

Attitudes of university students towards the use of condoms in sexual practices in Santiago de Cali, Colombia (2020)

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Abstract

Objective: To determine the attitudes of university students in the Early Childhood Education program of a university institution in the city of Cali regarding the use of condoms in sexual practices. **Methodology:** Descriptive cross-sectional study, with a quantitative approach and non-experimental design. The sample consisted of 102 students randomly selected by convenience sampling; 98% of the participants were women between the ages of 17 and 51. **Results:** Participants indicated that the condom provides the same sensation of pleasure and, in addition, protects against sexually transmitted infections and unwanted pregnancy, expressed by 35.3% (n=36) of respondents. Regarding condom use with their steady partner, 37.3% (n=38) said they never used condoms; however, when asked about condom use with casual partners, 67.6% (n=69) said they always used condoms. Concerning condom use at first sexual intercourse, 37.3% (n=38) reported not using condoms; among these, 21-year-old women were more likely to report not using condoms with 15.8% (n=6). **Conclusions:** Young women's attitudes toward condom use may be influenced



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by several factors, including lack of adequate information, which may lead to negative attitudes, and traditions and cultural norms, which may affect the perception and acceptance of condom use. Life experiences, including personal trauma, may also have a significant impact on their attitudes toward condom use.

Keywords: public health; disease; transmission; health promotion; sexual health; condoms

Actitudes de estudiantes universitarios frente al uso del preservativo en prácticas sexuales en Santiago de Cali, Colombia (2020)

Resumen

Objetivo: identificar la actitud de estudiantes universitarios del programa Pedagogía en Educación Infantil de una institución universitaria de la ciudad de Cali frente al uso del preservativo o condón en las prácticas sexuales. **Metodología:** estudio descriptivo de corte transversal, con enfoque cuantitativo y diseño no experimental. La muestra estuvo conformada por 102 estudiantes, seleccionados aleatoriamente mediante muestreo por conveniencia; el 98 % de la muestra fueron mujeres con edades comprendidas entre los 17 y 51 años. **Resultados:** los participantes señalaron que el condón ofrece la misma sensación de placer y, además, protege contra infecciones de transmisión sexual y embarazos no deseados, expresado por el 35,3 % (n=36) de las encuestadas. En relación con el uso del condón con su pareja estable, el 37,3 % (n=38) indicó que nunca lo utiliza. Sin embargo, ante la pregunta sobre el uso del condón con parejas ocasionales, el 67,6 % (n=69) respondió que siempre lo utiliza. En cuanto al uso del condón en la primera relación sexual, el 37,3 % (n=38) manifestó no haber usado preservativos; entre estos, las mujeres de 21 años refirieron con mayor frecuencia no haberlo utilizado, con el 15,8 % (n=6). **Conclusión:** la actitud de mujeres jóvenes frente al uso del condón puede estar influenciada por varios factores, como falta de información adecuada, que puede generar actitudes negativas, y tradiciones y normas culturales, que pueden afectar la percepción y aceptación del uso del preservativo. Asimismo, las experiencias de vida, incluidos traumas personales, pueden tener un impacto significativo en su actitud hacia el uso del condón.

Palabras clave: salud pública; enfermedades; transmisión; promoción de la salud; salud sexual; preservativos



Atitudes de estudantes universitários em relação ao uso do preservativo nas práticas sexuais em Santiago de Cali, Colômbia (2020)

Resumo

Objetivo: determinar as atitudes de estudantes universitários do programa de Educação Infantil de uma instituição universitária da cidade de Cali em relação ao uso do preservativo nas práticas sexuais. **Metodologia:** estudo transversal descritivo, com abordagem quantitativa e delineamento não experimental. A amostra foi composta por 102 estudantes selecionados aleatoriamente por amostragem de conveniência; 98% dos participantes eram mulheres entre 17 e 51 anos. **Resultados:** os participantes indicaram que o preservativo proporciona a mesma sensação de prazer e, além disso, protege contra infecções sexualmente transmissíveis e gravidez indesejada, expressado por 35,3% (n=36) dos entrevistados. Em relação ao uso do preservativo com o parceiro fixo, 37,3% (n=38) disseram nunca usar preservativo; no entanto, quando questionados sobre a sua utilização com parceiros casuais, 67,6% (n=69) disseram que sempre usá-lo. Com respeito ao uso de preservativo na primeira relação sexual, 37,3% (n=38) relataram não usá-lo; entre estas, as mulheres de 21 anos foram mais propensas a relatar não usar preservativo com 15,8% (n=6). **Conclusões:** as atitudes das mulheres jovens em relação ao uso do preservativo podem ser influenciadas por vários fatores, incluindo a falta de informação adequada, o que pode levar a atitudes negativas, e tradições e normas culturais, que podem afetar a percepção e aceitação do uso do preservativo. Experiências de vida, incluindo traumas pessoais, também podem ter um impacto significativo em suas atitudes em relação ao uso do preservativo.

Palavras-chave: saúde pública; doença; transmissão; promoção da saúde; saúde sexual; preservativos

Introduction

Studies have shown that condoms reduce the sexual transmission of diseases such as HIV, gonorrhea, syphilis, and others, thereby limiting the spread of infection (Uribe et al., 2012). The increase in sexually transmitted diseases worldwide has highlighted the need for condom use. Scientific advances in the prevention of infections such as HIV are undeniable (Gómez et al., 2018); among the most common are biomedical interventions that provide oral pre-exposure prophylaxis, improvements in antiretroviral treatments, or the large-scale implementation of HIV screening tests (López and Morales, 2021); however, the preventive measure of condom use remains the cornerstone in the prevention of sexually transmitted diseases (Uribe et al., 2012).

According to the World Health Organization (WHO, 2023), HIV remains one of the world's most serious public health problems, claiming 40.4 million lives, mostly in low- and middle-income countries. Recent advances in access to antiretroviral treatment have enabled HIV-positive people to live longer and in better health. According to WHO (2023), of all people living with HIV

today, 86% (73-98%) know and are aware of their status, 76% (65-89%) are receiving antiretroviral treatment and 71% (60-83%) have achieved viral suppression. In this sense, the best barrier to prevent HIV transmission remains the condom.

Coll et al. (1994, as cited in [Del Castillo et al., 2012](#)) point out that attitudes are used colloquially to express the feelings or thoughts that a person has about things or people that he or she likes or dislikes. These attitudes are often reflected in the way one speaks, acts, and behaves toward others. According to Ajzen and Fishbein (1980, as cited in [Del Castillo et al., 2012](#)), an attitude represents a favorable or unfavorable feeling in the direction of an object, person, or stimulus and reflects a person's position toward an object, action, or event.

Attitudes are learned and form part of the individual's relationship with the objects of reality; they are dynamic and modifiable, since they depend to a great extent on intrinsic and extrinsic situations that allow individuals to adjust their behavioral patterns; they can have a direction or orientation toward objects, which can be favorable (acceptance), unfavorable (rejection), or neutral (indifference) ([Del Castillo et al., 2012](#)).

Attitudes can be described by two basic qualities: the direction and intensity of the feeling. The first refers to the emotional orientation toward an object or person; it is positive when one feels attraction and negative when one feels rejection. Intensity, on the other hand, measures the strength of these feelings and indicates the degree of response, which can be positive, moderately positive, or negative. Together, these two components make up the affective component of attitude, reflecting how individuals relate emotionally to their environment ([Del Castillo et al., 2012](#)).

The concept of risky sexual behavior is itself quite broad and has been defined and operationalized in a variety of ways. Despite this theoretical variability, [Forcada et al. \(2013\)](#) identify certain factors associated with the practice of sexual activity without barrier methods, the most common of which is the condom. These factors include alcohol or drug

use and promiscuity, which is characterized by having multiple sexual partners. When these behaviors are repeated and protective methods are not used, it can be said that the individual is involved in risky sexual activities.

For [Rodríguez and Becerra \(2022\)](#), risky sexual behavior is defined as any behavior that increases the likelihood of negative outcomes associated with sexual activity. These behaviors include unprotected sex or sex without contraception, sex work or contact with sex workers, sex under the influence of substances, having multiple sexual partners, casual sex, and relationships with people who have sexually transmitted infections (STIs). Early initiation of sexual relations, sexual infidelity, drug and alcohol use during sexual activities, and lack of use of protection and contraception are also considered risky sexual practices. These behaviors have negative consequences for both the physical and emotional health of the individuals involved.

[Poulson et al. \(2008\)](#) demonstrated the existence of risky sexual behavior among adolescents and young adults; they took as a sample, students from a university in the United States, which was not probabilistic. They used a questionnaire as an instrument for collecting information, with the purpose of knowing how often they had sexual relations and used drugs and/or alcohol under these conditions. The questionnaire showed that about seven out of ten respondents (73%) had regular sexual activity, and half of this percentage did not regularly use condoms.

In this context, it is important to understand condom use from a female perspective. In this regard, the study conducted by [Clue App and KI-CURT \(2018\)](#) reports that one in five women decides to use condoms during sexual intercourse; three out of four mention that the decision is made as a couple. Therefore, women play an active and decisive role when it comes to the decision to use condoms and the positive attitudes that can be obtained.

It is important to note that women play a key role in deciding whether to use the female condom; their positive attitudes are directed towards the advantages of using the method,

such as its high resistance to breakage, while their negative attitudes point to problems related to its placement and aesthetics (Lameiras et al., 2008).

Risk behaviors and the direction of attitudes, favorable or unfavorable, go hand in hand with the Theory of Reasoned Action (TRA), which is based on the idea that people make decisions based on how they value the outcomes of their behavior and what they hope to achieve by doing it. The intention to perform or not to perform a behavior is the result of a balance between what the person believes he or she should do (attitudes) and the perception of what others believe the person should do (subjective norm) (Ajzen & Fishbein, 1977).

Therefore, the objective of this research was to identify the attitudes of university students of the Early Childhood Education program of a university institution in the city of Cali, Colombia, regarding the use of condoms in sexual practices.

Methodology

Descriptive cross-sectional study with a non-experimental quantitative approach. To assess the variable 'Attitude towards condom use', the version of the Condom Use Attitude Scale adapted for the Mexican population was used (Fishbein et al., 2003; Robles & Díaz, 2011; Del Castillo et al., 2012). The instrument includes two attitude scales with six items each: with a regular partner and with an occasional partner (Eraso-Angulo et al., 2024; González & Pereira, 2023; Muñoz et al., 2024; Suárez et al., 2024).

Population and sample

Sampling was carried out by convenience (Chavez et al., 2024), and the sample size was estimated using the Epidat program version 4.1, which yielded a required sample size of 102 students (Mendoza et al., 2024).

The study was conducted in a university institution in the city of Cali, with female students enrolled in the Early Childhood Education program in the 2020-2021 academic period. Those who did not want to participate,

those who did not sign the informed consent, those who could not provide objective data due to their personal, professional or political position, and those who considered themselves heterosexual were excluded.

Data Collection Techniques and Instruments

First, permission to use the instrument was obtained from the directors of the institutions. Once the sample was selected, the participants were informed of the purpose of the study, that the data would be used for academic purposes only, and that their participation would be anonymous and voluntary. All signed the informed consent form.

Regarding the reliability of the instrument of attitudes towards condom use with regular partners, a Cronbach's alpha of 0.86 was found, and for the instrument of attitudes towards occasional partners, the coefficient was 0.87. These results indicate good internal consistency for both instruments. The response format was Likert-type with the values 1 (*Never*), 2 (*Almost never*), 3 (*Half the time*), 4 (*Most of the time*) and 5 (*In each and every one of my sexual relations*), and with a four-block structure, as follows:

- 1) In the first block, six questions of general information and socio-demographic variables (age, socio-economic stratum, among others) were adapted.
- 2) In the second block, six adapted questions were asked about behavioral attitudes, such as age of sexual initiation and general information about sexuality and condom use. The ability to say no to sexual relations under different circumstances was assessed.
- 3) The third block of the questionnaire consisted of questions about knowledge of condoms and recognition of sexually transmitted infections. These questions allowed an approach at the psychosocial level, attitudes, risky sexual behavior, prevention, and situational variables. There were ten questions in total.

- 4) In the fourth block, the questions were general information about how to get a condom, marriage, and fidelity, with eight questions in total.

The full questionnaire consisted of 30 questions. It should be noted that the tables presented in this paper summarize the most interesting questions. The data obtained were tabulated, organized, and stored using the Microsoft Excel program (Spindola et al., 2022), version 16.5, and the EpiInfo 7 program. Content validity was analyzed using absolute frequency measures. For criterion validity, descriptive statistics were used through measures of central tendency and dispersion to explore the variation of the data, and inferential statistics through the independent samples t-test to identify differences (Manjarres-Posada, et al., 2021), with a value of $p < .04$, in the trend of the dimensions of intention and condom use between participants who reported having a stable partner, versus those who had occasional partners.

Results

A total of 102 data were analyzed, with a mean age of 24 years and a standard deviation of 1.2; the youngest participant was 17 years, the oldest was 51 years, and the median was 22 years. The first quartile was 20 years and the third quartile, 27 years. 98% of participants were female.

Socioeconomic variable

Regarding sexual orientation, 92% ($n=94$) are heterosexual. About marital status, 56.9% ($n=58$) of the sample remain single; 42.1% ($n=43$) are cohabiting or in a free union. Regarding employment status, 46.1% ($n=47$) are unemployed, looking for work, and 70.6% ($n=72$) receive less than the current minimum monthly wage (see Table 1).

Table 1

Socioeconomic variable

	Variable	Frequency	Percentage
Sexual orientation	Heterosexual	94	92
	Bisexual	5	5
	Homosexual	2	2
	Asexual	1	1
Marital status	Single	58	56,9
	Free union	43	42,1
	Separate	1	1
Employment status	Unemployed, looking for work	47	46,1
	Employee, full-time job	17	16,6
	Unemployed, not looking for work	13	12,8
	Employee, with a part-time job	25	24,5
Monthly income	Less than one minimum wage	72	70,6
	A current monthly minimum wage	19	18,6
	More than one minimum wage	11	10,8

58.8% (n=60) reported using a condom the first time they had sex. 85.3% (n=87) informed having sex in the last 12 months, of which 70.6% (n=72) said having only one sexual partner. When asked about condom use with their regular partner, 37.3% (n=38) said they never used condoms, and when asked about condom use with casual partners, 67.6% (n=69) said they always used condoms (see Table 2).

Table 2

Sexuality and condom use

Variable		Frequency	Percentage
Used a condom the first time he/she had sex	Yes	60	58,8
	No	38	37,3
	Doesn't know	4	3,9
Sexual activity in the past 12 months	Yes	87	85,3
	No	15	14,7
How many partners have you had in the past year?	0	7	6,9
	1	72	70,6
	2	18	17,5
	3	2	2
	4	2	2
	5	1	1
Used a condom with his/her last regular partner	Always	25	24,5
	Occasionally	39	38,2
	Never	38	37,3
Used a condom with his/her last casual partner	Always	69	67,6
	Occasionally	18	17,6
	Never	15	14,7

When asked about the purpose of condoms, 94.1% (n=96) said that they are used to prevent sexually transmitted infections and unwanted pregnancies. 73.5% (n=75) of the respondents said that they do not lose sensitivity when using a condom and 92.2% (n=94) said that they do not lose their erection when using a condom. 70.6% (n=72) recognized all the sexually transmitted infections listed in the data collection instrument. 97% (n=99) agreed that not using a condom is very risky and 71.1% (n=73) agreed that a person who does not dare to tell his partner to use a condom during sexual relations is more likely to contract a sexually transmitted infection (see Table 3).

Table 3

Condom knowledge and STI awareness

	Variable	Frequency	Percentage
What is a condom for?	Control sexually transmitted infections	5	4,9
	Preventing pregnancy	1	1
	All of the above	96	94,1
Will you lose sensitivity if you use a condom?	Yes	27	26,5
	No	75	73,5
Will you lose an erection if you use a condom?	Yes	8	7,8
	No	94	92,2
Which of the following is considered an STD?	HIV, AIDS	13	12,7
	HPV, Papillomavirus	7	6,9
	Genital herpes	6	5,9
	Syphilis	4	3,9
	All of the above	72	70,6
Is there any risk in using a condom during sex?	A lot	99	97
	Little	3	3
Who do you think is more likely to get sexually transmitted infections?	A sex worker who always uses a condom with her clients	4	3,9
	A homosexual man who always uses a condom during sexual relations	2	2
	A person who does not dare to tell his partner to use a condom during sexual relations	73	71,6
	Doesn't know	23	22,5

When asked if they would use a condom even if their partner were using another birth control method, 69.6% (n=71) said yes. According to respondents' perceptions, 35.3% (n=36) expressed that using a condom provides the same sensation of pleasure and protects against contracting sexually transmitted infections and unwanted pregnancy. When asked on what occasions they used a condom, 50% (n=71) said they did not (see Table 4).

Table 4

Condom awareness and means of obtaining them

	Variable	Frequency	Percentage
You use a condom even if your partner were using another birth control method	Yes	71	69,6
	No	31	30,4
Condom awareness during sexual activity	Protects against sexually transmitted diseases and unwanted pregnancy	35	34,3
	It is the same sensation of pleasure	36	35,3
	It is less advantageous because the same pleasure is not felt	2	2
	It is less advantageous because it does not provide the same pleasure, but it protects against infections and unwanted pregnancies	16	15,7
	It is much less advantageous because it produces dissatisfaction	4	3,9
	It is the same sensation of pleasure	5	4,9
When do you use a condom?	Vaginal sex	71	50
	Anal sex	22	15,5
	Uses it before ejaculation	12	8,4
	Does not use it	30	21,1
	Oral sex	7	5
How do you get a condom?	Pharmacy	67	65,6
	EPS Care Center	12	11,8
	Private clinic	2	2
	Supermarket or store	9	8,8
	Hospitals, health centers government	6	5
	Other location	7	6,8
Do you have a budget for condoms?	Yes	70	68,6
	No	32	31,4

Regarding the perception of condoms and the means of obtaining them, 65.6% (n=67) said that they obtain them in drugstores and 68.6% (n=70) have the budget to buy condoms. About possible reasons for not using a condom, 51.1% (n=73) said that they have a stable partner and 60.8% (n=62) said that if they were married they would use a condom (see Table 5).

Table 5

Condom use

	Variable	Frequency	Percentage
Possible reason you don't use condoms	Has a stable partner	73	51,1
	Because he/she uses a different method	35	25
	My partner doesn't like to use it	11	7,8
	My partner is a lesbian	2	1,5
	Difficulty in achieving it	2	1,5
	It's not comfortable in the relationship	9	6,4
	Another reason	8	5,7
Would you use a condom if you were married?	Yes	62	60,8
	No	40	39,2

Discussion

The results of this study show that 58.5% of respondents used a condom in their first sexual relationship. This result should be analyzed with caution since there is still a lack of awareness about the use of this protective barrier. According to the [Ministry of Health of Mexico \(2021\)](#), the condom remains the most effective method to prevent sexually transmitted infections (STIs) and unplanned pregnancies; therefore, its constant use is promoted so that people can fully exercise their sexual life from a perspective of rights and inclusion.

However, the results of this study are in synergy with the study conducted by [Camacho and Pabón \(2014\)](#), in which 51.2% used a condom in their first sexual relationship. Nevertheless, there is a need for health promotion campaigns to raise awareness among the population about the importance of condom use.

Regarding the first sexual experience, in the study by [Uribe et al. \(2017\)](#), less than 50% of women and men did not use a condom. This behavior may be a predisposing factor to inconsistent use in future sexual practices.

In terms of age, women aged 21 were the most likely to report not using a condom during their first sexual relationship, with a percentage of 15.8% (n=6). This result is similar to that found in the study by [Lameiras et al. \(2008\)](#), who found that aspects such as age and greater sexual activity were associated with lower frequency of condom use.

Another interesting point is that although the vast majority of women (35.3%, n=36) say that condoms give them the same feeling of pleasure and also protect them against sexually transmitted infections and unwanted pregnancy, the percentage of respondents who use condoms with their steady partner is significantly lower (24.5%) (n=25).

Regarding the reasons for not using a condom, 51.1% said that they did not use a condom because they had a stable partner. This result is similar to the percentages found by [Lameiras et al. \(2008\)](#), where young people recognize the role of the condom, but the proportion of use is relatively low.

Concerning condom use with casual partners, 67.6% (n=69) reported that they always used condoms. At this point, there is a significant difference in condom use in stable relationships

($p=0.002$). These percentages are similar to the results of the work of [Uribe et al. \(2012\)](#), in the correlation of condom use with stable partners and with casual partners. There is a belief that condom use is only necessary with casual partners, while it is not imperative in stable relationships.

Considering the gender mandates and sexual roles imposed by society, it can be said that women have gained fundamental spaces that allow them to make decisions regarding their sexual and reproductive rights ([Bonaccorsi & Reybet, 2008](#)). However, this is different from what was stated by [Uribe et al. \(2017\)](#), who showed that men, unlike women, tend to use condoms more frequently; the reason for this is that men are mostly given the responsibility of carrying them.

Finally, the model of reasoned action of [Ajzen and Fishbein \(1977\)](#) tries to predict healthy behaviors, where these behaviors are defined as the result of behavioral intention, that is, the subject is the one who decides to perform a certain behavior or attitude; it is derived from the combination of affective, evaluative and bipolar dimensions, which is reflected in favorable or unfavorable feelings towards an object or stimulus. However, when comparing this model with the planned behavior model used by [Enríquez-Negrete et al. \(2022\)](#), the conclusion was the same in both cases: the intention to use a condom is the best predictor. Therefore, the subjective norm was more important than attitudes, although the latter variable was not configured as a predictor among women in Argentina.

Conclusions

Considering the specificities of the student population and the various social, economic, and cultural factors involved, it can be observed that about half of the university population engages in risky behaviors related to sexually transmitted infections due to the non-systematic use of condoms. This finding underscores the need for a more effective approach to sexual education in the university environment.

Condom use with stable partners is associated with a significant reduction in infections compared to casual partners. Therefore, it is recommended that educational and awareness-raising campaigns be implemented to promote the use of condoms in all relationships among the university population, emphasizing their importance as a prevention tool.

The attitudes of young female students towards condom use is a complex issue involving factors such as education, culture, and personal experience. Although there is a generally positive attitude towards condom use, more information and guidance are needed, especially in the context of casual sexual encounters. Female university students have greater access to information and are more familiar with the topic, which can be an advantage in promoting safe sexual practices.

Research has shown that although young women are more aware of the importance of condom use, they face additional barriers when negotiating condom use with their partners. They may also feel uncomfortable buying or carrying condoms, which limits their ability to adequately protect themselves. It is, therefore, critical that education and awareness-raising strategies address these challenges.

Attitudes toward condom use among young women can be influenced by several factors: lack of information, which can lead to negative attitudes, and cultural traditions and norms, which can affect the perception and acceptance of condom use. In addition, life experiences, including personal trauma, can significantly influence their attitudes toward condom use. Addressing these factors is essential to promoting positive change in the sexual health of college women.

Limitations of the research include the limited sample size, as the study focused on only one academic program at the university institution; and, the development of a descriptive analysis. It is recommended that the study be conducted on the entire student population to include all active academic programs.

Conflict of interest

The authors of this article declare that they have no conflicts of interest regarding the work presented.

Ethical Responsibilities

This study was classified as risk-free research according to [Resolution 8430, 1993](#), since it did not involve any intervention in the biological, physiological, psychological, or social variables of the participants. In addition, the following fundamental ethical principles of the Declaration of Helsinki were observed ([Asociación Médica Mundial, 2024](#)).

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Contribution

Gustavo Adolfo Girón-Restrepo: Principal Investigator. Statistical data processing, writing of materials and methods, and obtaining the results.

Oscar Marino López-Mallama: Analysis and interpretation of results, writing of the introduction, methods, discussion, and conclusions.

Alexander Almeida-Espinoza: Conceptualization, supervision, writing, review, and editing.

All authors participated in the preparation of the manuscript, read it, and approved it.