



Knowledge, Awareness, and Attitudes toward Sexually Transmitted Diseases (STDs) Among Final Year BSN Students

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ABSTRACT

The aim of this study was to assess the awareness, knowledge, and attitudes regarding STDs among final-year BSN students at Isra University, Hyderabad. From July to September 2024, a cross-sectional study was carried out with a validated questionnaire. A sample of 42 final-year female BSN students was selected through non-probability convenience sampling. IBM SPSS version 23 was used for data analysis, and descriptive statistics such as frequencies, percentages, means, and standard deviations were employed. Findings revealed that the majority of participants were able to name different STDs, their ways of transmission, and possible health consequences. Students' attitudes regarding STD prevention and screening were somewhat neutral; they knew that STD screening was important but many of them had issues regarding its necessity as well as the effects of untreated STDs. The study concluded that the final-year BSN students had high awareness and moderate knowledge regarding STD but attitudes require a wider preventive education campaign. Increasing final-year BSN students' knowledge, self-estimated awareness, and activity concerning STD prevention is significant since they become healthcare professionals.

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Introduction

Sexually transmitted diseases (STDs) remain an uncontrolled epidemic, affecting people's health, well-being, and productivity in the working age, with the trend showing worsening incidence and prevalence across the world (Sinka, 2024). STDs are often spread through sexual activity and the specific diseases include; HIV/AIDS, gonorrhea, chlamydia, syphilis,

and herpes. These diseases are not only on the health aspect but also harm the psychological aspect of the person's societies, and their economies (Elendu et al., 2024). Community, individual, and professional awareness, knowledge, and attitudes regarding STDs are important in their prevention and control, and it is the mandate of healthcare professionals particularly nurses to offer information, education prevention, and management of these infections (Lagadinou et al., 2024). Being first-level caregivers, the nurses have a strategic chance to contribute to people's health by educating them and offering advice on how to prevent STDs (Khamisy-Farah et al., 2023). Nursing student needs to acknowledge different STDs. It is at this stage of their learning that students are capable of having adequate knowledge and proper attitude in educating patients, proper handling and management of STD cases in a way that will bring about the elimination of prejudice associated with such diseases. The knowledge of the above diseases nursing students concerning symptoms, ways of prevention, and their management could improve the health of the societies they will be serving (Dolu et al., 2024; Gullu, 2023). Studies have shown that the general population, including healthcare students, lacks adequate information about STDs. Lack of knowledge causes people to receive wrong information or lack correct knowledge about the diseases' transmission and prevention measures which can worsen the disease's impact (Hamunyela et al., 2024). Being members of the health care team, nursing students need to be knowledgeable, accurate, and current with the facts about STD signs symptoms, ways of transmission, prevention measures, and treatments available. It also alters their attitudes regarding their commitment and participation in educational and preventative programs within the communities they will serve (Souayeh et al., 2024). Nursing education programs should, therefore, aim at preparing students not only with the skills and knowledge that have to be used in offering nursing care but also the knowledge and attitudes that have to be applied in controlling public health problems such as STDs (Oducado, 2023). The understandings that the nursing students have about STDs, negative or positive will affect the type of treatment and care they give. Thus, it is vital to assess the current level of awareness, knowledge, and attitudes of final-year BSN students to establish the extent of the need for subsequent quality improvement in the curriculum and subsequent interventions for the necessity of further training. In addition to being aware of the medical facts regarding STDs, nursing students must approach those affected with the disease, without prejudice. Perceptions and beliefs regarding STDs depend on culture, society, and individual perceptions, and acceptance of STDs is a barrier to health education and management (Mutaru et al., 2021). This study aims to assess knowledge, awareness, and attitudes regarding STDs among final-year BSN students at Isra University Hyderabad. It will also help in identifying the gaps in the knowledge that the clients have regarding that specific issue, or in this case STDs. This research's conclusion will give significant information about how nursing students are prepared to care for STD issues within their practice as professional nurses, helping to enhance patient care as well as health for all people.

Research Objective

- To assess the level of knowledge, awareness, and attitudes regarding sexually transmitted diseases (STDs) among final-year BSN students.

Literature Review

Sexually transmitted diseases are a global problem, according to the World Health Organization; millions of people become infected with STDs every year. According to the

WHO, more than a million new cases of STDs are recorded daily globally, even more in adolescents and young people (Sinka, 2024). The issue of health promotion therefore cuts across the nurses, because they are a critical component of health since they are most times the first line of contact in imparting knowledge on issues to do with the general public including sexual health. Consequently, knowledge, awareness, and attitudes of nursing students about STDs are important to strengthen their ability to prevent, identify, and manage these infections (Jaya et al., 2024). Several research works have shown that despite nursing students possessing a common assimilation of notions regarding STDs, these students lack detailed information about certain diseases, their transmission, signs, and cures. (Mokhtari et al., 2023) Surveyed the knowledge and attitude of midwifery students in Iran on STDs and determined that while the students were relatively well informed about HIV/AIDS and syphilis, they lacked a detailed understanding of less known STDs, their prevention, and treatment. (Gullu, 2023) conducted a similar study in Turkey with students revealing responses that indicated that the student's knowledge of STDs was suboptimal as they lacked understanding of how the STDs impact both male and female reproduction. The research revealed that despite students' ability to identify some risk factors associated with STDs like multiple partners, and unprotected sex, they could hardly explain the modes of transmission and protective measures when it comes to oral and anal sex. Such conclusions identify that adequate STD education is important with a focus on both frequent and rare conditions (Vasudev et al., 2024). (Subotic et al., 2022) reported that while the nursing students' knowledge of the risky factors related to STDs, including unprotected sexual contact and drug injection was satisfactory, their knowledge of measures to prevent STDs, including proper condom use and vaccination, was poor. Also, a considerable number of learners were not familiar with how sexual health education contributes to STD prevention by encouraging early detection as well as frequent screening. Research has revealed that such organized sexual health education enhances the level of awareness among the students who have ever attended any specialized workshops or seminars that touched on sexual health and were more knowledgeable about the prevention of STDs through the practice of condom use and early medical treatment. This has underlined the need to implement sexual health education in nursing curricula and to incorporate it into continuing nursing professional development for the students (Merenhque et al., 2021). This underlines the necessity of the active implementation of the programs on sexuality for the carders of educational courses for nurses and other students interested in this field. However, the attitudes of nursing students toward STDs are another important factor that determines further behavior in clinical practice. Stigmatizing views and perceptions of those suffering from STDs may hinder treatment, and limit communication between health providers and patients, and users ensue. The studies show that nursing students have more or less negative perceptions towards people living with STDs such as HIV/AIDS. In another research study by (Bonacaro et al., 2022) participation of nursing students in South Korea indicated that the perceived cause of HIV/AIDS is closely associated with risk factors like drug use and multiple partnerships likely to expose affected personnel to stigmatization and exclusion. In this respect, educational interventions play a major technique in nurturing the knowledge, awareness, and attitudes of students who are pursuing nursing on STDs. As will be demonstrated in the literature review, structured, evidence-based programs on sexual health positively influence the knowledge of STDs among nursing students. The program also changed the students' attitude for the better; they are more confident when it comes to addressing patients on sexual health matters (Ceylan & Koç, 2021).

Research Methodology

Study Design: A cross-sectional and was conducted from July to September 2024.

Study Setting: The research was conducted in the Isra School of Nursing, Isra University Hyderabad.

Study Population: The target population consists of 42 Final year nursing students enrolled in the BSN program.

Sample Size: 42 final-year BSN students represented the population, and as all of them took part in the study, 42 was the sample size.

Inclusion Criteria:

- Female BSN students(final year)
- Those who were willing to participate in the study.
- Those who were available during data collection.

Exclusion Criteria:

- Those who were not willing to participate.
- Those who were not available during data collection.

Sampling Technique: Convenience sampling technique

Data Collection Process: The principal of the Isra School of Nursing granted her approval for this research. Participants were provided both written and verbal consent after being instructed objective of the study.

Data Analysis: Data were analyzed by statistical methods including frequencies, percentages, mean, and standard deviations from IBM SPSS version 23.

Ethical Considerations: Consent in writing was sought and secured from all the participants. The anonymity of the participants was preserved in the course of the given study.

Results

Table 1: Demographics Analysis (n=42)

Variables	Category	Frequency (n)	Percent (%)
Age in Years	20-25	21	50%
	26-30	20	47.6%
	Above 30	01	2.3%
Residence	Hostler	19	45.2%
	Day Scholar	23	54.8%
Marital Status	Single	39	92.9%
	Married	3	7.1%

The demographic data is shown in Table 1. The majority of respondents are aged 20-25 years (n=21, 50%); 26-30 years (n=20, 47.6%); and above 30 years (n=1, 2.3%). Regarding residential status, the majority of them are day scholars (n=23, 54.8%) while the remaining (n=19, 45.2%) are hostlers. Participants' marital status reveals that the majority of them are single (n=39, 92.9%) and the rest are married (n=3, 7.1%).

Table 2: Knowledge of Participants Regarding Sexually Transmitted Diseases (STDs)

STATEMENT		Freq	%	MEAN	ST. DEVI
Have You Ever Heard Of STDs?	Yes	42	100%	1.00	0.00
	No	-	-		
Which one is an STD?	Tuberculosis	6	14%	1.84	0.457
	HIV/AIDS	33	79%		
	Chlamydia	3	7%		
Which organisms cause sexually transmitted diseases?	Bacteria	11	26%	1.76	0.479
	Virus	30	71%		
	Fungi	1	2%		
Which routes can sexually transmitted diseases go through?	Blood Transfusion	18	43%	2.34	1.63
	Sharing needles	14	33%		
	Infected mother-to-child	10	24%	-	
What are the symptoms of STDs?	Swollen glands, fever, and body	15	36%	2.18	0.932
	Sore throat	5	12%		
	Painless sores on mouth/genital	22	52%		
	Swollen glands, fever, and body	15	36%	2.18	0.932
Can an individual with an STD be asymptomatic?	Yes	23	55%	1.72	0.854
	No	9	21%		
	Don't know	10	24%		
Which STD complications are there?	Infertility	11	26%	2.06	0.798
	Cervical cancer	18	43%		
	Body weakness	12	29%		
	Ectopic	1	2%		
Do you share infected needles with others?	Yes	7	17%	2.02	0.597
	No	27	64%		
	Don't know	8	19%		
Use of contraceptive pills can reduce the risk of STDs	Yes	23	55%	1.76	0.895
	No	7	17%		
	Don't know	12	29%		
Certain medications can make a person more vulnerable to STDs.	Yes	23	55%	1.86	0.965
	No	7	17%		
	Don't know	12	29%		

Table 2 indicates that participants (100%) claimed to have heard of STDs. The highest recognition of an STD was HIV/AIDS at 79% while tuberculosis was recognized by 14%. Most of the respondents correctly associated viruses as causative organisms (71%) followed by bacteria (26%) and then fungi (2%). Among transmission routes, the most frequently identified transmission mechanism was blood transfusion (43%) followed by needle sharing (33%), with a relatively high SD (1.63). Concerning symptoms, 52% mentioned painless sores, and 36% mentioned swollen glands, fever, and body aches among others. 55 percent knew that STDs may not have symptoms (SD = 0.854), and cervical cancer was the most identified risk (43%). The majority of the participants, 64% did not use needles, and 55% of them were aware that pills and drugs used as contraceptives could affect the risk of STDs though there was a level of uncertainty as reflected by the standard deviations, 0.895 and 0.965 respectively.

Table 3: Attitude of Participants toward Sexually Transmitted Diseases (STDs)

STATEMENT		Freq	%	MEAN	ST. DEVI
I feel screening for STDs is good	Strongly Agree	18	42.9%	1.74	0.789
	Agree	20	47.6%		
	Disagree	3	7.1%		
	Strongly Disagree	2	4.8%		
I think it is essential to get screened for STDs before getting married.	Strongly Agree	17	40.5%	1.90	0.971
	Agree	18	42.9%		
	Disagree	3	7.1%		
	Strongly Disagree	5	11.9%		
STDs may be cured, but they are not harmful.	Strongly Agree	6	14.3%	2.60	0.049
	Agree	17	40.5%		
	Disagree	8	19.0%		
	Strongly Disagree	12	28.6%		
I believe that the topic of STD prevention does not need to be discussed in academic institutions.	Strongly Agree	5	11.9%	2.74	0.978
	Agree	12	28.6%		
	Disagree	15	35.7%		
	Strongly Disagree	11	26.2%		
I believe that if STDs are not treated, they can be fatal.	Strongly Agree	19	45.2%	1.81	0.879
	Agree	15	35.7%		
	Disagree	7	16.7%		
	Strongly Disagree	2	4.8%		

The results presented in Table 3 indicated that the majority, 47.6% of the participants had a positive attitude towards screening for STDs as being good while 42.9% strongly agreed on the same. Mean was 1.74 with SD 0.789. Concerning premarital screening 42.9% agreed and 40.5% strongly agreed. 40.5% of the participants agreed with the statement that STDs are not dangerous because they can be cured, while a smaller percentage of 28.6% strongly disagreed with the statement. Regarding STD prevention academic institutions' responses; 35.7% and 26.2% of participants agreed and strongly disagreed respectively. More than half of the participants (45.2%) strongly agreed while 35.7% agreed with the statement, 'STDs can be fatal if not treated.

Discussion

The purpose of this study was to assess the BSN students' awareness, knowledge, and attitude towards STDs. The analysis revealed that all the participants had heard about STDs, and this is in agreement with other research studies that indicated high knowledge among healthcare students (Mutaru et al., 2021). However, a small portion of the participants were able to identify a variety of STDs; only 79% of participants identified HIV/AIDS, which is in line with the findings that while HIV/AIDS has good name recognition, other STDs, such as chlamydia, do not (Jadoon et al., 2022). Participants' knowledge of specific causative organisms of STDs was as follows: viruses, 71%; bacteria 26%; fungi 11%, and these are consistent with (Vinícius de Lima et al., 2022) who also noted that participants had limited knowledge of fungal STDs. Regarding the sources of transmission, the most frequently reported was through blood transfusion (43%) while the others were through shared needles (33%) and from mother to child (24%). This is similar to (Mutaru et al., 2021) in that while healthcare students were aware of the main routes of transmission, they had comparatively lower levels of knowledge of others. Regarding the symptoms, 52% of them believed that painful or painless sores in the mouth and genitals are characteristic of herpes and syphilis, however, 57% of them stated that STDs can be asymptomatic, which, according to (Hamunyela et al., 2024) is a fairly widespread misconception among students. The study also identified that the attitudes towards STD screening were relatively favorable; the percentage of the participants who agreed that screening is helpful was 47.6%, and that of the participants who supported pre-marital screening was 40.5%. These findings readily correspond with the World Health Organization's guidelines and best practices offered in the area of prevention (Jadoon et al., 2023; White, 2024). Nonetheless, 28.6% disagreed with the statement about talking about STD prevention with educational institutions; that was also reflected in other research works by (Amakali; Khan et al., 2023) some participants lack an understanding of the relevance of how institutions can play a vital role in creating awareness on STD prevention.

Conclusion

In conclusion, it was found that the final-year BSN students demonstrated moderate to high levels of awareness and knowledge about Sexually Transmitted Diseases (STDs). Most of the participants were able to identify the common STDs, their modes of transmission, and potential consequences. However, regarding STD prevention and screening, their views were inconsistent; some of the students were not sure about the necessity of screening and the potential consequences of untreated. While their knowledge was moderate, their attitude toward STDs needs improvement. This highlights the need for expanded preventive education and to enhance knowledge and awareness among BSN students about STDs once they emerge to the practicing healthcare professions.

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