

Risky sexual behavior in American continent college students

DOI: 10.46932/sfjdv3n2-074

Received in: February 15th, 2022

Accepted in: March 1st, 2022

Tomasa de Los Angeles Jimenez Pirron

President of the bioethics committee, PTC of biochemistry

Doctor in Educational Technologies

Institution: Universidad Autónoma de Chiapas, Facultad de Medicina Humana

Address: Dr. Manuel Velasco Suárez C-II ,Calle central entre 10 y 11 sur Zip: 29090

Correo electrónico: angeles_pirron@hotmail.com

Sonia Rosa Roblero Ochoa

Dr. in Health Sciences. PTC immunology

Institution: Universidad Autónoma de Chiapas, Facultad de Medicina Humana

Address: Dr. Manuel Velasco Suárez C-II ,Calle central entre 10 y 11 sur Zip: 29090

E-mail: sroblero1504@hotmail.com

Zally Patricia Mandujano Trujillo

Prof. In Education in Health Sciences

PTC anatomy and physiology

Institution: Universidad Autónoma de Chiapas, Facultad de Medicina Humana

Address: Dr. Manuel Velasco Suárez C-II ,Calle central entre 10 y 11 sur Zip: 29090

E-mail: zallym@hotmail.es

Rosa Martha Velasco Martínez

Dr. in Health Sciences. PTC Nutrition

Institution: Universidad Autónoma de Chiapas, Facultad de Medicina Humana

Address: Dr. Manuel Velasco Suárez C-II ,Calle central entre 10 y 11 sur Zip: 29090

E-mail: oro_vel@hotmail.com

Itzel Castro Padilla

Physician

Proffesor of biochemistry

Institution: Universidad Autónoma de Chiapas, Facultad de Medicina Humana

Address: Dr. Manuel Velasco Suárez C-II ,Calle central entre 10 y 11 sur Zip: 29090

E-mail: Itzel.castro@unach.mx

Victor Arturo Dichi Aguero

Physician, TUM

Proffesor of Public Health

Coordinator of the medical simulation área

Institution: Universidad Autónoma de Chiapas, Facultad de Medicina Humana

Address: Dr. Manuel Velasco Suárez C-II ,Calle central entre 10 y 11 sur Zip: 29090

E-mail: victor.dichi@unach.mx

ABSTRACT

Introduction: Sexuality is determined by multiple factors. The knowledge and perceptions of the individual's environment will determine their behavior in this regard. Identifying the perceptions in a population that attends higher education is important to carry out specific prevention activities, since the repercussions of their sexual behavior are decisive for the public health of populations. **Objective:** Determine what are the perceptions and the main sexual risk behaviors in American university students. **Method:** Systematic review. The search was carried out in the Cochrane, Medigraphic and PubMed databases with the search words sexual behavior, college students, finding 25,821 results, filtered by language (English or Spanish), access to full text, year of publication (2016-2021), geographic area (American continent) and sample (university population), resulting in n=12 articles. **Results:** most of the authors agree that American university students, despite having knowledge regarding sexuality and Sexually Transmitted Infections (STIs), do not carry out preventive actions, with a beginning of sexual life approximately at the age of fifteen and multiple partners. simultaneous; condom use is predominant as a method of family planning and sexting as a risky sexual behavior has become more important in recent years. **Conclusions:** the high prevalence of risk behaviors and the low use of diagnostic tests supports the fact that America is one of the continents with the most annual diagnoses of STIs in the world, with consequences that can be of varying severity and even fatal.

Keywords: sexual behavior, university students, perceptions of sexuality.

1 INTRODUCTION

Perception is recognized as an "inner sensation resulting from ideas or *knowledge obtained from the bodily senses*" (Real Academia de la Lengua Española S.F.). These mental representations of external reality will lead to behaviors (Oviedo, 2004). Under this concept, the perception of an individual is given by the stimuli that surround him and the reality in which he is situated will give rise to specific perceptions and behaviors.

Issues related to sexuality, perceptions and behaviors can impact the life and development of the human being in different spheres, factors such as geographic space, availability of natural resources and sanitation, limited access to economic resources and social conditions such as poverty, educational level, inequity and discrimination determine the reality of individuals, predisposing them to attitudes and behaviors that are not always positive or beneficial, such as unwanted pregnancies, STIs, health complications such as infertility, maternal-fetal morbidity and mortality, susceptibility to various cancers, emotional disorders, social stigmas and increased risk of contracting the Human Immunodeficiency Virus (HIV). Even 7-9% of total annual mortality is related to this type of disease. (World Health Organization [WHO], 2022).

Among the behaviors considered to be of greater risk in the sexuality of individuals, we find the lack of attachment or incorrect use of contraceptive methods, promiscuity and low knowledge of basic concepts in reproductive health. This can be seen reflected in indicators such as adolescent fertility in some countries like México, where the rate in women aged 15 to 19 is 73/1,000 inhabitants (the world

rate is 40/1,000). This high figure has been related to educational lag and lack of access to health services (Gómez and González, 2018). It is important since those women who have children before finishing their higher education usually do not complete them, in addition to the fact that they often become socially rejected. In general, these young women belong to a low socioeconomic stratum, to rural areas or to indigenous groups. It has also been documented that the early start of an active sexual life, as well as the lack of knowledge of contraceptive methods, is usually more common in men (Villalobos et al, 2017). Thus, although the male condom is the most commonly used, many users believe that it can be reused or are unaware that STIs protect them (Rojas et al, 2017).

When it comes specifically to STIs, the groups considered most vulnerable by the WHO are mobile populations, homeless people (especially children and adolescents), people with drug addiction, those who live in unrest areas and prisoners. This is why the distribution of communicable diseases is greater in regions with low socioeconomic resources, estimating that for 2012, of the 357 million people with STIs, the vast majority were located in the Western Pacific area (142 million), the area of the Americas (64 million) and the area of Africa (63 million), with trichomoniasis, gonorrhea and chlamydia being the most frequent. Among viral STIs, the predominant ones are those caused by herpes simplex virus, human papillomavirus (HPV), and HIV (WHO, 2016).

The perception of sexuality that young people have greatly determines their health and their development possibilities. In addition, the multiple consequences on reproductive health that risk behaviors translate into also represent a public health problem. The present analysis exposes the findings in this matter only in university students, since, due to their educational level, better knowledge and practices would be expected, despite this, the environment in which they operate continues to be considered as risky due to the geographical area where they reside. Identifying the problem at this level of studies will help implement interventions that promote the acquisition of greater knowledge and, therefore, better opportunities for students.

2 OBJECTIVE

Determine what are the perceptions and the main sexual risk behaviors in American university students.

3 METHODOLOGY

Systematic review. Articles published in the period 2016-2021 were selected, with the keywords perception, sexual behavior, university students, sexual behavior, college students, in the Cochrane, Medigraphic and PubMed search engines, finding n=25821. The search included titles, abstracts and

keywords: sexual behavior, perceptions of sexuality, university students. The selected articles were published from January 1, 2016 and updated for the last time on December 25, 2021.

3.1 SELECTION CRITERIA

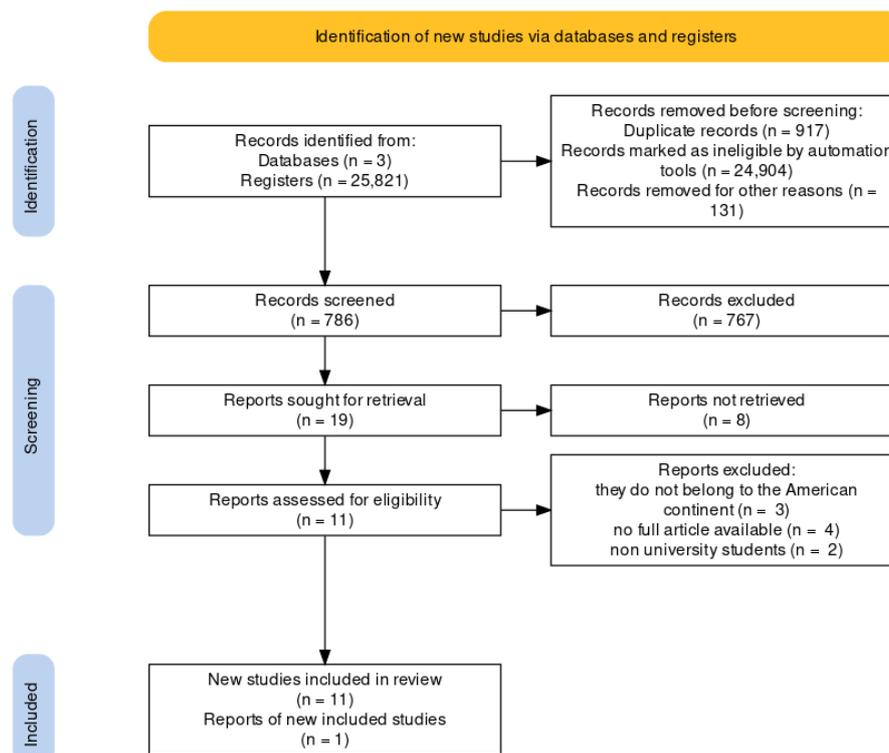
Only scientific studies that addressed the indicated topic were considered, specifying: a) sample of university students b) belonging to the American continent c) availability of full article d) study available in indexed and refereed journals.

3.2 SELECTION OF ARTICLES

Only those carried out in the American continent and in the English or Spanish languages were selected, finding $n=786$ records, then the summary or abstract was read and if there was any doubt about its usefulness, the article was read in its entirety. Replicates were eliminated, those that did not allow complete access and those whose sample did not correspond to university students or the designated geographic area (America), subtracting $n=11$, adding $n=1$, reference of one of the articles analyzed, the processes of selection were detailed with the help of the online diagramming tool PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses), this is represented in Figure 1. The type of article, year and country of realization are specified in the Table 1.

3.3 ANALYSIS OF DATA

The review of the articles by title and abstract was carried out by TAJP and ICP, later the rest of the authors verified the usefulness of the selected articles. The samples and methodology of each study are different; the topic addressed may have multiple points of view given the geographical area in which it was carried out, so it was decided not to carry out a quantitative analysis.



4 RESULTS

Table 1 presents the articles selected in this study.

Table 1. Selected Articles

Article	Year	Methodology	Country	Autor
Conocimientos sobre VIH/sida, percepción de riesgo y comportamiento sexual en estudiantes universitarios.	2016	Descriptive	Cuba	Rosabal et al.
Conocimiento sobre el VIH/Sida en estudiantes de Odontología de la Universidad de Guayaquil	2017	Descriptive	Ecuador	Real et al.
Conductas sexuales de riesgo en adolescentes estudiantes de primer año de pregrado de la Universidad San Sebastián: Estudio transversal	2017	Descriptive	Chile	Bouniot et al, 2017
Sexual risk behavior differences among sexual minority high school students — united states, 2015 and 2017	2018	Descriptive	E. U	Rasberry et al.
Salud sexual y reproductiva en universitarios	2018	Descriptive	México	Mandujano et al.
Conductas sexuales de riesgo y actividades preventivas frente al cáncer de cuello uterino en mujeres universitarias vacunadas frente al VPH	2018	Descriptive	México	Fernández et al.
Conducta sexual y realización de la prueba del virus de la inmunodeficiencia humana en jóvenes que estudian en la universidad en cuzco (Perú)	2018	Descriptive	Perú	Paz et al.
Self-perception of self-care skills in university students concerning chronic diseases	2019	Correlational	México	Rivas et al.
Risky sexual behavior and associated factors in undergraduate students in a city in southern Brazil	2019	Descriptive	Brasil	Dalmas et al.
Associations among negative urgency, sensation seeking, alcohol use, self-esteem, and casual sexual behavior for college students	2019	Correlational	E. U	Longo et al.

Diferencias en los estilos de negociación sexual y autoeficacia en el uso del condón en hombres y mujeres universitarios de Querétaro, México, 2018	2020	Descriptive	México	Palacios y Ortega
Impulsividad, consumo de alcohol y conductas sexuales riesgosas en estudiantes universitarios	2021	Correlational	Argentina	Leonangeli et al.
Construcción y validación de tres instrumentos para evaluar sexting en jóvenes mexicanos	2021	Correlational	México	Quezada y Robles

4.1 RISKY SEXUAL BEHAVIOR

Longo et al (2019) found that sexual impulsiveness is associated with alcohol consumption and low self-esteem in university students, just like Gräf et al (2020), those with high self-esteem have fewer behaviors associated with casual sex. Still, almost half of its population have sexual encounters with people who are not their romantic partners, and a quarter have had sex with strangers. In general, males perform sexual acts with strangers more frequently (Bouniot et al, 2017). In some studies, the average number of sexual partners in university students is 3 (Palacios and Ortego, 2020), without considering their sexual orientation.

According to the findings by Rasberry et al (2018), sexual orientations other than heterosexuality are minorities with a high risk of STIs and a high prevalence of risky sexual behaviors. In addition, they reported that among the university students studied, those who were not sure of their sexuality or were bisexual began their sexual life more frequently before the age of thirteen, had more than four sexual partners, and had never had diagnostic tests for HIV. In this last aspect, in some Latin American populations the percentage of carrying out these tests is higher, due to having had unprotected sexual acts or due to the intention of donating blood (Gräf et al, 2020), despite this, another study in university students of the medical degree showed much lower percentages, although they are aware of engaging in risky sexual behaviors, they did not consider it necessary to carry out said test (Mandujano et al, 2018).

The risk behaviors described above were more frequent in women than in men. Contrary to what was found in non-heterosexuals, risk behaviors tend to be more frequent in men than in women (Longo et al, 2019; Gräf et al, 2020). The age of onset of sexual life in Latin American university populations is usually less than or equal to 15 years (Palacios and Ortego, 2020; Gräf et al, 2020; Fernández et al, 2018). As for the type of sexual relations performed, the most frequent are usually vaginal and oral (Palacios and Ortego, 2018; Bouniot et al, 2017). In general, anal intercourse occurs in just under a fifth of the sexually active population (Palacios & Ortego, 2020; Gräf et al, 2020).

Sexting, defined as the action of creating and distributing sexually explicit content, has gained strength in recent years as risky sexual behavior (Courtice & Shaughnessy, 2021). Given the changes to daily life caused by the pandemic, this way of sharing sexuality has been popular among young people, according to what was found by Quezada and Robles (2021) and Gräf et al (2020), more than three

quarters of the population studied have practiced sexting, with women being the transmitters and men the receivers; all of the latter received and sent explicit sexual content. 2% of the recipients of these contents were someone considered trustworthy and at least 7% had their material leaked. These behaviors attract attention given that their filtration without the consent of the author can imply legal repercussions for those who spread them and problematic emotional disorders for those who are exposed, considering it cyber bullying. (Fajardo et al, 2013; Courtice and Shaughnessy, 2021).

4.2 USE OF BARRIER CONTRACEPTIVE METHODS

One of the main behaviors found was the lack of adherence to the use of condoms to avoid pregnancy and not to avoid STIs (Real et al, 2017; Dalma et al, 2019, Rasberry et al 2018). According to what was found by Rosabal et al (2016), less than half of university students used a condom in their first sexual relationship, with more than two sexual partners in the year, this was also observed in the study by Mandujano et al (2018). Homosexual or bisexual women tend to use condoms less often than men (Rasberry et al, 2018). These results are similar to those found by Gräf et al (2020), Mandujano et al (2018) and Bouniot et al (2017), who found that almost half of the students did not use a condom in their last sexual encounter and a quarter of them have more than one sexual partner simultaneously.

In another Latin American population, it was observed that women who do not have HPV immunization tend to engage in risky sexual behaviors with relative greater frequency, not using a condom with a new partner, for example (Fernández et al, 2018). Despite this, women are usually the ones who request the use of a condom and avoid sexual intercourse if their partner does not want to use it (Palacios and Ortego, 2020).

4.3 USE OF FAMILY PLANNING METHODS

Some university students only identify the male condom and pills (without being able to specify which one) as family planning methods (Real et al, 2017). Among those who are bisexual, the use of sexual planning methods is low, despite having partners of the opposite sex (Rasberry et al, 2018).

The most used planning method is pills, followed by coitus interruptus; the percentage of use of family planning methods in certain populations is less than 50% (Gräf at al, 2020). It is common for the condom to be the most used method since it is identified by students as the safest to avoid pregnancy (Mandujano et al, 2018), followed by abstinence. Women are the ones who report using this type of therapy more frequently, despite the low percentages (Bouniot et al, 2017).

4.4 KNOWLEDGE ABOUT RISK BEHAVIORS

Regarding the perception of self-care in their sexual behavior, Rivas et al (2019) found that nutrition and medicine students showed a better self-perception than those of biology and nursing, these results are similar to those obtained by Mandujano et al (2018) who found that medical students consider themselves to have high knowledge on this subject, despite this, almost half of them reported having irresponsible behavior, similar to that declared by Cuban university students in the study by Rosabal et al (2016), who described that three quarters of the population perceived themselves as irresponsible in the self-care of their reproductive health.

5 DISCUSSION

The review carried out suggests how multiple factors can condition or promote risky attitudes and behaviors, among them, the emotional state is usually linked to self-esteem and self-care, which has been a relevant factor already studied in the literature (Auquilla, 2021), pointing out that those belonging to dysfunctional homes are more susceptible to emotional disorders, have a higher risk of STIs and unwanted pregnancies, and even tend to start their sexual life at an early age. This last risky behavior was found by multiple authors in this review (Longo et al, 2019; Palacios and Ortego, 2020; Gräf et al, 2020; Fernández et al, 2018).

Regarding alcohol consumption linked to sexual impulsivity, this relationship has also been documented in university students from other countries (Saeteros et al, 2013), not only being related to performing the sexual act without a condom, but also increasing the frequency of sexual abuse in women , most carried out by men (Redondo et al, 2021). Behaviors such as having casual sex (including encounters with sex workers) have been found more frequently in men (Saeteros et al, 2013), which coincides with the literature analyzed. In studies carried out in the last two decades, similar results were found in terms of inconsistency in condom use, a greater probability of not using it in relation to alcohol intake and the presence of multiple sexual partners (Desiderato and Crawford, 1995; Caico, 2014), as well as what was found in this review.

With reference to sexting, it has been pointed out that its high frequency predicts risky sexual behaviors in young people (Hicks et al, 2021). Although it can currently be considered as a way of coping with the lack of physical contact, its high prevalence has a diverse underlying problem (Mestre et al, 2020), since it not only influences areas such as identity and sexual behavior, but also also in legal matters ranging from cyberbullying to distribution of illegal content, in addition to being related to emotional disorders (Barrense et al, 2017; Raine et al, 2020). According to what was found, this practice is frequent in the American population and its repercussions can be observed in the short term, since its frequency

has increased along with the advancement of technology and the needs of the population in the context of the current pandemic. (Ibarra et al, 2020), in a review on the subject, prior to the appearance of the pandemic (Hicks et al 2017), the prevalence of its practice was 30 percentage points lower.

Misconceptions regarding HIV are common, the stigmas related to this disease are still common even among health personnel (Solis et al, 2020), a situation due to ignorance concerning its transmission routes, a fact supported by the data reported by Rosabal et al, 2016. In Asian university students, it has been detected that despite having the possibility of performing diagnostic tests for HIV, they decide not to do them; this is linked to insufficient knowledge about prevention and open sexual attitudes (Yang et al, 2021). In the case of Latin American students, the situation is similar.

Male college students who engage in casual sexual behavior have a high degree of openness in sexual attitudes. Only a third of Asian university students who have casual sex use a condom in all their encounters, which is alarming given the high possibility of STI infections (Yang et al, 2021), this percentage is lower than what was found in most of the American literature considered in this analysis (Real et al, 2017; Dalma et al, 2019; Rasberry et al 2018; Rosabal et al, 2016; Bouniot et al, 2017), despite this, sexual minorities generally have more open positions about sexuality, it can also be considered as a similar case in what was found by Yang et al (2021) in this aspect.

It is usually women who present greater self-care and self-efficacy for the prevention of STIs (Palacios and Ortego, 2020), this fact has already been previously documented by other authors (Herrera et al, 2013). In addition, as in the present analysis, the literature agrees that it is women who most frequently declare using some family planning method, the most frequent being the condom and the pill (Saeteros et al, 2013).

A common finding in this analysis corresponded to university students who do not consider that they have risky sexual attitudes despite carrying out these practices (Gräf et al, 2019; Fernández et al, 2018, Mandujano et al, 2018), this fact is similar to what was found in Nigerian students, although this last study contemplates a population of lower age and educational level (Odeigah et al, 2019). In another study carried out in Mexico, it was found that at an older age and after having started their sexual life, they tend to have greater knowledge on this subject.

Knowledge of STIs was considered high, according to the autoperception of American students, however, few decide to undergo diagnostic tests. This has also been pointed out by other authors, pointing out that the majority of university students who have high knowledge on this subject are those who have already been diagnosed with an STI (Wayas et al, 2019; Balan et al, 2019), in addition, in other populations, high knowledge is associated with greater performance of diagnostic tests, different from what was found in American populations. In a study carried out in France in adolescents, it was found

that low knowledge regarding sexuality and STIs is related to little parental communication, low socioeconomic level of parents and lack of health education. Considering multiple countries, making assertions regarding the socioeconomic status of those studied or the educational level of their parents is not possible.

6 CONCLUSIONS

- According to the literature university students are not a specific risk group, however risky sexual behaviors are highly prevalent in this group, which supports the fact that America is one of the continents with the highest diagnosis of STIs in the world and their respective consequences can be of varying severity and even fatal.

- Risky sexual behaviors are more frequent in men and among those who consume alcohol and can often be related to emotional disorders

- It is common to find that university students have more than one sexual partner simultaneously

- The onset of active sexual life in American university students is approximately 15 years old

- Women tend to have more behaviors associated with self-care in their sexuality and to seek the use of family planning methods

- The contraceptive method of choice among American college students is condoms and birth control pills. Despite this, the frequency with which they are used is low, which increases the risk of unwanted pregnancies and STIs. The most common type of sexual intercourse is vaginal.

- The sexual behavior of minorities should be studied in greater depth, since they have been detected as a population at risk, by observing an earlier start of sexual life and lack of adherence to contraceptive measures and protection during the sexual act.

- In the current context, sexual practices that involve technologies are frequent and have multiple repercussions, raising the risk of suffering from emotional disorders and developing risky sexual behaviors and even of having legal responsibilities for their use and distribution. It is important that users know these repercussions in order to execute these practices or reduce them if necessary.

- Access to diagnostic tests should be simplified and increased, conducting awareness campaigns could greatly help reduce the impact of risky sexual behavior on public health

- Despite the fact that most students consider they have a high level of knowledge regarding sexuality and STIs, many of them fail to identify the risky sexual behaviors they carry out, nor do they carry out preventive or diagnostic actions, according to the behaviors of other populations with high knowledge on the subject, in other countries.

REFERENCES

- Aquilla, F. (2021). Funcionamiento familiar en relación con la conducta sexual de riesgo en adolescentes: Una revisión integradora de la literatura. *South Florida Journal Of Development*, 2(2), 3700-3716. <https://doi.org/10.46932/sfjdv2n2-208>
- Balán, I., Lopez-Rios, J., Dolezal, C., Rael, C. T., Lentz, C. (2019). Low sexually transmissible infection knowledge, risk perception and concern about infection among men who have sex with men and transgender women at high risk of infection. *Sexual health*, 16(6), 580–586. <https://doi.org/10.1071/SH18238>
- Barrense Y., Berchtold A., Surís J., Akre C. (2017). Sexting and the Definition Issue. *J Adolesc Health*. 2017 Nov;61(5):544-554. doi: 10.1016/j.jadohealth.2017.05.009. Epub 2017 Jul 19. PMID: 28734631.
- Bouniot, S., Muñoz, C. A., Norambuena, N., Pinto, C., Muñoz, M. (2017). Conductas sexuales de riesgo en adolescentes estudiantes de primer año de pregrado de la Universidad San Sebastián: Estudio transversal. *Revista Colombiana De Obstetricia Y Ginecología*, 68(3), 176-185. <https://doi.org/10.18597/rcog.2799>
- Caico, C. (2014). Sexually Risky Behavior in College-Aged Students. *Open Journal of Preventive Medicine*. 04. 354-364. 10.4236/ojpm.2014.45043.
- Courtice, E. L., & Shaughnessy, K. (2021). Four Problems in Sexting Research and Their Solutions. *Sexes*, 2(4), 415–432. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/sexes2040033>
- Desiderato, L., & Crawford, H. (1995). Risky sexual behavior in college students: Relationships between number of sexual partners, disclosure of previous risky behavior, and alcohol use. *Journal Of Youth And Adolescence*, 24(1), 55-68. doi: 10.1007/bf01537560
- Enfermedades Transmisibles - OPS/OMS | Organización Panamericana de la Salud. (2022). Recuperado el 14 de febrero de 2022, de <https://www.paho.org/es/temas/enfermedades-transmisibles>
- Fajardo, M., Gordillo, M., Regalado, A (2013). Sexting: nuevos usos de la tecnología y la sexualidad en adolescentes. *International Journal of Developmental and Educational Psychology*, 1(1),521-533.
- Fernández, A., Antón, R., & Paz, M. (2018). Conductas sexuales de riesgo y actividades preventivas frente al cáncer de cuello uterino en mujeres universitarias vacunadas frente al VPH. *Atención Primaria*, 50(5), 291-298. <https://doi.org/10.1016/j.aprim.2017.05.007>
- Gómez, O., & González, K (2018). Fecundidad en adolescentes y desigualdades sociales en México, 2015. *Revista panamericana de salud pública*. 42, e99. <https://doi.org/10.26633/RPSP.2018.99>
- Gräf, D. D., Mesenburg, M. A., & Fassa, A. G. (2020). Risky sexual behavior and associated factors in undergraduate students in a city in Southern Brazil. *Revista De Saúde Pública*, 54, 41. <https://doi.org/10.11606/s1518-8787.2020054001709>
- Grondin, C., Duron, S., Robin, F., Verret, C., & Imbert, P. (2013). Connaissances et comportements des adolescents en matière de sexualité, infections sexuellement transmissibles et vaccination contre le papilloma virus humain: résultats d'une enquête transversal dans un lycée [Adolescents' knowledge and behavior on sexuality, infectious transmitted diseases, and human papilloma virus vaccination: results of a survey in a French highschool]. *Archives de pediatrie :organe officiel de la Societe francaise de pediatrie*, 20(8), 845–852. <https://doi.org/10.1016/j.arcped.2013.05.012>

Herrera, A., Arriaga, C., & Conde, C. (2013). Conocimiento sobre el virus herpes simple tipo 2 y virus del papiloma humano, y percepción de riesgo a adquirir las infecciones entre estudiantes universitarios. *Gac Med Mex.*, 149(1), 16-26.

Hicks, M., Kernsmith, P., & Smith-Darden, J. (2021). Does sexting predict sexual behaviors among adolescents? Gender and race effects. *Journal of adolescence*, 93, 126–133. <https://doi.org/10.1016/j.adolescence.2021.10.010>

Ibarra, F. P., Mehrad, M., Di Mauro, M., Godoy, M., Cruz, E. G., Nilforoushzadeh, M. A., & Russo, G. I. (2020). Impact of the COVID-19 pandemic on the sexual behavior of the population. The vision of the east and the west. *International braz j urol: official journal of the Brazilian Society of Urology*, 46(suppl.1), 104–112. <https://doi.org/10.1590/S1677-5538.IBJU.2020.S116>

Longo, L. M., Ertl, M. M., Paziienza, R., Agiliga, A. U., Dillon, F. R., & Martin, J. L. (2020). Associations among Negative Urgency, Sensation Seeking, Alcohol Use, Self-Esteem, and Casual Sexual Behavior for College Students. *Substance use & misuse*, 55(5), 796–805. <https://doi.org/10.1080/10826084.2019.1703748>

Mandujano, Z., Jiménez, T., & Maza, A. (2018). Salud sexual y reproductiva en estudiantes universitarios. *Congreso Mesoamericano De Investigación Chiapas*, 10(1), 183-186.

Mestre-Bach, G., Blycker, G. R., & Potenza, M. N. (2020). Pornography use in the setting of the COVID-19 pandemic. *Journal of behavioral addictions*, 9(2), 181–183. <https://doi.org/10.1556/2006.2020.00015>

Odeigah, L., Rasaki, S., Ajibola, A., Hafsat, A., Sule, A., & Musah, Y. (2019). High risk sexual behavior among adolescent senior secondary school students in Nigeria. *African Health Sciences*, 19(1), 1467. <https://doi.org/10.4314/ahs.v19i1.20>

Organización Mundial de la Salud. (2016). Estrategia mundial del sector de la salud contra las infecciones de transmisión sexual 2016-2021 [Ebook] (1ª ed., pp. 9-16). Suiza. Obtenido de <https://www.who.int/es/publications/i/item/WHO-RHR-16.09>

Oviedo, G. (2004). La definición del concepto de percepción en psicología con base en la Teoría Gestalt. *Revista de Estudios Sociales*, (18), 89-96.

Palacios, J., & Ortego, N. (2020). Diferencias en los estilos de negociación sexual y autoeficacia en el uso del condón en hombres y mujeres universitarios de Querétaro, México, 2018. *Revista Colombiana De Obstetricia Y Ginecología*, 71(1), 9-20. <https://doi.org/10.18597/rcog.3327>

Percepción. (2022). Recuperado el 14 de febrero de 2022, de <https://dle.rae.es/percepci%C3%B3n>

Quezada, R., & Robles, S. (2021). Construcción y validación de tres instrumentos para evaluar sexting en jóvenes mexicanos. *Revista Electrónica De Psicología Iztacala*, 24(2), 743-744.

Raine, G., Khouja, C., Scott, R., Wright, K., & Sowden, A. (2020). Pornography use and sexting amongst children and young people: a systematic overview of reviews. *Systematic reviews*, 9(1), 283. <https://doi.org/10.1186/s13643-020-01541-0>

Rasberry, C., Lowry, R., Johns, M., Robin, L., Dunville, R., & Pampati, S. et al. (2018). Sexual Risk Behavior Differences Among Sexual Minority High School Students — United States, 2015 and 2017. *MMWR. Morbidity And Mortality Weekly Report*, 67(36), 1007-1011. <https://doi.org/10.15585/mmwr.mm6736a3>

Real, J., González, J., Irrazabal, A., Ramírez, J., Roby, A., & Hernández, M. (2017). Conocimiento sobre el VIH/Sida en estudiantes de Odontología de la Universidad de Guayaquil. *EDUMECENTRO*, 9(4), 6-18.

Redondo, S., Amezcua, C., Suarez, M., Ayán, C., Mateos, R., Martín, V., . . . Fernández, T. (2021). Experiencias declaradas de conductas sexuales de riesgo en relación con el consumo de alcohol en el primer año de universidad. *Revista Española de Salud Pública*, 95.

Rivas, J., Valencia, A., Verde, E., Correa-, E., Aguilera, M., & Feliciano, M. (2019). Autopercepción de capacidades de autocuidado en estudiantes universitarios sobre enfermedades crónicas, sexualidad y adicciones. *Rev Enferm Inst Mex Seguro Soc*, 2(27), 64-72.

Rojas, R., de Castro, F., Villalobos, A., Allen-Leigh, B., Romero, M., Braverman-Bronstein, A., & Uribe, P. (2017). Educación sexual integral: cobertura, homogeneidad, integralidad y continuidad en escuelas de México. *Salud Pública De México*, 59(1, ene-feb), 19-27. <https://doi.org/10.21149/8411>

Rosabal, E., Soler, Y., Pérez, R., López, E., & Leyva, V. (2016). Conocimientos sobre VIH/sida, percepción de riesgo y comportamiento sexual en estudiantes universitarios., 20(1), *Revista Médica Multimed*.

Saeteros, R., Pérez, J., & Sanabria, G. (2013). Vivencias de la sexualidad en estudiantes universitarios. *Revista Cubana De Salud Pública*, 39(5), 915-928.

Solís, O., Aguiar, L., Pérez, B., Flores, R., & Mendoza, V. (2020). Conocimientos, actitudes y prácticas de los profesionales de la salud ante el VIH/SIDA en el primer nivel de atención. *South Florida Journal Of Development*, 1(4), 221-229. <https://doi.org/10.46932/sfjdv1n4-006>

Villalobos, A., De Castro, F., Rojas, R., & Allen, B. (2017). Anticoncepción en adolescentes mexicanos de escuelas del nivel medio superior: uso y necesidades insatisfechas. *Salud Pública De México*, 59 (5, sep-oct), 566. doi: 10.21149/8481

Wayal, S., Reid, D., Weatherburn, P., Blomquist, P., Fabiane, S., Hughes, G., & Mercer, C. H. (2019). Association between knowledge, risk behaviours, and testing for sexually transmitted infections among men who have sex with men: findings from a large online survey in the United Kingdom. *HIV medicine*, 20(8), 523–533. <https://doi.org/10.1111/hiv.12753>

Yang Z., Chen W., Jin M., Chen W., Chen L., Zhou X (2021) Analysis of factors influencing casual sexual behavior among male college students in Zhejiang Province, China. *PLoS ONE* 16(5): e0250703. <https://doi.org/10.1371/journal.pone.0250703>.