

# Knowledge of nursing student on the prevention of sexually transmitted infections

Saberes de estudantes de enfermagem sobre a prevenção de Infecções Sexualmente Transmissíveis Los saberes de estudiantes de enfermería sobre la prevención de infecciones de transmisión sexual

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#### **ABSTRACT**

**Objective:** To identify the knowledge and self-care actions taken by nursing undergraduate students of a Federal University of the South of Brazil, against Sexually Transmitted Infections. **Method:** Exploratory qualitative study, conducted 40 interviews with undergraduate students at the beginning and end of the course. The analysis was thematic, resulting in three categories. **Results:** Knowledge about the subject is a decisive factor for self-care, and the more knowledge, the greater the prevention. The dissemination of knowledge of students at the end of the course not only influences self-care but also health promotion in the social sphere. **Final considerations:** Knowledge is important in self-care and caring for others. The dissemination of knowledge becomes evident according to the complexity of the course. Stable relationships may interfere with the use or disuse of condoms in sexual relationships, a misnomer present in today's society.

**Descriptors:** Sexually Transmitted Diseases; Self-Care; Prevention of Diseases; Knowledge; Nursing Students.

#### **RESUMO**

Objetivo: Identificar o conhecimento e ações de autocuidado tomadas por estudantes de graduação em Enfermagem de uma Universidade Federal do Sul do Brasil, frente às Infecções Sexualmente Transmissíveis. **Método:** Estudo qualitativo exploratório, realizado 40 entrevistas com estudantes de graduação do início e do final do curso. A análise foi temática, resultando em três categorias. **Resultados:** O conhecimento acerca da temática é um fator decisivo para o autocuidado, sendo que quanto mais conhecimento, maior a prevenção. A disseminação de conhecimentos dos estudantes de final do curso não só influenciam no autocuidado como também na promoção de saúde no âmbito social. **Considerações finais:** O conhecimento é importante no autocuidado e no cuidado ao próximo. A disseminação de conhecimento se torna evidente conforme a complexidade do curso. Os relacionamentos estáveis podem interferir no uso ou desuso dos preservativos nas relações sexuais, equivoco presente na sociedade atual.

**Descritores:** Doenças Sexualmente Transmissíveis; Autocuidado; Prevenção de Doenças; Conhecimento; Estudantes de Enfermagem.

#### **RESUMEN**

**Objetivo:** Identificar el conocimiento y las acciones de autocuidado tomadas por estudiantes de graduación en Enfermería de una Universidad Federal del Sur de Brasil frente a las Infecciones de Transmisión Sexual. **Método:** Estudio cualitativo exploratorio. Fueron realizadas 40 entrevistas con estudiantes de graduación del inicio y del final del curso. El análisis fue temático y resultó en tres categorías. **Resultados:** El conocimiento acerca de la temática es un factor decisivo para el autocuidado, considerando que cuanto más conocimiento, mejor es la prevención. La diseminación de conocimientos de los estudiantes de final del curso no sólo influye en el autocuidado, sino también en la promoción de la autocuidado y en el cuidado al prójimo. La diseminación de conocimiento es importante en el autocuidado y en el cuidado al prójimo. La diseminación de conocimientos se hace evidente según la complejidad del curso. Las relaciones estables pueden interferir en el uso o desuso de los preservativos en las relaciones sexuales, equivocación presente en la sociedad actual. **Descriptores:** Enfermedades de Transmisión Sexual; Autocuidado; Prevención de Enfermedades; Conocimiento; Estudiantes de Enfermería.

#### **INTRODUCTION**

Sexually Transmitted Infections (STIs) can be transmitted through sexual contact (oral, vaginal, anal) without the use of a male or female condom with an already infected person. This infection can be by viruses, bacteria or other microorganisms. There may also be vertical transmission, that is, from the mother to the child during gestation, delivery or breastfeeding<sup>(1)</sup>.

Body fluids such as blood, semen, pre-seminal fluid, rectal fluids, vaginal fluids, and breast milk are the means of transmitting Human Immunodeficiency virus (HIV) from one person to another. For transmission to occur, these fluids need to be in contact with a mucous membrane (rectum, vagina, penis and mouth), damaged tissue, or injected directly into the bloodstream<sup>(2)</sup>.

The use of condoms in all sexual relations is the most effective method to avoid STI transmission, in addition to preventing unwanted pregnancies. A person who has unprotected sex is at risk for STI regardless of age, marital status, social class, gender identity, sexual orientation, creed or religion. A person may be apparently healthy and still be infected by a STI<sup>(1)</sup>.

Despite major technological advances, disease prevention and health promotion are key life-sustaining issues. Education and health, when well articulated, increase the possibilities of comprehensive care for people. Education in the area of Health should encourage experiences that promote the implementation of actions that seek to improve living conditions and promote health. For this to happen, it is necessary to value both biological, emotional, social, political, economic, cultural and spiritual aspects<sup>(3)</sup>.

Among the STIs, HIV infection rates in the young population are among the major concerns in the field of Collective Health today. HIV among adolescents and young people becomes a risk when they transition through old age into challenging places with poor access to food, education, housing and high rates of violence. Measures of social protection and insertion in the school environment and in the labor market reduce vulnerability to HIV. Schools represent an open and educational space in relation to sexuality and provide the knowledge and skills necessary to encourage healthy and conscious choices<sup>(4)</sup>.

According to the Epidemiological Bulletin on HIV/AIDS published by the Brazilian Ministry of Health, from 2007 to June 2016, 136,945 cases of HIV infection were reported in Brazil. The ratio expressed by the number of AIDS cases among men and women in the year 2015 was 21 cases of AIDS in men for every 10 cases in women. The rate of detection of the disease among young men aged 15 to 19 years has tripled (from 2.4 to 6.9 cases per 100 thousand inhabitants) and among young people aged 20 to 24 the rate has more than doubled (from 15, 9 to 33.1 cases per 100 thousand inhabitants)<sup>(5)</sup>. This high number, among adolescents and young people, is associated with several factors, including unprotected sexual practice, which makes them increasingly vulnerable to STI acquisition<sup>(6)</sup>.

In order to verify these actions implemented in schools, in the 2008 School Census, of the 99,316 Elementary Schools that participated and answered the questions of the Survey of Actions in Health Promotion and Preventive Education, 94% of them work on a theme aimed at the promotion of health and

preventive education, 52% promote some action focused on HIV/AIDS prevention<sup>(7)</sup>.

To reduce the vulnerability of young adolescents to STIs, a project called *Saúde e Prevenção nas Escolas* (freely translated as Health and Prevention in Schools - SPE) was created that promotes the integration of health and education systems, promotes the continuing education of Health Professors and professionals in Sexuality, Vulnerability and Prevention STIs and offers condoms in schools<sup>(8)</sup>.

The SPE aims to contribute to the integral graduation of students through actions of promotion, prevention and health care, bringing the vision to face the vulnerabilities that may compromise the development of children and young people of the public school system<sup>(9)</sup>.

The importance of the school has been emphasized as a space of socialization, in which the dialogue between friends and teachers can be understood as a space to deal with aspects related to STIs, as well as practices of health promotion within these contexts<sup>(10)</sup>.

It is important to make this association of the school in the construction of knowledge through this knowledge the adolescents will take preventive measures. In this way, we adopt as theoretical reference the model of Self-Care Deficit Theory proposed by Dorothea Orem. This model describes why and how people take care of themselves. Self-care is the exercise that people practice for their own benefit, aiming at the well-being and health<sup>(11)</sup>.

This study is important because it enables reflection on the construction of knowledge about the subject and in what way this knowledge is actually being applied by nursing students. Knowledge prior to academic training and later acquired becomes a baggage that will influence the care for themselves and for the other. From the aspects presented previously, we draw the following research question: How does the knowledge about STIs influence the undergraduate students of a Nursing undergraduate course in the decision to adopt preventive measures of self-care?

## **OBJECTIVE**

To identify the knowledge and self-care actions taken by undergraduate students in Nursing at the *Universidade Federal de Santa Catarina* regarding Sexually Transmitted Infections.

## **METHOD**

#### **Ethical aspects**

For the development of the study, the ethical precepts of Resolution 466/2012<sup>(12)</sup> of the National Health Council (*Conselho Nacional de Saúde*) were respected and the research was approved by the Research Ethics Committee involving Human Beings of *Universidade Federal de Santa Catarina*.

Because it is a question of research only with young people who have reached the legal majority, the authorization of the parents or guardians was not necessary. All participants signed the Free and Informed Consent Form in two ways. For the anonymity of the interviewees, we use the nomenclature S1P1 (Student 1 of Phase 1) and thus consecutively.

# Type of study

This is a qualitative study, using a semi-structured interview script, focused on the profile of nursing students regarding their sexuality, knowledge about STIs and self-care actions. Interviews were conducted with nursing undergraduate students from the *Universidade Federal de Santa Catarina*, who were enrolled in the first, second, ninth and tenth phases of the course. To better reach the data of the study, a sample calculation was carried out in the SESTATNET - *Sistema Especialista para o Ensino de Estatística* (freely translated as Specialist System for Statistics Teaching)<sup>(13)</sup>, which pointed out the number of students per phase that should be interviewed. Since there were no such students interested in participating in the interviews, we minimized this demand to 10 students from each phase, thus totaling 40 participants in the research.

The curriculum of the Undergraduate Nursing Course of this study belongs to the Federal *Universidade Federal de Santa Catarina*, which is developed in 10 consecutive semesters. Each semester refers to one phase, thus totaling 10 phases. The course aims to train generalist nurses who are critical and committed to the health needs of the population with the responsibility of assisting individuals, families and the various social groups in their totality and individuality in the various health settings<sup>(14)</sup>.

## **Methodological procedures**

## Study setting

The study was carried out with nursing students from the Undergraduate Nursing Course of the *Universidade Federal de Santa Catarina*. The interviews took place from November 2016 to April 2017, with a locality in classrooms of the Health Sciences Center of the *Universidade Federal de Santa Catarina*. The inclusion criteria of the study were the majority, students who were studying the discipline axis of the phases pertinent to the study and the interest in participating in the research.

## Collection and organization of data

For data collection, the students of the initial and final phases of the course were identified through a classroom visit, a dialogue with the teacher and, later, a presentation of the theme, thus inviting students to participate in the construction of this study.

The students who showed interest in participating left a telephone and an electronic address for contact. During the collection, the students chose their free time and the place where they would like to be interviewed. The interview was guided by a script that sought to identify the profile of these students in relation to sexual life, approach to the subject, knowledge and dissemination of information.

## Data analysis

The analysis of the data occurred as they were collected, the interviews were transcribed and transcribed soon after their accomplishment and, therefore the approximation by assimilation and the categorization were performed. Regarding interview records,

transcription should be analyzed according to the conditions of its creation and updating, taking into account the spoken language. The interviewer must reproduce everything that was said in the interview, without making cuts or additions, in that opportunity is conferred the fidelity of the material. The transcription of the collected material serves as a re-creation of the text in its fullness in order to avoid vices of language, slang and grammatical errors<sup>(15-16)</sup>.

After the organization of all the information collected, a critical analysis of the data was performed and a categorization of the data was made, thus forming three important categories for the study. Category 1: First contact with the theme: School/family; Category 2: Self-care actions: Use/(not)use of condoms, contraceptive methods and serologies; Category 3: Knowledge as an influencer of care actions and information disseminator.

#### **RESULTS**

37 were women and 3 were male students from the 40 nursing undergraduate students participating in the survey. From the data collected, it was possible to trace a profile of the interviewees by phase of the course, through age, relationship condition, first sexual relation, sexuality and number of partners, as presented in Table 1.

Participants' ages ranged from 18 years to 37 years, with most respondents being single or dating, and the first sexual intercourse predominantly occurred in the 14-16 age group and 17-19 years old. Regarding the sexual option, 35 of the 40 interviewees are heterosexual and the number of sexual partners during the interviewees' lives is in the range of 1-3 partners and 4-6 partners.

**Table 1** - Profile of undergraduate nursing students interviewed by phase of the course (n- Florianópolis, Santa Catarina, Brazil, 2017)

Profile		Phase 1ª 2ª 9ª 10ª Total				
Age	18-20 years	7	7	_	_	14
J	21-23 years	1	1	6	-	8
	24-26 years	2	2	3	5	12
	Above 27 years	-	-	1	5	6
Status	Single	4	5	4	4	17
	Dating	5	5	5	2	17
	Stable relationship	-	-	1	3	4
	Married	1	-	-	1	2
1 <sup>st</sup> sexual relation	14-16	8	6	4	3	21
	17-19	2	4	5	6	17
	20-22	-	-	1	1	2
Sexuality	Heterossexual	10	6	9	10	35
	Homossexual	-	-	1	-	1
	Bissexual	-	4	-	-	4
N° of partners	1-3	6	5	5	3	19
	4-6	2	3	4	4	13
	7-9	-	2	-	-	2
		2	-	1	3	6
Total of interviews		10	10	10	10	40

# Category 1: First contact with the theme: School/family

When asked about the first moment they heard about Sexually Transmitted Infections, students put two prominent environments,

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the family environment and the school environment. The two bringing great influences on the construction of knowledge.

> That was when I was about 12 years old, and at home, they only talked to me about using condom. But they never explained the reason to me, except that its use prevents pregnancy. They did not explain Sexually Transmitted Diseases. I went to learn at about 12 years old. It was a lesson, they taught how to put the condom and contraceptive methods ... It was really cool. (S2P2)

> I think it was at school. I was 8 years old, but it was not very explicit either. It was just to explain how babies come up, but when they started talking about the more specific part of the disease itself, then I was already in seventh grade, I think. (S4P2)

> I remember a lecture that I had in the fourth arade that were with those transparencies that went on the wall. I remember the nurses who wore white coats to speak. The first time was shocking, because I did not even know what sex was, I did not know much. It struck me so much that I still remember them talking about it, and the first time I saw a condom, I did not even know it existed, what was it for? (S4P9)

> Sexually Transmitted Diseases ... I remember I was in 5th grade, sort of, and I had a lecture about it in the classroom. We were a small child and it was very moving ... lots of laughs. I remember this because it stuck me a lot, because I always took it naturally, and my friends laughed at each other. I thought: wow, why laughing? (S5P9)

Some students have placed the family environment as the first driver of knowledge, bringing the family relationship as a basis for approaching the theme.

> It was at home. It was embarrassing the first time, but then I think it was good. Because people generally do not have contact with parents, it is often outside the home. (S4P1)

> It was at home, we always had a pep talk about it, especially the issue of condom use. (S6P1)

> I believe that if it was not at school, it was at home because my mother is a sciences teacher, so the subject was always developed easily. Better to have an answer at home than at school. (S4P10)

We also find speeches that bring the family environment as something closed that makes it impossible to talk about issues such as sexuality.

> My mother has a hard time talking about sexuality. She never spoke to me in my childhood or in my teens. It's always been a taboo in my family. Even when I started dating, she never talked about it. I got to know about it in the first year of high school. To be aware, I was 14 when I heard about sexual intercourse. And in my 14 years I did not know that intercourse needed penetration. (S2P9)

> It was very difficult to talk to my family, especially since my mother was always very close, so much so that the first time I went to the gynecologist alone was me, you know. It was my initiative and not hers. (S3P9)

> My mother is a very strict, conservative person, she never talked to me about sex, about protection. The first conversation we had

in this conversation was when my first boyfriend came to the house and asked to date me, I was 15 years old, and she said that if I got pregnant, she would kick me out of the house. It was these guidelines that I have got. (S4P9)

The first contact with the subject is stored in the memory, being something positive or negative. The knowledge acquired through this contact will influence the person from that moment forward, making the actions of protection more evident.

# Category 2: Self-care actions: Use/(not)use of condoms, contraceptive methods and serology

When asked about the use of condoms and the relevance of condom use, most people associate the importance of condom use with two factors: Preventing Pregnancy and Sexually Transmitted Infections.

> Condom is important not only to prevent pregnancy, but as a contraceptive method to prevent Sexually Transmitted Diseases. It prevents the person from being in a risk group that has to always be evaluated the serologies that are usually hepatitis B, C, HIV and syphilis. (S2P9)

> Firstly to avoid Sexually Transmitted Diseases, and also in relation to the heterosexual to avoid a ... get pregnant. (S5P9)

Also on the use of condoms, statements that correlated the non-use of the condom justified by the serious relationship, due to the relationship of trust in the partner, appeared. The students stated that, after a certain period of relationship, condom use becomes less frequent due to the bond created with the partner.

> I think it is important because of the prevention of both pregnancy and illness. It's just that since I have been in a relationship for many years, I have confidence in my partner. I know what I do, I am aware of being from the area of Health. I am aware of the importance of the condom against ... the prevention of diseases, which is much worse than having a pregnancy. (S8P10)

> When I'm in a long-lasting relationship with a boyfriend, for example, sometimes it happened to have sex without a condom. It's ... I think mainly because of this, for trusting on the same partner, because you are living with that person every day and you end up creating a bond like that and really for ... when you do not have condom you will not stop doing it because you are with that person you like and you end up trusting him. (S4P9)

> Always with unknown or sporadic people. When you're a steady partner, eventually we do not use it after a while. It was not that I did not see that he had a problem, but ... the fear he always had. But we talked a lot about it and decided that we would not be ... having relationships with other people without a condom and if this happened we would be sincere and not... When we had relations, do not use without or counting. So we decided that I would not use it due to ... comfort, at the time I was taking contraceptives. (S2P10)

Regarding contraceptive methods, it was possible to observe three behaviors: The use of a condom, oral contraceptive and Intra-Uterine Device (IUD). On the performance of serologies appeared reasons such as: Sharp Accident, risk behavior, prenatal, through preventive, routine exams and curiosity. Students in the final stages, for the most part, said they performed the rapid test for the question of learning to perform the test for later application in patients.

## Category 3: Knowledge as an influencer of care actions and information disseminator

In this category, the students are confronted about the importance of the knowledge acquired so far in the decision making of self-care. Is this knowledge about this subject making a difference?

> It makes a lot of difference, I think if I did not have the least knowledge I would not use condoms in relationships, as I will tell you, in quick relationships. Relationships without constant partners, I think knowledge helps a lot. (S1P1)

> I know I'm not immune. That I am vulnerable and that a beautiful little face does not mean that it is trustworthy and I take care of myself, I try to take care of myself and with certainty this matter of having this practice in health, to have that contact with the field of internship that I work, have a high incidence of Sexually Transmitted Diseases and this has struck me a lot. (S4P9)

> I think if I did not have the knowledge I have now, but a lot came from the undergraduate. I think if it was not for graduation I would not have that knowledge. This helps a lot for me to have a notion of gravity. (S6P9)

> I've dated four years, and it's difficult for you to keep using, at least for me, to keep condom use during a relationship ... as much as we know of all the possible consequences and ... I do not know, daily it is just forgotten. (S4P10)

In relation to the dissemination of knowledge, we seek answers only from students of the final stages, to understand if the undergraduate course has become a driver of knowledge about the subject. In the speeches found, it is perceived that the dissemination of knowledge about this theme is much stronger in the primary scope for these students who put the experiences in Primary Care as the main environment for health promotion.

> Especially when we go to Primary Care. In hospital care I have already talked about this with the patient, but always at that time to make history, as we ask about sexuality, we ask if you have a fixed partner or not, if you use a condom and there we give some guidelines. But in Primary Care, in schools, for adolescents, it is where there is more. (S4P9)

> At various times, especially when we conduct consultation, during the internships, we are able to disseminate a lot. ut whenever you have an entry to say something we are talking about, regardless of which phase it is, I think that at all stages we talked a little about it with somebody. (S9P9)

> I believe it was during the stages, especially in the stages in the 9th phase in Primary Care. We end up having a lot of contact with IST. Here, in Florianópolis, mainly nurses can already prescribe

treatments for some STIs. I believe that where I had more contact and worked more this theme was in the ninth phase. (S3P10)

Soon in the second phase, if I'm not mistaken, we make a ... It's an action. And HIV was on the 1st day of December which is the world day of the fight against, so that's where I started. Then in the seventh phase we did a lot of workshop with teenagers in schools and had the workshop that was not about sexual intercourse or STD, then the subject would fall, we see that especially for teenagers when you put themselves at disposal, they have many doubts. We even stop to answer their questionnaire ... Oh My God, what's the answer to that? (S4P10)

During graduation doing lectures in schools as an internship activity. Projects. At the nursing office itself, I am always emphasizing whatever age, if the person comes and says that he has a sex life, has already started a sex life, I always try to emphasize, speak, guide enough. (S8P10)

I think most of it happens in the ninth phase, when we go through Primary Care. When you host nursing, sometimes patients come for the serologies and you provide guidance. I think mainly in the 9th stage. In the 10th that is more part of hospital and some other clinic that you find interesting I did not see much applicability. (S10P10)

The dissemination of knowledge is noticed as students advance the phases of the course, becoming more and more important and overwhelming. It is perceived that knowledge spreads as a network among students in both the social and academic spheres. Knowledge is shared among the students and the people around them, being able to be in a circle of friends, lectures and actions developed in the school, in Primary Care and in the hospital.

#### **DISCUSSION**

Sexuality accompanies the lives of individuals. It is during adolescence that the awakening of sexuality occurs and this occurs in a differentiated way, besides being marked by its own characteristics. The family, regardless of the structure, is considered an indispensable space to guarantee the survival and comprehensive protection of its members(17).

Many put the difficult family context into conversations related to sexuality, bringing to light that the parents did not give any space or did not demonstrate to want to talk about this subject, some report that the parents were "closed" and made impossible the subject was discussed.

For the better development of children, it is necessary for parents to follow the process of learning their children outside the family environment. The dialogue between family and children will contribute to physical, cognitive and emotional development. The family articulation/dialogue and school education prepare children for possible daily conflicts and improve school and social performance<sup>(18)</sup>.

In view of this public health issue, in 1997, the Ministry of Education created the Parâmetros Curriculares Nacionais (PCNfreely translated as National Curricular Parameters), adding the transversal axis - Sexual Guideline. It is pointed out that this work in schools is articulated through the promotion of health for children, adolescents and young people, in addition to enabling effective preventive actions against Sexually Transmitted Infections more effectively(8).

PCN seek to promote, among educators, the discussion of practice and positioning in the face of educational, economic, political and social issues. The sexual orientation PCN with their proposal seek to re-dimension the pedagogical practice so that it reaches the whole of sexuality, allowing the educator not only to be attentive to the physical-anatomical information, since it is necessary that a process of action of the teacher takes place that can approach the complexity, contributing to learning<sup>(19)</sup>.

> Practically all schools work the reproductive apparatus in Natural Sciences. They usually do so by discussing human reproduction with information or notions relating to the anatomy and physiology of the human body. This approach usually does not address the anxieties and curiosities of children, nor the interest of adolescents, because it focuses only on the biological body and does not include the dimension of sexuality. It is known that the curiosities of children about sexuality are very significant issues for subjectivity, insofar as they relate to the knowledge of the origins of each and the desire to know. The satisfaction of these curiosities contributes so that the desire to know is boosted throughout life, while non-satisfaction generates anxiety, tension and, eventually, inhibition of the investigative capacity. The offer by the school of a space in which children can clarify their doubts and continue to formulate new questions contributes to the alleviation of anxieties that often interfere in the learning of school contents<sup>(7)</sup>.

By observing these settings, it is important that the sexual education of adolescents be shared between the family and the school, this process of communication can increase even more the learning of basic and necessary information that influence in the moment of adopting actions of self-care in relation to sexual life.

The school is observed as a propitious place to develop educational actions on sexuality, HIV transmission and other STIs, demystifying some concepts and values that exist around these subjects. Therefore, it is necessary to articulate among health professionals, professors, family members and community<sup>(20)</sup>.

The World Health Organization (WHO) states that adolescence is characterized by the period from childhood to adulthood and corresponds to the age group of 10 to 19 years. It is at this stage that sexual attraction and personal and sexual affirmation are developed, as well as the initiation of the sexual life<sup>(21)</sup>.

Youth is a stage of life where the person undergoes various transformations and experiences new experiences with regard to their sexuality. The onset of sexual life is earlier, and young people more exposed to the risks of unplanned pregnancy and acquisition of STIs/AIDS. These two factors are more likely to occur the lower the schooling level and it also varies according to family income<sup>(22)</sup>. Young adults are one of the largest at-risk groups related to STIs, and this number is increasing due to unprotected sexual contacts(4).

The World Health Organization<sup>(21)</sup> states that the correct use of male condoms reduces the sexual transmission of STIs in both vaginal and anal contact by approximately 94%. Condom use is one of the primary means of ensuring individual and collective health. Thus, it is of great relevance the orientation of adolescents on the importance of the use of the condom in sexual relations and the use of other contraceptive methods, having this adolescent sexual life active or not(23).

Regarding HIV coping by the young population, it is highlighted mainly the unprotected sexual practice or the discontinued use of the condom either with stable or eventual partner<sup>(24)</sup>. In young women, unprotected sexual practices can impact the reproductive life of this young woman, being a set of susceptibilities related to contamination as well as problems of sexual transmission<sup>(25)</sup>.

Through the identification of vulnerability factors, it is possible, with the concrete information of the reality of the adolescents, the elaboration of interventions and implementation of protective actions directed to the determinants of the occurrence of infections<sup>(26)</sup>.

With the initiation of the public policies and financing, technological advances and research have encouraged a great search of knowledge about HIV, as well as helped in the elaboration of prevention strategies to avoid and/or minimize the epidemic process<sup>(25)</sup>.

Most of the interviewees put the risk of pregnancy and the acquisition of Sexually Transmitted Infections as a factor responsible for condom use. They also emphasize the frequent use of condoms in sporadic relationships and the lack of use in long-term relationships with a stable partner as a demonstration of trust.

The concept of vulnerability originates from Public Health and resulted from a process between activism in the face of the AIDS epidemic and the human rights movement<sup>(27)</sup>. Regarding the individual plan, vulnerability is basically related to personal behaviors and attributes that condition the possibility of infection prevention. Vulnerability is linked to cognitive aspects (knowledge of the epidemic, information about it, attitudes and perceptions of risk), feelings (such as fear) and behaviors related to the disease (behavioral intention, attitude towards the condom, sexual habits and experiences, behaviors risky). Approximation of the concept of vulnerability is that of risk, which refers more specifically to the possibility of contamination<sup>(28)</sup>. The fact that students do not use condoms in their long-term relationships and that the partner's trust factor becomes a vulnerability.

Contraceptive methods are a topic of great relevance, especially in adolescence. It should be considered its social importance that confers on the occurrences of pregnancy in this age group and possibility of exposure to STIs. Knowledge about these methods and the risks of unprotected sexual intercourse is essential for adolescents to be able to experience their sexual lives in an appropriate and healthy way, thus ensuring the prevention of unwanted pregnancies and STIs(29).

University students use condoms more than non-university students, in other words, individuals with higher education are more likely to use contraceptive methods(30). The knowledge acquired during life is in the family or school environment, is the responsible factor in boosting the decision making in the self-care. We can see in the speeches of undergraduate Nursing students, who put knowledge as the main responsible for the action of self-care. Without the knowledge acquired the conduct would be inefficient.

It should also be noted that "there is greater evidence of vulnerability among young people as they go through experiences at a stage in life where biological, social and economic transformations occur more intensely"(31).

Adolescence is a phase of life where the individual is in the process of learning, is more open than adults to adopt new behaviors, which justifies the person under 20 years of age to be considered a priority public for education in health<sup>(32)</sup>. The

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level of knowledge about STIs is not enough for a person to take protective actions, but the lack of basic information ultimately contributes to increased vulnerability(33). The construction of knowledge is not limited to informational issues, but involves individual perception of the problem, understanding and the ability to interpret information.

In relation to the dissemination of knowledge, the students of the final stages of the course stated that this attitude of propagating the learning in a way that helps in the prevention of diseases is more intertwined with the Primary Health Care.

Nursing plays a fundamental role in identifying the care needs of the population, as well as the promotion and protection of the health of individuals in their different dimensions of care. Nursing is considered as a science of comprehensive and integrated care in health, both in order to assist and coordinate the practices of care, as well as in the sense of promoting and protecting the health of individuals, families and communities (34).

## **Study limitations**

In relation to the limitations of the study, we associate the lack of time to perform a review in the curriculum of the undergraduate Nursing course of Universidade Federal de Santa Catarina to identify where the theme is inserted throughout the course five years of the course.

#### **Contributions to the sector of Nursing**

The study developed has great scientific, social, academic and health care relevance in terms of promotion and prevention of Sexually Transmitted Infections. The study also makes it possible to understand how students deal with the issues of their sexual life, as well as their knowledge and self-care about the subject, and to alert the importance of approaching the theme in the various phases of the undergraduate Nursing course.

## **FINAL CONSIDERATIONS**

Regarding Sexually Transmitted Infections, we can identify the importance of learning from childhood, which can happen with family members or at school. The best result we can achieve in terms of sufficient knowledge to drive self-care actions is the articulation of these two factors. The more knowledge gained the greater the chance of preventive actions in relation to sexual health.

The actions of self-care are connected with the knowledge of how to take care. Knowledge about risks can prevent situations of vulnerability and increase the chances of potentialities.

Nursing students at the undergraduate Nursing course of Universidade Federal de Santa Catarina seem to understand the importance of knowledge about the subject as a way to protect and prevent sexually transmitted infections and also believe that this knowledge makes a difference in sexual health.

The knowledge they acquired during life and graduation become important not only in self-care but also in caring for others. The dissemination of knowledge as a form of health promotion becomes evident as these students progress through stages in the undergraduate and accumulate knowledge on the subject.

Although it is possible to identify that knowledge is a transforming topic and that it assists in self-care actions, we have verified many statements related to trust in the partner. Many students say that being in a serious relationship ends up becoming a factor that prevents/discourages them from using condoms in sexual relationships, considering trust and love as a protective factor, a mistake still very much present in our society.

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