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Sexually Transmitted Diseases Among Students in Western Illinois University, Macomb

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Abstract

Sexually transmitted diseases (STDs) remain a significant public health problem in the United States, especially among college students. The sexually transmitted disease is used to refer to an infection spread from one individual to another through sexual contact. Sexually transmitted diseases may be most often, but not exclusively spread by sexual intercourse. It can also be spread by birth (mother to child) or with the use of needles. Western Illinois University (WIU) is a public university. It has two campuses: Moline, IL (Quad cities) and Macomb, Illinois, United States. It was founded in 1899 and is located at 1 University Circle, Macomb, IL 61455 (WIU, 2019). Western Illinois University's main campus is in the rural community of Macomb, Illinois, and offers a college program experience for almost 8,000 students. This research study makes use of both primary and secondary data to generate data. The primary data involves the use of a survey while secondary data will be generated from the Center for disease control, Western Illinois University Beau Health center, and World Health Organization. These sources are reliable because the method of data collection is consistent. Furthermore, these centers are trusted to give an accurate representation of statistics among students that present for the screening and the infected population. Monitoring and summative evaluation results due to the limited resources of the program. The program will be tailored to address sexually transmitted disease(s) by dealing with the highest pressing issues presented by the members.

Keyworas: SIDS; W	10; Macomb; Condon	ns.
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1. Introduction

Sexually transmitted diseases (STDs) remain a significant public health problem in the United States, especially among college students [12]. The sexually transmitted disease is used to refer to an infection spread from one individual to another through sexual contact. The sexually transmitted disease may be most often, but not exclusively spread by sexual intercourse. It can also be spread by birth (mother to child) or with the use of needles [13]. Different types of STDs exist. The causative agents of these STDs include bacteria (chlamydia, gonorrhea, and syphilis), virus (HIV, genital herpes, genital warts, human papillomavirus, and hepatitis B), and pathogen (trichomoniasis). The germs that cause STDs to disguise in semen, blood, vaginal secretions, and occasionally saliva [19]. Most of the organisms are spread through vaginal, anal, or oral sex. However, some that cause genital herpes and genital warts, can be spread through pores and skin contact [19]. Sexually transmitted diseases are a vital global health priority because of their devastating impact on college kids. In 2000, approximately 18.9 million new cases of STD occurred, of which 9.1 million (48%) were among young adults aged 15-24. 88% of these cases of STDs occurred among 15-24-year-old due to human papillomavirus, trichomoniasis, and chlamydia [20].

Students need to be aware of the importance of these STDs. This is because social stigma and lack of public awareness concerning STDs often discourage frank discussion between healthcare promoters and patients about STDs. Furthermore, college kids fall into the age bracket with the highest prevalence of STDs in America [1].

1.1. Details About Community

Western Illinois University (WIU) is a public university. It has two campuses: Moline, IL (Quad cities) and Macomb, Illinois, United States. It was founded in 1899 and is located at 1 University Circle, Macomb, IL 61455 [21]. Western Illinois University's main campus is in a rural community and offers a college program experience for almost 8,000 students. As of fall 2019, the total student enrollment in the Macomb campus was 7624, which constitutes 1666 graduate students and 5958 undergraduate students [21]. The school has more than 60 buildings on more than 1,000 acres, including seven residence halls, a 300-acre farm, and an 18-hole golf course. The Macomb community and University community are closely interspersed and work together to create a safe environment for everyone to learn and grow. Residence hall facilities provide nearly 4,000 students with living and dining services. All residence halls are smoke-free, and rooms are wired to local area networks and wireless internet. Many off-campus housing possibilities are also available and open to graduate students. The school has a main library. The provides an inviting environment for research and study. The Macomb campus also has specialized branch libraries for music and curriculum. The library is open for students until midnight [21]. The Macomb campus has a recreation center. This center offers a variety of fitness opportunities, intramural sports programs, and club sports. The recreation center is also open for other opportunities that allow student involvement include, including leadership development, volunteer services, student programming, student government association, fraternities, and sororities, and over 250 student originations [21]. The school has a Union building. The Union building is the community center of the Macomb campus and provides a variety of meeting and dining facilities. Services available at the Union building include a food court, meeting/banquet rooms, ballrooms, a bookstore, guest rooms, computer stations, a small theatre, a convenience

store, and more [21]. The school has a health center. The health center is called the Beu Health Center. The Beu Health Center provides quality health services and facilities for students at WIU. It also promotes and restores health as swiftly, safely, and humanely as possible [22]. There is the presence of a hospital called McDonough District Hospital where students also receive medical attention.

1.2 Behavioral and environmental objectives

The behavioral and environmental objectives for this program are

- Provision of condoms to participants to encourage safe sex.
- Provision of flyers that contain an overview of STDs and their preventive measures.
- Provision of contact number for private counseling at Beu health center and McDonough district hospital for STDs.

2. Program objectives

- Encouraging the prevention of sexually transmitted disease(s) for students at Western Illinois University [14].
- Preventing sexually transmitted disease(s) by practicing safe sex [11].
- Encouraging screening and treatment for sexually transmitted diseases [9].

3. Intervention approach

Empowerment modification intervention

The college student will be given an overview of sexually transmitted disease(s) in form of a lecture during a time that is not a peak period of their classes. A hall in stipes that will contain the anticipated number of students will be used. The lecture style is used because it is an effective means of teaching new knowledge and skills, promoting reflection, and stimulating further work and learning. During the lecture, hard copies of lecture materials will be distributed to each student. The materials will contain the definition, causes, complications, prevention, and treatment of STDs. It will also contain statistics on STDs affecting college students in the United State. There will be a practical section in the lecture materials on how to use male and female condoms.

Dummies and YouTube videos will be available to demonstrate the use of a condom. Pictures of affected body parts will be shown during the lecture and the student will be educated on the signs and symptoms of STDs. This is important to enable them to recognize the symptoms early on their own and deter them from delaying early screening and treatment.

This lecture is going to be conducted in conjunction with health practitioners from Beu Health Centre and McDonough District Hospital who are going to give a more professional insight on STDs. There will be a section for the question and answer to give an avenue for students to ask any question or seek further calcification on the subject matter. Male and female condoms will be distributed to the students. The contact

number will be attached as an appendix to the lecture material for private counseling on STDs.

Behavioral modification intervention

Lectures Intervention Approach

The intervention approach is specific strategies incorporated to direct the process of evaluating, planning, selecting, and implementing interventions concerning the client's desired outcomes, evaluation data, and evidence [10].

The lecture intervention approach is among the widely used intervention that educates the students on ways to prevent STDs. The lectures intervention is best in this program since it involves interpersonal communication between the health practitioner and the students on the best behavior changes that prevent STDs. During the program, the students will be educated on ways to reduce STDs through lecture notes, lecture speeches, and counseling.

Communication Intervention Approach

Having a two-way conversation is beneficial for the effective outcome of this intervention. Firstly, I would like to gain the insight of the participants on the topic, and then based on the output given by the participants, necessary interventions like planning in ways from my research and analysis which is done one pretest conducted on the participant will be taken. The participant will be divided into groups based on their current knowledge to know how to have an effective or beneficial conversation about the topic.

4. Theories or models

The stage of change model and health belief model will be used to support the intervention.

Behavioral Modification

The stages of change

The stages of change focus on the decision-making of the individual and are a model of intentional change. The stages of change operate on the assumption that people do not change behaviors quickly and decisively. Rather, behavior change, especially habitual behavior, occurs continuously through a cyclical process. The stages of change are not a theory but a model; different behavioral theories and constructs can be applied to various stages of the model where they may be most effective [15].

The stages of change apply to the program as follows:

i. The stage of contemplation: In this stage, people have no intention of changing their behavior. People are often unaware that their behavior is problematic or produces negative consequences. College students may not think they are at risk for a sexually transmitted disease (STD). They don't think they need to be tested and

they may not be aware that STD rates are very high in the United State and especially high rates among ages 15-24. The college students may not act toward getting STD test screening, either because of insufficient information about the consequences of not getting examined or because of several unsuccessful attempts at getting the screening. They may also consider the cost of screening. These unsuccessful attempts could cause a lack of morale to change, and the individuals involved tend to avoid reading, talking, or thinking about their behaviors [15].

- ii. The stage of contemplation: In this stage, people are intending to start healthy behavior in the foreseeable future (defined as within the next 6 months). People recognize that their behavior may be problematic, and more thoughtful and practical consideration of the pros and cons of changing the behavior takes place, with equal emphasis placed on both. The college students after the lecture plan to change their behaviors. They realize they may be at risk for STDs and consider taking steps toward getting frequent testing at Beu Health Centre or McDonough District Hospital. The college student also identifies the pros and cons of infrequent STD testing such as the long-term negative and damaging effects of STDs [15].
- iii. The stage of preparation: In this stage, people are ready to act (usually the next month). People start to take small steps toward behavior change, and they believe changing their behavior can lead to a healthier life. This stage begins when the college students plan to act soon (usually the next month) by signing up for tests at Beu Health Centre or McDonough District Hospital, buying a self-help book, as well as educating and encouraging others to do so [15].
- iv. The stage of action: In this stage, people have recently changed their behavior (defined as within the last 6 months) and intend to keep moving forward with that behavior change. People may exhibit this by modifying their problem behavior or acquiring new healthy behaviors. The college students here have made observable adjustments to their lifestyles within the past six months. At this stage, making an appointment at Beu Health Centre or McDonough District Hospital, and following up with the appointment is seen as action [15].
- v. The stage of maintenance: In this stage, people have sustained their behavior change for a while (defined as more than 6 months) and intend to maintain the behavior change going forward. People in this stage work to prevent relapse to earlier stages. The college students at this stage have made specific, overt modifications in their lifestyles and are working to avoid relapse (even though they are less tempted to relapse). They are increasingly more confident that they can sustain the change and apply change processes less frequently than people in the action stage. They will get tested at least once per semester [15].

Empowerment modification

The health belief model

The health belief model derives from psychological and behavioral theory with the foundation that the two components of health-related behavior are 1) the desire to avoid illness, or conversely, get well if already ill; and, 2) the belief that a specific health action will prevent, or cure, illness. Ultimately, an individual's course of action often depends on the person's perceptions of the benefits and barriers related to health behavior [15].

The health belief model applies to the program as follows:

- i. Perceived susceptibility: This refers to a person's subjective perception of the risk of acquiring an illness or disease. There is wide variation in a person's feelings of personal vulnerability to an illness or disease. College students feel they cannot contact STDs, STDs cannot be gotten from one exposure, STDs are only transmitted through semen, and therefore the 'pulling-out 'method is effective, or STDs are uncommon [15].
- ii. Perceived severity: This refers to a person's feelings on the seriousness of contracting an illness or disease (or leaving the illness or disease untreated). There is wide variation in a person's feelings of severity, and often a person considers the medical consequences (e.g., death, disability) and social consequences (e.g., family life, social relationships) when evaluating the severity. College students feel STDs are annoying but not harmful. College students feel the price of buying condoms isn't worth the added protection or asking to wear a condom is more embarrassing than becoming infected [15].
- iii. Perceived benefits: This refers to a person's perception of the effectiveness of various actions available to reduce the threat of illness or disease (or to cure illness or disease). College students at this stage see condoms as a good strategy to prevent STDs, they also believe paying for a pack of condoms is cheaper than paying for medical bills [15].
- iv. Perceived barriers: This refers to a person's feelings on the obstacles to performing a recommended health action. There is wide variation in a person's feelings of barriers, or impediments, which leads to a cost/benefit analysis. The person weighs the effectiveness of the actions against the perceptions that it may be expensive, dangerous (e.g., side effects), unpleasant (e.g., painful), time-consuming, or inconvenient. College student feels condoms limits the feeling of pleasure during sex, they may think condom and STDs testing is expensive, and they are sometimes embarrassed talking about condoms with their partners [15].
- v. Cue to action: This is the stimulus needed to trigger the decision-making process to accept a recommended health action. College students at these stages begin to see obvious signs and symptoms of STDs [15].

The health belief model is more descriptive than explanatory and does not suggest a strategy for changing health-related actions while the stages of change provide suggested strategies for public health interventions to address people at various stages of the decision-making process.

5. Steps in community organizing

To solve the problem of STDs among students at Western Illinois University, there is a need to learn and integrate with the community for easier interaction. There are three main steps to organizing a community during need assessment, which includes entering the community, integrating with the people, and situation analysis of the community. When entering the school community, there is a need to gather basic data such as the lifestyle of the students, school culture, and practices [17]. After being integrated into the school, the team will recognize situations and issues that lead or can lead to STDs. This will involve engaging the students and making them understand the importance of the prevention of STDs.

6. Methods of organizing the people

The organization of the participants would begin with the distribution of flyers containing an overview of

sexually transmitted disease(s). The flyers will be placed on the information desk of each hall in the University.

Also, the details about the lecture will be sent to Western Illinois University's announcement board to send out the information to students.

Furthermore, the university's social media platform will be used to send the information about the lecture to the student on Facebook, Twitter, and Instagram.

During the lecture, hard copies of lecture materials will be distributed to each student. The materials will contain the definition, causes, complications, prevention, and treatment of STDs. It will also contain statistics on STDs affecting college students in the United State. There will be a practical section in the lecture materials on how to use male and female condoms.

Dummies and YouTube videos will be available to demonstrate the use of condoms. Pictures of affected body parts will be shown during the lecture and the student will be educated on the signs and symptoms of STDs. This is important to enable them to recognize the symptoms early on their own and deter them from delaying early screening and treatment.

7. Identification and allocation of resources

Internal Program Personnel

The lecture was conducted in conjunction with health practitioners from Beu Health Centre.

External Program Personnel

Health practitioners from McDonough District Hospital will be present to give professional insight on STDs to the student community.

8. Space requirements

The space requirement for this lecture will be a hall in stipes ranging from 50 to 200-seater with an access screen, audible sound systems, lighting, and an accessible entrance.

The hall will be 68 degrees Fahrenheit with a Personal space around eighteen inches from another person.

9. Equipment and supplies

Materials required for practical which consist of 100 pieces of male and female condoms and dummies would be requested from Beu Health.

Furthermore, 100 pieces of pens and a notepad for taking notes during the lectures and feedback would be requested from Western Illinois University.

Also, 100 pieces of a pamphlet containing the overview of sexually transmitted disease(s) as take home for students would be requested from McDonough District Hospital.

10. Financial resources

Participation fee

Participation is free.

The third-party supports

Space required (hall), electrical appliances such as projectors, screen and microphone, operator and manpower, and stationaries will be provided by Western Illinois University.

Condoms and dummies for a practical section on condom usage will be provided by Beu Health Centre.

A pamphlet containing the overview of sexually transmitted disease(s) has been taken home for the students and will be provided by McDonough District Hospital.

Sponsorship

The lecture will be supported by McDonough District Hospital, Beu Health Centre,

and Western Illinois University

11. Components of implementation - total program

The sexually transmitted disease(s) program will apply the total program to enable the complete delivery of the intervention to the members. Using a total program, a sexually transmitted disease(s) intervention program will involve more of the student's community, and an assessment of members will be easily generalized. During the implementation of the program, members will be required to:

- Focus on screening and treatment of sexually transmitted disease(s).
- There will be the use of both educational and behavioral counseling.
- Multi-component and more intensive programs will be applied to the greater effect of the program.

12. Informed consent

Title: Sexually transmitted diseases among students at Western Illinois University, Macomb.

The purpose of this program is to create awareness and enhance knowledge of sexually transmitted disease(s) among students at Western Illinois University.

The program is focused on providing education on sexual health and encouraging screening for sexually transmitted diseases among students at Western Illinois University.

During the program, you will be asked to complete questionnaires. You will then be asked to participate in the question-and-answer section.

Understand that the risk of this program is the pictorial image of affected body parts that will be shown during the lecture. Sexual words will be used during the lecture.

Students who participate in this program may have a better understanding of additional treatment and preventions methods for STD(s) that enable them to experience and increase their overall sense of well-being.

Participants can talk to their doctors and health providers on their own and can get health education from a reliable source this will achieve the same result.

If you decide to participate in this program, you may withdraw your participation at any time without penalty.

By signing my name below, I acknowledge that I have read, and fully understand, each of the separate paragraphs set for the above.

Name of Participant (print):

Signature:	Date:
Name of Program Administrator:	
Signature:	Date:

References

- [1]. American Sexual Health Association (2020). STIs and young people. Retrieved from http://www.ashasexualhealth.org/teachers/stis-and-young-people
- [2]. Barry, D., Sherrod, M. (2014). Ensuring access to sexually transmitted infection care for all. Retrieved from https://www.americanprogress.org/issues/ women/reports/ 2014/ 10/16/ 99135/ensuring-access-to-sexually-transmitted-infection-care-for-all/
- [3]. Bingenheimer, J. B., Asante.E., & Ahiadeke.C. (2016). Peer influences on sexual activity among adolescents in Ghana. *Journal of Study in Family Planning*, 46(1): 1-19. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4391617/
- [4]. Boskey, E. (2019). Top 10 reasons to support sex education in schools. Retrieved from https://www.verywellhealth.com/support-comprehensive-education-schools-3133083
- [5]. Chawada, B.L., Kosambiya, J.K., Chaudhari, V.P., & Wells, K.J. (2018). Development of the sexually transmitted infection service evaluation tool: use of Delphi approach. *Indian journal of community medicine impact*, 43(4): 260–265. Retrieved from HTTPS:// www.ncbi.nlm.nih.gov/pmc/articles/PMC6319279/
- [6]. Cuffe, K. C., Newton-Levinson, A., Gift, T.L., McFarlane, M., & Leichliter, J.S. (2016). Sexually transmitted infection testing among adolescents and young adults in the United States. *Journal of Adolescent Health*, 58(5): 512-519. Retrieved from HTTPS:// www.jahonline.org/article/S1054-139X (16)00019-7/full text#%20
- [7]. Family Doctor.org. (n.d.) Sexually transmitted infection (STIs). Retrieved from HTTPS://familydoctor.org/condition/sexually-transmitted-infections-stis
- [8]. Gaydos, A. C., Hsieh, Y. H., Galbraith, J. S., Barnes, M., Waterfield, G., & Stanton, B. (2016). Focus-on-teens, sexual risk-reduction intervention for high-school adolescents: impact on knowledge, change of risk behaviors, and prevalence of sexually transmitted diseases. *International Journal of STD &AIDS*, 19(10): 704–710. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4800004/
- [9]. Ghanem, K.G & Tuddenham, S. (2020). Screening for sexual infections. Retrieved from https://www.uptodate.com/contents/screening-for-sexually-transmitted-infections
- [10]. Gullette, D. L., Rooker, J. L., & Kennedy, R. L. (2013). Factors associated with sexually transmitted infections in men and women. *Journal of Community Health Nursing*, 26(3): 121–130. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3582223/
- [11]. Healthline. (2017). STD prevention. Retrieved from https://www.healthline.com/health/sexually-transmitted-diseases/safe-sex
- [12]. Healthy People. (2014). Sexually transmitted disease. Retrieved from https://www.healthypeople .gov/2020/topics-objectives/topic/sexually-transmitted-diseases
- [13]. Heather Cruickshank. (n.d.). Sexual Transmitted Disease. Health line. Retrieved from https://www.healthline.com/health/sexually-transmitted-diseases
- [14]. Hiv.gov. (2012). Encouraging health care providers to reach youth for STD awareness month. Retrieved from https://www.hiv.gov/blog/encouraging-health-care-providers-to-reach-youth-for-std-awareness-month

- [15]. Lamorte, W.W. (2019). Behavioral change models. Retrieved from http://sphweb.bumc.buedu/ Scott/MPH Modules/ SB/Behavioral Change Theories/ BehavioralChangeTheories2.html
- [16]. Nelson, E.M., (2014). Formative evaluation of intervention methods designed to improve behaviour change strategies. Retrieved from https://lib.dr.iastate.edu/cgi/viewcontent .cgi?article=5225&context=etd
- [17]. Sahota, P., & Christian, S. (2019). Effective implementation of primary school-based healthy lifestyle programs: a qualitative study of views of the school staff. https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7550-2
- [18]. Scanlon, D. P., Alexander, J. A., McHugh, M., Beich, J., Christianson, J. B., Greene, J., Jean-Jacques, M., Leitzell, B., Shi, Y., & Wolf, L.J. (2016). Summative evaluation results and lessons learned from the Aligning Forces for Quality program. *The American journal of managed care*, 22(12), s360-s372. Retrieved from HTTPS:// www.ncbi.nlm.nih.gov/ PubMed/27567509
- [19]. WebMD. (2005). Understanding sexual transmitted diseases (STDs). Retrieved from https://www.webmd.com/sex-relationships/understanding-stds-basics
- [20]. Weinstock, H., Berman S., Cates, W. Jr. (2004). Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. A journal of peer-reviewed research, 23(1): pages 6-10. Retrieved from https://www.guttmacher.org/journals/part/2004/ sexually-transmitted-diseases-among-American-youth-incidence-and-prevalence
- [21]. Western Illinois University. (2009). Total student enrollment- fall term 2019. Retrieved from http://www.wiu.edu/IRP/enrollments/2020/fall/tdse.php
- [22]. Western Illinois University. (2020). Beu Health Center. Retrieved from http://www.wiu.edu/student_services/beu_health_center/