 years of age signed the Free and Clarified Consent Term (FCCT) or the participant signed (over 18 years of age).

RESULTS

Sociodemographic profile

The participants were 105 adolescents and young students from an urban settlement. As for sex, 58.1% were male and 41.9% female. The mean age was 16.2 (SD±3.32; Min.12; Max. 24), with a predominance of adolescents (12-18 years; 73.3%).

The mean of years of education was 7.76 (SD± 1.75; Min.: 3; Max.: 12) and time in the settlement was 2.73 (SD±0.94; Min.:1, Max.: 5). In relation to family income, 81.0% of the participants had income of up to three minimum wages.

Twenty (19.0%) individuals reported not having any religion. Of the practitioners, 56.2% declared themselves Protestant.

Condom use

Of the total number of participants, 60 (40.6%) had already started sex life. Regarding the male

condom use in sexual intercourse, 38.3% reported using it in all sexual relations (regular use) and 61.7% reported the inconsistent use or non-adherence to the protection method.

Table 1 presents the factors associated with condom use in univariate analysis. Thus, regular condom use in sexual intercourse was associated with over six years of education (OR: 9.3; 95% CI: 1.1-77.9; p=0.02), access to information about sexuality at the school (OR: 1.9; 95% CI: 1.1-3.6; p=0.04) and with parents (OR: 1.9; 95% CI: 1.0-3.5, p=0.05). In addition, not having a tattoo (OR: 3.9; 95% CI: 0.8-19.7; p=0.08) remained marginally associated with condom use.

Table 1: Factors associated with the regular use of the male condom in 60 adolescents and young students from an urban settlement in Goiânia, GO, Brazil, 2013.

Variable	Regular condom use		*Odds ratio* (95% CI)†	p§
	Yes/Total	(%)		
Sex				
Female	8/23	34.8	1.0	
Male	15/37	40.5	1.3 (0.4-3.8)	0.70
Age (years)				
12-18	14/34	41.2	1.0	
19-24	9/26	34.6	0.8 (0.3-2.2)	0.60
Civil status				
Married	2/7	28.6	1.0	
Single/separated	21/53	39.6	1.6 (0.3-9.3)	0.50
Education (years)				
≤ 6	1/12	8.3	1.0	
> 6	22/48	45.8	9.3 (1.1-77.9)	0.02
Tattoo				
Yes	2/12	16.7	1.0	
No	21/48	43.8	3.9 (0.8-19.7)	0.08
Piercing				
Yes	14/36	38.9	1.0	
No	9/24	37.5	0.9 (0.3-2.7)	0.90
Illicit drug use				
Yes	5/19	26.3	1.0	
No	18/41	43.9	2.2 (0.7-7.2)	0.20
Illicit drug use				
Yes	8/25	32.0	1.0	
No	15/35	42.9	1.4 (0.7-2.6)	0.50
Access to sexuality information with parents				
No	11/38	28.9	1.0	
Yes	12/22	54.5	1.9 (1.0-3.5)	0.05
Access to information about sexuality in school				
No	13/43	30.2	1.0	
Yes	10/17	58.8	1.9 (1.1-3.6)	0.04
Access to information on sexuality in the BHU‡				
No	6/20	30.0	1.0	
Yes	17/40	42.5	1.4 (0.7-3.0)	0.30

† 95% Confidence interval; § χ^2 or *Fisher Exact*; ‡Basic Health Unit.

Access to the Basic Health Unit (BHU)

Only 38 participants (36.2%) reported having attended the settlement BHU in the last six months. Table 2 shows the most frequent reasons.

Table 2. Services used at the BHU by adolescents and young students from an urban settlement in Goiânia, GO, Brazil, 2013.

Service*	N	%
Emergencies	26	24.8
Medical consultations	18	17.1
Vaccines	11	10.5
Dental Consultations	5	4.8
To obtain condoms	2	1.9
To obtain contraceptives	1	1.0
Others	4	4.0

* Multiple choice variables (N=38); BHU: Basic Health Unit.

DISCUSSION

Health care in adolescence and youth, phases of the life cycle with analogue sexual and reproductive characteristics[6], has been a recurring theme in the production of knowledge, with a view to finding solutions that minimize the vulnerability of these individuals. However, there are still few studies in areas of formal urban settlement[7-8], especially in relation to behaviors aimed at human sexuality and the use of male condoms.

Studies show that individuals with early first sexual intercourse are exposed to risks related to unprotected sexual activity, which may result in an increased risk of sexually transmitted infection, early pregnancy, obstetric complications, anxiety, interrupted family processes, school dropout, among others[9-10].

Among the adolescents and young adults participating in this research, 40.6% had already started sexual life. According to data presented in the National School Health Survey (PeNSE), 28.7% of the individuals reported active sexual life[10]. Moreover, a study the World Health Organization (WHO) conducted in Europe and North America found that 26.0% of students up to 15 years of age had already begun sexual life[11].

These indices show that sexual initiation of the young population has occurred early, particularly when it comes to individuals from urban settlement areas, which in turn is an alert to immaturity, as well as the difficulty of this population to adopt safe sexual behaviors. Thus, it ratifies the vulnerability of students in settlements and the need for preventive strategies of awareness and co-responsibility regarding the regular condom use, thus minimizing the acquisition and dissemination of STIs[7].

The barrier method represents the main strategy for the prevention of pregnancy and STIs; it is a method that if well used does not jeopardize sexual intercourse, is cost-effective, practical and widely discussed, encouraged and distributed free of charge by several Brazilian units. However, non-adherence to regular condom use continues to be a major vulnerability factor for young people globally[11-12].

National studies show differences with the data found in the urban settlement, in which only 38.3% of the participants reported using condoms in all relationships. According to PeNSE (2012), 75.3% of adolescents used condoms[10]. A study conducted in 20 European countries found an overall trend of increasing condom use in the last relation, reaching 80%[13]. In this study, in relation to biological sex, male students (40.5%) stood out when they stated that they use condoms, against 34.8% female, in agreement with other studies[14-

16).

According to the United Nations on HIV/AIDS (UNAIDS)[17], social and cultural conceptions of gender relations can often restrict adolescents' access to basic information and knowledge, making them passive in sexual intercourse or adopting behaviors/attitudes which increase the risk of these young women in the acquisition and dissemination of STIs.

Sex asymmetry and gender conception in relationships among adolescents is perceived in the negotiation, when women do not require condom use for fear of losing and/or impairing the affective ties with their partner, thus causing the relationship to end. Thus, it is up to the social actors in hebiatry to define strategies in which gender relations are decisive from the empowerment of women and the sensitization of men[16,18].

The absence of tattoos was marginal (p=0.08) as a factor associated with the use of condoms among the investigated individuals. Although studies on the subject are still incipient, this practice may denote young adults the prospect of experimentation and liberation, which in turn may indicate a risk attitude towards sexuality situations[2,5].

Almost half of the studied population reported abusive use of licit and illicit drugs, placing this group in a situation of greater vulnerability, thus requiring interventions aimed at the prevention and control of alcohol and other drugs in the settlements.

Studies have shown that individuals who use alcohol and other drugs for entertainment, pleasure, or as a means of "escape from reality" may facilitate exposure to various risk behaviors, especially in casual and often unprotected sexual intercourse[5,19], evidencing the great association between the risk behavior pattern for sexual and reproductive health in adolescence.

In this research, significantly, access to information about sexuality through the parents made the adolescents and young adults more aware of the risks and adherents to the regular condom use (OR: 1.9; 95% CI: 1.0-3.5; p=0.05). In fact, communication is the pillar of family support and a great protective factor, providing a good self-perception of health status by the young population[11]. However, it is essential that family groups not only report on the condom use, but also on the development and experience of safe sexuality, addressing violence, unwanted pregnancies, sexual orientation and STIs [20-21].

Likewise, access to this information at school was favorable to the individual's awareness of male condom use (58.8%) (OR: 1.9; 95% CI: 1.1-3.6 p=0.04). Although significant, these data could be even more significant if the educational institution had the School Health and Prevention Program (SPE, in Portuguese).

PeNSE detected that 89.1% of the students received information about STIs and Aids at the school, but it is not the reality of the study population[16]. An investigation carried out in the same settlement to identify the teachers' perception about sexual education found it difficult to address this issue at the school due to the lack of knowledge during the training, technical competence and support of family members; only 4.76% of the investigated teachers carried out some activity together with the parents[22].

Schools are an important space for intervention on sexual education, being the second place of greater

access to inputs, followed by health services. Of the Brazilian schools, 63% already work on STIs and AIDS and about 50,000 participate in the SPE[6], helping to communicate with adolescents and young adults, as it triggers initiatives to health promotion, enhancing access and schools partnership with the Health Unit[9,22]. However, when the educational institution is in settlement areas, the SPE index decreases considerably[22], and the settlement institution still does not have the Health in School Program (PSE, in Portuguese) in its Pedagogical Political Project, as established in the National Curricular Parameters.

With these results, we understand that access to information by both parents and school is an indicator of STIs protection. Thus, sexuality must be handled transversally in educational institutions and continuously in the family environment, always in partnership with health services[23].

In this study, access to information at the BHU was insignificant; however, it is a protective factor for condom use. Only 1.9% of the participants sought the unit to pick up condoms, evidencing the service fragility and the relevant awareness urgency of attitude change by the settlement health team. A study with adolescents identified that 83% of the participants never sought a health service to obtain clarification on sexuality, not even to obtain condom[21].

We observed that these persons seek health care in the BHU only in situations of extreme need, not worrying about primary care, that is, prevention. It is a worrying fact that requires investments so that facts that demonstrate inefficiency of the local health service and lack of knowledge about the correct condom use, such as condom rupture, which occurred in 54% of the participants no longer occur (data not shown). Therefore, we ratified that non-coverage of Basic Health Care (BHC) programs in many settlements and the dependence of urban concentration centers expose these adolescents and young adults to the risk of harmful behaviors and the acquisition of health problems[24].

It is essential that adolescents, young adults and those involved in their monitoring know and practice legislation on sexual and reproductive rights and, above all, that health education be an instrument that goes beyond the walls of the school, encompassing social facilities in the settlement. It should be emphasized that these rights aim at guaranteeing the experience of sexuality in a more oriented and free of concepts pre-established by moral, religious, social and cultural standards.

Finally, we believe that the nurse, as an educator, can holistically contribute to the empowerment of adolescents and young adults in the implementation of preventive measures and, consequently, in the accomplishment of actions that make it possible to reduce the vulnerability of these individuals to STIs. We hope this study contributes to the production of knowledge, in order to provide information for the technical-scientific improvement of professionals, to discuss issues related to sexuality and condom adherence to the settled individuals.

The study has some limitations; despite all the care, biases are possible due to data collection, since it was based on verbal report, and the prevalence may be under or overestimated. In addition, there are inherent limitations to cross-sectional studies, since they do not allow for the establishment of cause and effect relationships. The shortage of studies that portray condom use in individuals in formal urban

settlement may have compromised the discussion, since the few studies were conducted in informal and/or rural settlements[8,25].

FINAL REMARKS

The adolescents and young adults living in a settlement were vulnerable, with low adherence to male condoms, multiple behaviors/attitudes of risk and very low demand for services of prevention and health promotion. More than six years of education, access to information about sexuality with parents and at school were statistically associated with condom use, ratifying the relevance of these social facilities in maintaining the health of this social group.

Formal urban settlement areas require investments in public policies that invest in working together among healthcare professionals, families and educational institutions to raise the awareness more effectively of these individuals regarding their vulnerability to STIs and other issues related to human sexuality. However, it is imperative to carry out further studies in formal settlements populations, both urban and rural, since due to the current social, political and economic context it is an emerging group.

Finally, BHU healthcare professionals, particularly nurses, play an important role in the link between adolescents, families and schools. Through the nursing consultation in hebiatrics, in the Health in School Program, it seems possible to provide a bond of mutual trust to awaken in the young population adherence to protective behaviors and a better quality of life.

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