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ORIGINALES

Risky sexual behaviors and associated factors among university students in Barranquilla, Colombia, 2019

Comportamientos sexuales riesgosos y factores asociados entre estudiantes universitarios en Barranquilla, Colombia, 2019

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Abstract:

Introduction: Adolescents and young adults are frequently involved in risky sexual behavior (unprotected sex, sex with casual partners, promiscuity, early sexual initiation, etc.) bringing with them, unplanned pregnancies, sexually transmitted infections, suicides, abortions, academic and labor affectations.

The **objective** of the study was to identify risky sexual behaviors and associated factors in students at a university in Barranquilla, 2019.

Materials and methods: Study descriptive-correlational cross-sectional, the sexual risk survey was used, which evaluated risky sexual behavior in university students of Barranquilla in the last six months, were generated correlation coefficients Chi-square Pearson (95% confidence level; p≤0.05) to measure the association between sexual risk scores and sociodemographic and academic factors.

Results: 63% of participants initiated sexual activity before the age of 18. The 87% have participated one or more times in risky sexual behaviors: vaginal sex without a condom (73%), fellatio without a condom (60.3%), number of partners with whom they have sexual behaviors (66.2%) and unexpected sexual experiences (54.4%). Men and law students had higher sexual risk scores than women and nursing students.

Conclusion: The university students are at risk and participating in risky sexual behavior, which could affect their health and life Project. The major risk factors were; early sex, gender, age >20 years, risky sexual practices such as vaginal, oral, and anal unprotected sex and impulsive and unplanned sexual behaviors.

Keywords: Sexual Behavior, Young Adult, Sexual Activity, Sexually Transmitted Infections, Risky Health Behaviors (Fuente: MeSH).

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RESUMEN:

Introducción: Adolescentes y adultos jóvenes participan frecuentemente en comportamientos sexuales riesgosos (relaciones sexuales sin protección, sexo con parejas casuales, promiscuidad, iniciación sexual temprana, etc.), trayendo consigo embarazos no planeados, Infecciones de Transmisión Sexual, suicidios, abortos, afectaciones académicas y laborales.

El **objetivo** del estudio, fue identificar los comportamientos sexuales riesgosos y factores asociados en estudiantes de una universidad en Barranquilla, 2019.

Materiales y métodos: Estudio de tipo descriptivo-correlacional de corte transversal, se utilizó la Encuesta de Riesgo Sexual, que evaluó comportamientos sexuales riesgosos en universitarios de Barranquilla, en los últimos seis meses, se generaron los coeficientes de correlación Chi cuadrado de Pearson (nivel de confianza 95%; p≤0.05) para medir la asociación entre los puntajes de riesgo sexual y factores sociodemográficos y académicos.

Resultados: El 63% de los participantes inició actividad sexual antes de los 18 años. 87% han participado una o más veces en comportamientos sexuales de riesgo: sexo vaginal sin condón (73%), fellatio sin condón (60.3%), número de parejas con quién tienen comportamientos sexuales (66.2%) y experiencias sexuales inesperadas (54.4%). Los hombres y estudiantes de Derecho tenían puntajes de riesgo sexual más altos que las mujeres y los estudiantes de Enfermería.

Conclusión: Los universitarios están en riesgo y participando en comportamientos sexuales riesgosos, que podrían afectar su salud y proyecto de vida. Los factores de mayor riesgo fueron; sexo temprano, género, edad >20 años, prácticas sexuales arriesgadas como el sexo vaginal, oral y anal sin protección y conductas sexuales impulsivas y no planificadas.

Palabras claves: Conducta sexual, Adulto joven, Actividad sexual, Infecciones de transmisión sexual, Comportamientos de Salud Arriesgados (Fuente: Decs).

INTRODUCTION

Research on sexual and reproductive health (SRH) of young people and emerging adults, as a priority for interventions in the context of public health, has focused on risky sexual behaviors, defined in various ways such as the vaginal, anal and oral sexual practices without protection, sex with casual or unknown partners, intravenous drug use in relationships, promiscuity and early age sexual initiation among others (1).

This type of practice can be influenced by the degree of information, prejudices or erroneous ideas, parenting models, lack of family communication, social, cultural, religious, moral, and legal restrictions, little concern for their health and lifestyles principally ⁽²⁾. Models have also been mentioned for analyzing the risky sexual behaviors and associated risk factors, centered principally on decision making. These models include aspects such as age, sex, ethnicity, and education; intrapersonal factors such as attitudes and personality; interpersonal factors such as the facets of the relationship; and situational factors such as the use of substances before the sexual act ⁽³⁾.

In terms of age factor, adolescents and young adults have been identified as most frequently involved in risky sexual activities; within this population, group is the university students, who enter principally before the age of 18 years, they are facing great physical, cognitive, emotional, and social changes that can affect their way of responding to the social demands and pressures of the environment ⁽⁴⁾. The adolescent population is especially considered of great importance in SRH, because it is socially instituted as the stage of the life cycle of initiating more open relationships, in correspondence with physical and mental changes ⁽⁵⁾.

Amongst the consequences derived from conducts or sexual behaviors of risk are, the unplanned pregnancies, sexually transmitted infections (STI), mental illness, suicides, abortions, academic and labor affectations (3). In the adolescent population, these

consequences deserve special attention, especially in their process of formation and education, in which generally the pregnancies are not planned, bearing to badly practiced abortions, in the abandonment of the woman or the child, configuring, this way the social problem of the single mother, in other cases STI that affect the health and integrity of the people, these aspects usually lead to academic desertion ^(5,6).

The STI as a major consequence of risky sexual behaviors occur every day, the global burden of these diseases remains high, according to world estimations of the WHO for 2016, approximately 376 million new cases of four types of curable STI occur in persons between the ages of 15 and 49 years (Chlamydia, Gonorrhea, Syphilis, Trichomoniasis) (7–9). The morbidity and mortality of STI, compromise the quality of life and impose strong pressure on household budgets and national health systems in countries of medium and low economic income; these lead to increased transmission of HIV and complications such as pelvic inflammatory disease, infertility, ectopic pregnancies, spontaneous abortions, fetal deaths, congenital infections; the mortality estimated related with STI includes 200.000 fetal and neonatal deaths from gestational syphilis and more than 280.000 deaths for cervical cancer from HPV in every year (7,8).

In Colombia, the HIV situation is alarming, in 2018 there was estimated an average of 160.000 adults and children living with HIV and an incidence of 0.20/1000 inhabitants (adults between 15-49 years), with 73% coverage of antiretroviral treatment (10). In the case of the departments, the Atlantic (Colombia) is among the regions with the highest HIV rates with 0.23/100 inhabitants and the highest mortality with 3.7/100,000 inhabitants. Considering the importance of HIV and the high cost it generates in the health services of the country, due to the increased number of complications, deaths, and consumption of resources superior tan the general population; expenses incurred primarily for the purchase of antiretroviral drugs, hospitalization, and ambulatory care expenses, diagnostic tests, and follow-ups (11), control interventions are needed at all levels. The achievement of the global objectives about STI and VIH requires a holistic understanding of the sexual characteristics and behaviors of the most exposed populations, including adolescents and the specific characteristics of their context (7,8).

In Colombia great interest has existed about the sexual behaviors of university students, particularly in the sexual interrelations and their consequences, it has been determined that adolescents initiate sexual activity at an early age and without using contraceptive methods properly and regularly (12–15). Often, the information and erroneous concepts about contraceptives are obstacles to their proper and effective use, it is frequently transmitted through the social context, as friends and family, and is strongly influential for the decision making.

The evaluation and comprehension of the sexual behaviors of the adolescent and young university students are necessary to explore and identify the daily experiences and sociocultural factors that influence and enable risks in their SRH. Based on the above, the objective of this work is to identify risky sexual behaviors and associated factors in two groups of students at a university in the city of Barranquilla, Colombia during 2019.

MATERIALS AND METHODS

Descriptive-correlate cross-sectional type study. The data was collected between February and May 2019. The population consisted of university students of the Rafael

Núñez University Corporation, from the city of Barranquilla; to achieve representativeness of the behavior of the target population, students who decided to participate in the study were voluntarily surveyed and signed informed consent, considering that these refer to responses more calmly than those selected by random methods of probabilistic sampling ⁽²⁾.

The sample consisted of a subgroup of 235 students, who met the inclusion criteria: be between 16 and 28 years of age, be registered in the Law or Nursing program, be present in the classroom at the moment of the survey, to sign the informed consent, in the case of children under the age of 18 years, it was duly signed by their parents. Were excluded the students that did not decide to participate, those who did not belong to the chosen academic programs, or were not registered in the institution. The eligibility criteria were defined, considering the need to identify and compare sexual behaviors in two different academic programs, in the health area and for this to be, the age group with the highest risk of sexual health problems such as unplanned pregnancies and STI, whose sexual experiences and practices allow us to estimate the behavior throughout the whole population.

Data Collection

The questionnaire and the purpose of the study were previously informed to the people selected, the confidentiality of the information was assured and clear instructions were given for the correct completion of the questionnaire, which was realized in the classrooms, virtually through the "Google forms" tool and with the accompaniment of the research group. No names or other potential identification information were entered for the interviews, it lasted between 15 and 20 minutes per participant. The Research Ethics Committee of the Rafael Núñez University Corporation under code CURN-011-2018 approved the project. All participants signed a free and informed consent form.

The Sexual Risk Survey – SRS was used, validated and used in the Turchik & Garske study ⁽¹⁶⁾, which is developed to measure risk sexual behaviors among university students, adapted in the first part with questions that allow identifying the characteristics sociodemographics and some sexual characteristics, such as marital status, sexual orientation, and age of sexual activity initiation of the surveyed population. The other 24 items-survey measured a broad range of sexual behaviors grouped into 5 factors (taking sexual risks with uncommitted partners, risky sexual acts, impulsive sexual behaviors, intent to participate in sexual behaviors, and the risk of anal sex) ⁽¹⁶⁾.

Participants were asked to indicate how many times they have done it or participated in each behavior in the past 6 months. The highest punctuations in every respondent indicate major risk-taking; each item could score between 0 times to > 6 times. The scale was recoded and the frequency was determined in each response range, meaning the codes of "0" only included frequencies of 0, and the remaining frequencies were coded into four ordinal categories based on the original scoring $^{(16)}$, for example; responses to item number 1 were coded 0= 0 times; 1= 1-2 times; 2= 3-4 times; 3=5-6 times and 4= > 6 times. Each item was scored from 0 to 4 with a possible total response scale from 0 -96. The elements of each of the scales were added to obtain a total score for the item. The SRS has demonstrated convergent and discriminant validity, good internal consistency and reliability $^{(16)}$, the resultant

information about the factorial structure and SRS score, allows to predict important results such as the acquisition of STIs and unplanned pregnancies (16,17).

Data Analysis

The information was deposited in a database in the software of Excel 2019 and analyzed using the SPSS 25® v. for Windows. Descriptive statistical analysis was used, centering measures (arithmetic mean and median) and dispersion measures (range and standard deviation) were determined in the case of continuous variables. In the case of categorical variables, they were shown as proportions. To measure the association of variables such as years, sex, and academic program with the risk survey score, with a confidence level of 95% and a value of p≤0.05, Pearson's Chisquare correlation coefficients were generated.

RESULTS

Of the total respondents, the majority were between 20 and 28 years old, 153/235 (65%), with a mean at age 23.2 years (SD \pm 5.0 years), predominantly female (70%) and more than half of those surveyed studying in the first semesters meaning between the first to the fourth semester (62%), students belonging to the academic Law program (58%) prevailed. Most of the participants informed to be single 197/235 (84%), from nuclear type families (mother, father, and children) in an (84%) and low stratum 1 and 2, with 64%.

Concerning the sexual characteristics of the students surveyed, the majority of students in both academic programs are heterosexual (91%). About the age range for the initiation of sexual activity, it is evident that 50% of those surveyed have initiated early sexual activity between the ages of 15 and 18 (Nursing 53% vs. Law 47%), it should also be noted that 13% of the participants have initiated their sexual activity before the age of 15 years (Law 18% vs. Nursing 13%) (Figure 1). It was also shown that most students currently have a partner (69%).

The majority of men reported initiating sex before the age of 18 than the womens (< 15 years; M= 30% vs. F= 5%; 15-18 years M= 53% vs. F= 48%), while women mostly reported not initiating sex or initiating sex after age 18 compared to men (> 18 years; F= 33% vs. M= 9%; did not initiate F= 13% vs. M= 9%).

Sexual risk behaviors of students surveyed

An analysis was previously conducted for each of the 24 items of the "Sexual Risk Questionnaire" to examine the descriptive statistics, frequency, and distribution of responses to each item. Based on these analysis items 6, 9, 11, 15, 17, 20, 22, 23 were discarded due to the low number of responses above 0 and little variability in these responses.

16 items were chosen that refer to the 5 factors or aspects mentioned prior. Taking into account the scale of responses, to evaluate the level of overall risk according to sexual behaviors, the mean score per scale 0-4 was 5.0 SD± 5.5, where the minimum value was 0 and the maximum value 36 (Figure 1). The group "0" was determined without risk, from this 31/235 (13%) of the respondents declared not to have participated in any risky behavior, that is to say, approximately 87% of the participants

reported to have participated in 1 or more of the behaviors analyzed in the survey (Figure 1).

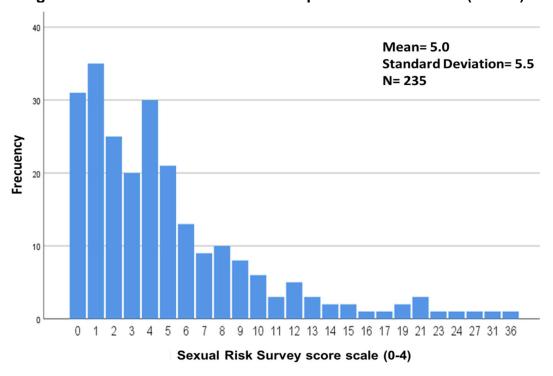


Figure 1. Distribution of Sexual Risk questionnaire scores (N=235)

The mean value of the 16 items was 0.67 and the majority of the items have means above 0.4; the descriptive statistics and means of the five factors are shown with their respective items, according to the coding in the 4 established categories (Table 1).

Table No.1. Prevalence of sexual risk behaviors recorded in the ordinal categories of SRS scores

	Factor/ Ítem	Mean of		atego	egory		
		item 0-4 (DE)	"0"	"1"	"2"	"3"	"4"
1	Sexual Risk-Taking With Uncommitted Partners	0.47 (0.72)					
	Sex with someone don't know well	0.4 (0.83)	76.4	14.8	4.2	1.3	2.5
	Partners with many past partners	0.6 (0.93)	58.2	28.7	7.2	2.1	3
	Partners with other current partners	0.4 (0.85)	72.6	20.3	1.7	1.7	3
2	Risky Sex Acts	1.31 (1.06)					
	Vaginal sex without a condom	2.1 (1.67)	27	18.1	13.5	3.8	36.7
	Fellatio without a condom	1.5 (1.64)	39.7	24.1	6.8	2.1	26.6
	Cunnilingus without protection	0.9 (1.45)	62.4	12.2	7.6	2.5	14.3
	Sex under the influence of substances	0.7 (1.23)	62.9	19	5.9	3	8.4
3	Impulsive Sexual Behaviors	0.74 (0.71)					
	Number of sexual behavioral partners	1.0 (1.07)	33.8	48.1	9.3	0.1	7.6
	Sexual behavior with an	0.6 (0.98)	57.4	29.5	6.3	1.7	4.2
	acquaintance						
	Unexpected sexual experience	0.8 (1.03)	45.6	38	8.9	1.3	5.5
	Regretted sexual encounter	0.5 (0.82)	62.4	29.1	4.6	0.4	2.5

4	Intent to Engage in Risky Sexual Behaviors	0.37 (0.73)					
	Left social event with someone	0.4 (0.82)	76.4	13.5	6.8	0	2.5
	Going out with the Intent of sexual behavior	0.4 (0.83)	77.2	12.2	6.8	0.4	2.5
	Going out with the intent of engaging in sex	0.4 (0.90)	79.7	11.4	3.4	8.0	3.8
5	Risky Anal Sex Acts	0.49 (0.89)					
	Anal sex without a condom	0.6 (1.11)	71.7	13.1	5.9	2.5	5.9
	Analingus without protection	0.4 (0.96)	77.6	11.4	5.1	0.4	4.6
	Total scale 16	0.67					

SD: Standard Deviation

The factor with the highest score above the "0" category was "Risky sexual acts", mainly the item related to vaginal sex without a condom (measured at 2.1±1.67) in which 27% reported not having practiced it on any occasion, compared with 73% who mentioned having practiced it more than once; as for fellatio without a condom (measured at 1.5±1.64), 39.7% did not report having done it on any occasion, compared with 60.3% of respondents who reported having done it more than once (table 1).

Another factor that showed the important risk was "Impulsive and unplanned sexual behavior", mainly in the item related to the number of partners with whom the person performs sexual behavior but not sex (measured at 1.0±1.07), in which 33.8% of the respondents stated that they had never performed this behavior, compared to 66%. 2% who refer to having had sexual behavior with 1 or more partners in the last 6 months; likewise, the item unexpected sexual experience (measured 0.8±1.03), showed that 45.6% of those surveyed stated that they had not had any experience of this type, while 54.4% refers to having had this behavior on 1 or more occasions (Table 1).

Table No.2. Correlation between the means scores of the 5 factors by sociodemographic characteristics.

Socio-			p= Va	lue*							
demographic	Mean	Scale	F1	F2	F3	F4	F5				
features	(SD)	score 0-4									
Age											
16 to 19 years	4.5 (4.1)	.81	.77	.36	.11	.36	.56				
20 to 28 years	5,4 (6.2)	-									
Gender											
Masculine	8.8 (7.5)	<.001	<.001	.12	<.001	<.001	.02				
Feminine	3.5 (3.4)	-									
Academic program											
Law	6.2 (6.2)	.08	.33	.35	.24	<.001	.19				
Nursing	3.4 (3.9)	-									
Semester											
I to III	5.0 (4.5)	-									
IV to VI	4.1 (5.3)	.10	.50	<.001	<.001	.64	<.001				
VII to IX	6.7 (7.7)	-									
Socioeconomic strat	tum										
Low level(1 a 2)	4.4 (4.7)	-									
Medium Level(3 a 4)	5.8 (6.0)	.002	.10	.49	<.001	.16	.29				

High level (>5)	6.8 (3.8)						
Sexual Orientation	n						
Heterosexual	4.8 (5.4)	<.001	<.001	.02	.01	.01	.11
Homosexual-	7.9 (6.2)						
Bisexual							
Age of sexual deb	out						
< 15 years	10.2 (8.4)						
15 to 18 years	5.2 (5.0)	<.001	.001	<.001	<.001	.008	.003
> 18 years	3.7 (3.7)						

^{*} The correlation is significant at the level 0.05

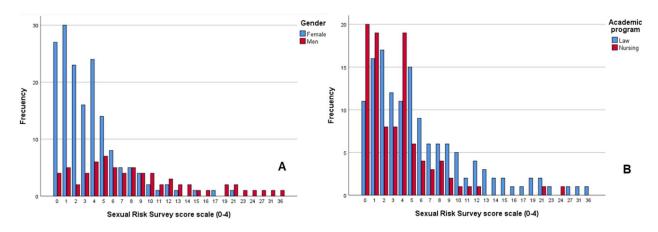
SD: Standard Deviation

In terms of the association of sexual risk behaviors and socio-demographic characteristics; gender, sexual orientation, and age of sexual debut were strongly significant (p<0.01) concerning the total SRS score and similarly for a majority of the sexual risk factors assessed (Table 2, Figure 2). In terms of gender, it was evident that men had higher total sexual risk scores (mean 8.8 ± 7.5) than women (mean 3.5 ± 3.4); specifically, they reported more risk on three of the five subscales or factors, sexual relations with uncommitted partners (p<0.01), impulsive sexual behaviors (p<0.01), and greater intention to engage in risky sexual behaviors (p<0.01) compared to women (table 2).

For the academic program, participants in the Law program had higher total sexual risk scores (mean 6.2 ± 6.2) than those in Nursing (mean 3.4 ± 3.9) (Figure 2); specifically, they showed greater intent to engage in risky sexual behavior (p<0.01) (Table 2). Likewise, participants in the more advanced semesters VII to IX semesters had higher scores (mean 6.7 ± 7.7) compared to the early semesters; specifically in three of the 5 subscales (Table 2), risky sexual acts (p<0.01), impulsive sexual behaviors (p<0.01), and risky acts in anal sex (p<0.01) (Table 2).

The sexual orientation variable showed that sexual minorities had higher scores (mean 7.9±6.2) than heterosexuals; the association was significant in almost all five subscales, except for participation in risky anal sex acts only (Table 2). In terms of age of sexual initiation, there was a significant association in all five subscales and participants who started before the age of 15 had higher scores (mean 10.2±8.4) compared to those who started after the age of 15 (Table 2). Although the age variable was not statistically significant, the results obtained show that older participants aged 20 to 28 years old had higher total sexual risk scores (mean 5.4±6.2) than younger participants aged 16 to 19 years old.

Figure No.2. Distribution of SRS scores by sociodemographic variable A) Gender, B) Academic program.



DISCUSSION

The present study allowed a fairly broad approach to sexual practices and impulsive sexual acts in a sample of university students in the city of Barranquilla, compared to other studies in Colombia that have been limited to the use of contraceptives, knowledge, and practices in sexual and reproductive health of first semester students (13) and other studies, some practices of risk for HIV infection, such as lack of protection, use of alcohol and drugs in sexual relations (14,18).

In the university stage, sexual awakening is more active and behaviors are oriented towards the enjoyment of pleasure, often without taking into account the consequences ⁽¹⁹⁾; various research, indicate that university students, are at risk and engaging in risky sexual behavior, which may also be associated with increased unplanned pregnancies, STI and HIV among young adults ^(15,20). This is consistent with the results found in the present study, which showed a high prevalence (87%) of students who reported participating one or more times in the sexual behaviors analyzed and a mean total score of moderately high sexual risk (5.0 SD± 5.5).

For the sociodemographic characteristics of the participants, they reflect a mean age of 23.2 years, the majority were women, single, and a great number of students were studying in the first semesters, data similar to that reported in other studies in the country ^(14,18). These aspects are important to consider, taking into account that the number of students tends to decrease as they advance in their formation, among the reasons reported in the literature have been mentioned early and unplanned pregnancies in university women, it also brings problems associated with family conflicts, economic affectations, low academic performance, sometimes academic desertion and changes in general in the project of life ⁽⁶⁾.

About sexual characteristics, the predominant sexual orientation was exclusively heterosexual (91%), with more than half of the population beginning sexual activity between the ages of 15 and 18 years (53%) and with 13% before the age of 15 years, very early age and similar to national estimates ⁽¹²⁾. In contrast to another study in the country that reports an average sexual initiation in college students at 13.2 years, the students in this research have started their sex lives a little later ⁽¹⁸⁾.

For its part, UNICEF mentions that early sexual initiation leads in turn to early maternity, which is more prevalent in rural areas, more disadvantaged social stratum and with lower levels of education, and indicates that the proportion of men who start before the age of 15 is higher than that of women (12,18,21-23); Besides, the National Demographic and Health Survey (NDHS), 2015, reports that the median age of sexual initiation for men is 16.1 years and for women is 17.6 years among people aged 25-49 years. (24). The above data are consistent with those reported in the present study, taking into account that university students have had access to a better level of education, in more favored social stratum, and with better sexual decision-making, presumably because they have a better knowledge of contraceptive practices (23).

The highest risk factor found after sexual initiation at an early age and very frequent in young people, are the risky sexual acts or unprotected sexual practices, mainly the vaginal sex in which 73% of the population refers to practice it more than 1 time without the protection of the condom, these results coincide with previous studies that mention the low use of condoms in the country^(14,15,25). Approximately less than half of university students don't protect themselves against STI ^(18,21); Among the reasons reported in the literature for not using condoms are: trust and stability towards sexual partners, the zeal of the moment, the dislike of using them or the lack of sensitivity they generate ^(18,21), Another, even more, alarming reason, is that it has been replaced with other contraceptive methods, evidence of young people's concern about getting pregnant rather than avoiding getting an STI ⁽²⁵⁾.

Results related to oral sex practices indicate that students don't consistently use condoms on fellatio (60.3%) and cunnilingus (37.6%) as reported in previous studies in the country ^(18,21). Young people's perceptions of oral and anal sex practices further aggravate the situation, are mentioned, the additional pleasure, pregnancy prevention, virginity preservation, and even more seriously mention the low risk of STI/HIV ⁽²⁶⁾. However, these practices become situations of alarm and risk of infection for STIs, through contact with secretions such as pre-semen, semen, and vaginal secretions ⁽²¹⁾.

Although in this study, there is little sexual diversity, 9% of sexual minorities in which anal sexual practices would be more frequent, it is important to highlight that 28.3% of university students in general, perform anal penetrative practices on more than one occasion without protection, these data are higher than those reported in the country, in Medellin (11.5%) and various cities such as Bucaramanga, Cali, Cúcuta (3.8%) (18,21). These types of behaviors are the highest risk for HIV transmission in contrast to practicing vaginal sex.

Likewise, impulsive and unplanned sexual behaviors also proved to be an important risk behavior among university students, 66.2% reported having had sexual behavior but not sex with one or more acquaintances in the last 6 months and more than half reported having had more than one unexpected sexual experience. This type of exploratory practices are little studied in the country, however, in the case of casual sex without compromises, it seems to be very common among university students, in many cases inform that these meetings are a one-time thing, and in few cases refer that they are the beginning of a romance (27).

Demographic results and SRS subscale scores were largely consistent with previous studies; older students reported more sexual risk behaviors than younger students (14,17). Older populations have been identified as reporting mostly riskier sex with uncommitted couples and risky sexual acts compared to the youth population, who for

their part report mostly impulsive sexual behaviors and increased intent to engage in risky sexual behaviors (17).

According to gender, men report more sexual risks than women ⁽¹⁶⁾, principally in practices such as early sexual initiation, sex with uncommitted partners, impulsive sexual behavior, and greater intent to engage in risky sexual behavior, these findings are consistent with previous reporting ⁽¹⁷⁾. Gender differences in sexual attitudes and risks point to women's conservative sexual attitudes, men's tendency to report higher numbers of partners, and casual and non-exclusive sex ⁽²⁸⁾; These behaviors have been explained from different theories related to aspects of personality, social and cultural, however, although sexual intentions and desire are mostly manifested in men, the real behaviors can probably be homogeneous among both genders ⁽¹⁶⁾.

The present study showed that law students were associated with major sexual risk, principally in the intent to engage in risky sexual behavior, such as leave a social event with someone, going out to events with the intent to have sex, or engage in sexual behavior. Although various studies evaluate risk behaviors, especially in the sexual and reproductive health of university students, in Colombia there has not been a rigorous analysis that analyzes the possible association among these behaviors and the discipline of study; it is assumed that the greater knowledge that students presumably have in areas of health care represents a protective factor in the development of healthy attitudes and behaviors in sexual and reproductive health (29).

Finally, the sexual risk factors and behaviors identified in university students, principally those related to early sex, gender, and unprotected and impulsive sexual practices, may be reduced in adulthood, through interventions aimed at self-control and mental training that especially allows adolescents to visualize their goals, identify possible obstacles to achieving them and develop plans to overcome them, thus increasing their capacity for self-control ⁽³⁰⁾. These interventions are ideal in the university context, from the moment students enter and throughout their formation, using diagnostic routes and characterization of their own needs, not only academic and psychosocial but also in educational needs in sexual and reproductive health; this will allow the generation of early warnings for the prevention and control of risky sexual behaviors that negatively impact health, welfare, and their life Project.

CONCLUSIONS

Based on the mean global score informed and on each of the SRS factors, it was evident that university students are at high risk and participate to a high proportion in risky sexual behaviors, which could mainly cause STIs and unplanned pregnancies, affecting their overall health and their life project at this stage of university. The major risk factors found were; early sexual initiation, age over 20 years, unprotected or risky sexual practices such as vaginal, oral and anal sex without condoms, the latter being the greatest risk for HIV transmission and impulsive and unplanned sexual behaviors, such as having sexual or exploratory behaviors but not sex with one or more acquaintances or unexpected or casual sex, which in many cases are a one-time thing.

The female gender and being a student in a health care program reflected to be determinants that contribute to participate less in risky sexual behaviors. The data from this study cannot be generalized to an entire population, as university students

from a unique university, are needed to continue studies in populations that are more diverse and to direct interventions towards building self-regulatory skills in the emerging adult who may be less likely to engage in sexual risk-taking.

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