

STI Prevention in Different Cultural Contexts: A Comparative Study of Knowledge and Attitudes in Eswatini and Egypt

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Abstract

Background: Sexually transmitted infections (STIs) have a significant impact on reproductive and sexual health on a global scale. Every day, over one million sexually transmitted infections are developed. **Aim:** To compare the attitudes and knowledge related to sexually transmitted infection prevention in two culturally distinct contexts- Eswatini and Egypt and to examine how cultural differences influence these factors. **Patients and methods:** This comparative research has been performed on 800 cases classified into two groups: 400 patients in Egypt group and 400 cases in Eswatini group. A self-administered questionnaire was applied to assess their knowledge and attitudes towards STI. **Results:** A statistically significant difference was found between the Egyptian and Eswatini groups regarding participants' attitudes and knowledge about sexually transmitted infections (STIs). Egyptians generally exhibited a more positive, open, and treatment-oriented approach, while participants from Eswatini showed more uncertainty, hesitation, and stigma surrounding STIs. This highlights how cultural context shapes attitudes toward sexual health. In contrast, however, no statistically significant difference was observed between the Egyptian and Eswatini groups regarding their views on the importance of STI screening. **Conclusions:** Cultural differences played a key role in shaping the participants' knowledge and attitudes toward STIs with significant disparities observed in attitudes related to social status, living conditions, and HIV prevention. Additionally, there was a highly statistically significant increase in knowledge about STI transmission and prevention in the Egyptian group compared to the Eswatini group.

Key words: STIs; knowledge; attitudes; STI prevention; cultural differences.

Introduction

Sexually transmitted infections (STIs) have a significant impact on reproductive and sexual health on a global scale. Every day, over one million sexually transmitted infections are developed (1).

Reproductive morbidity is a global problem as a result of sexually transmitted infections. In 2019, the World Health Organization (WHO) predicted that there were 376 million new cases of gonorrhea, syphilis, trichomoniasis and chlamydia, (2).

The female anatomy is a contributing factor to the greater effect of STIs on females than on males. Especially due to the thin, delicate, and easily penetrated vaginal mucosa, the urogenital anatomy of a female is more susceptible to sexually transmitted infections than that of a man (3).

Genital ulcer illness, vaginitis, pelvic inflammatory disease (PID), and infertility are among the numerous symptoms and effects that STIs may cause in various regions of the female reproductive tract (4).

STI rates were greatest between young adults, primarily females aged twenty to twenty-four and males who have sex with males (MSM). Sexually transmitted infections are among the most severe health problems that adolescents and young women encounter, frequently resulting in miscarriage (5).

Viral sexually transmitted infections (STIs) that may be either lifelong (e.g., herpes simplex virus) or long-lasting (e.g., human papillomavirus [HPV]) impact hundreds of millions of individuals globally at any given time (6).

Individuals who have STIs are at a higher probability of transmitting HIV to others. STIs elevate HIV acquisition rates between individuals who are not infected with HIV. (7).

The quality of life may be significantly impacted by the psychological, social, and economic consequences of STIs (1).

In numerous regions of the globe, the public health response to STIs was inadequate, regardless the necessity. As the 2016–21 WHO global strategy on STIs concluded, WHO released a global progress report on the approach, which indicated that STI control had made relatively little advancement (1).

Few countries in the EMR have developed a comprehensive national strategy for prevention and control of STIs, aiming for the achievement of the Millennium Development Goals and to prevention and control of HIV (1). However, interventions are lacking evidence-based effective public health approaches, as recommended in the global control

strategy. In 2015, the Egyptian government is paying great attention to achieve the Sustainable Development Goals. This is expressed in “Strategy for Sustainable Development– Egypt Vision 2030.” To be effective, national strategies should be translated into actions that reach communities, families, and individuals at grass roots (7). The selection of Egypt and Eswatini as the comparative contexts for this study was driven by their distinct cultural, demographic, and public health characteristics. Egypt, as a North African country with a predominantly Muslim population, has different social norms, health policies, and access to healthcare compared to Eswatini, a small, landlocked

Patients and methods

This comparative research has been performed on 800 participants classified into two groups: 400 participants in Egypt group and 400 participants in Eswatini group. A self-administered questionnaire was applied to assess their knowledge and attitudes towards STI.

Study setting: The survey on sexually transmitted infections (STIs) was conducted in the outpatient departments of healthcare facilities in Eswatini and Egypt. In Eswatini, the study was carried out at RFM Hospital, Manzini Clinic, and Mbabane Hospital. In Egypt, the research was conducted at the Benha University Hospitals Clinics and Benha Teaching Hospitals. These outpatient settings were chosen to assess the knowledge and attitudes of individuals towards STIs.

Inclusion criteria: Participants of both sexes who were more than eighteen years of age and agree for participation in the study.

Exclusion criteria: Critically ill cases who rejected for participation in the research.

Baseline assessment

A pre-tested structured interview questionnaire was used to collect data from the study participants. It included:

Socio-demographic characteristics: Age, gender, social status, educational level, working status, living place and living condition

Participants’ knowledge: This involved questions according to the case's knowledge of STDs, including their definition, reasons, vertical transmission, impact on pregnancy outcomes, types, mode of transmission, therapy, the role of community and family members in preventing STDs, clinical manifestations for both genders, complications of STDs, and the actions performed for an infected sexual partner.

Participants’ attitudes: This questionnaire was self-administered to evaluate cases' perspectives regarding STDs. The 3 responses were scored as 3, 2, and 1, respectively: agree, don't know, and disagree. The total score varied from nineteen to fifty-seven. The

kingdom in Southern Africa with a unique cultural heritage and a predominance of Christian beliefs. In Eswatini, many people rely on traditional healers, especially in rural areas, for health-related matters, which can influence attitudes and practices regarding STI prevention. These differences provide valuable insights into how cultural contexts influence STI prevention knowledge and attitudes, making them ideal for a comparative study (8 and 9).

The goal of this research was to compare the attitudes and knowledge related to sexually transmitted infection prevention in two culturally distinct contexts- Eswatini and Egypt.

total score of each student was divided by the total maximum score and multiplied by one hundred to determine the percentage of the total score. The percentage was classified as negative when it was below seventy-five percent and positive when it was greater than or equal to seventy-five percent as determined by statistical analysis.

The original language of the included items was English; they were translated to Arabic by two experts followed by back translation to English by other independent experts. For the Eswatini group, the questionnaire was translated into siSwati by a bilingual expert and then back-translated to English to ensure cultural and linguistic accuracy. This ensured that any language and cultural nuances were addressed to improve the validity of the responses.

Statistical analysis of the data: Data were input into the computer and examined utilizing IBM SPSS software package version 20. 0. (Armonk, NY: IBM Corp). Qualitative data were presented utilizing numerical values and percentages. The Kolmogorov-Smirnov test was utilized to assess the normality of the distribution. Quantitative data were characterized by range (minimum and maximum), mean, standard deviation, median, and interquartile range (IQR). The significance of the outcomes collected was assessed at the five percent level. The tests utilized were: Chi-square test for categorical parameters for comparing various groups. Utilize Fisher's Exact test or Monte Carlo correction for chi-square analysis when more than twenty percent of the cells show an expected count of less than five. Student's t-test for normally distributed quantitative parameters was utilized for comparing 2 examined groups. Paired t-test for normally distributed quantitative parameters for comparing two time periods. Mann-Whitney test for non-normally distributed quantitative parameters for comparing 2 examined groups, and Wilcoxon signed-rank test for non-normally distributed quantitative parameters for comparing two time periods.

Results**Table (1):** participants characteristic between the studied groups.

	Egypt group (number=400)	Eswatini group (number =400)	P value
	N (%)	N (%)	
Age			
18–30	244(61%)	222(55.5%)	0.51
31–40	96(24%)	108(27%)	
41–50	40(10%)	38(9.5%)	
>50	20(5%)	32(8%)	
Gender			
Female	218(54.5%)	210(52.5%)	0.68
Male	182(45.5%)	190(47.5%)	
Social status			
single	60(15%)	260(65%)	<0.001
Married	300(75%)	60(15%)	
Divorced	40(10%)	80(20%)	
Educational level			
Less than high school	60(15%)	80(20%)	0.61
High school diploma	120(30%)	102(25.5%)	
Some college	100(25%)	90(22.5%)	
Bachelor's degree	64(16%)	72(18%)	
Graduate degree	56(14%)	56(14%)	
Working status			
Had no job	28(7%)	40(10%)	0.54
Employed	178(44.5%)	160(40%)	
Student	154(38.5%)	150(37.5%)	
Others	40(10%)	50(12.5%)	
Living place			
Rural	260(65%)	180(45%)	<0.001
Urban	140(35%)	220(55%)	
Living condition			
Alone	20(5%)	128(32%)	<0.001
With family	40(10%)	82(20.5%)	
With friends	50(12.5%)	100(25%)	
With wife/husband	266(66.5%)	50(12.5%)	
With relatives	24(6%)	40(10%)	

p<0.001 is highly significant, P value <0.05 is statistically significant, P value >0.05: Not significant.

Table 1 demonstrates that, statistically significant variance was discovered among the Egyptian and Eswatini groups as regard social status, living place, and living condition, while statistically insignificant variance was discovered among the examined groups regarding age, gender, educational level, and working status.

Table (2): Knowledge of participants about ways of STIS transmission among the examined groups.

	Egypt group (number =400)	Eswatini group (number =400)	P-value
	N (%)	N (%)	
Unsafe sexual intercourse	336(84%)	276(69%)	<0.001
Sharing needles and syringes	248(62%)	120(30%)	<0.001
Blood transfusion	284(71%)	136(34%)	<0.001
During pregnancy	260(65%)	164(41%)	<0.001
During childbirth	172(43%)	80(20%)	<0.001
Through breast milk	216(54%)	120(30%)	<0.001
Through mosquito and another insect bite	256(64%)	116(29%)	<0.001
Casual contact with a person (handshaking).	120(30%)	40(10%)	<0.001

p<0.001 is highly significant, P value <0.05 is statistically significant, P value >0.05: Not significant.

Table 2 demonstrates that, highly statistically significant rise was discovered in knowledge of participants about ways of STID transmission in Egypt group than Eswatini group.

Table (3): Knowledge of participants about ways of STIS prevention among the examined groups.

	Egypt group (number =400)	Eswatini group (number =400)	P-value
	N (%)	N (%)	
Abstain from casual sexual intercourse	348(87%)	80(20%)	<0.001
Use a condom during sexual intercourse	120(30%)	356(89%)	<0.001
Remain faithful to a partner	316(79%)	140(35%)	<0.001
Avoid contaminated sharp objects	256 (64%)	164(41%)	<0.001
Avoid unsafe injections	304(76%)	140(35%)	<0.001
Avoid sex with sex workers	376(94%)	240(60%)	<0.001

p<0.001 is highly significant, P value <0.05 is statistically significant, P value >0.05: Not significant.

Table 3 demonstrates that, highly statistically significant rise was discovered in knowledge of participants about ways of STIS prevention in Egypt group than Eswatini group.

Table (4): Attitude towards HIV between the studied groups.

	Egypt group (n=400)	Eswatini group (n=400)	P-value
	N (%)	N (%)	
Do you believe that an individual may acquire HIV for the 1st time when they engage in sexual activity?			
Disagree	16(4%)	80 (20%)	<0.001
Do not know	24(6%)	40 (10%)	
Agree	360(90%)	280(70%)	
Do you believe that it is possible to determine whether an individual has HIV by conducting a thorough examination?			
Disagree	220 (55%)	300 (75%)	<0.001
Do not know	60 (15%)	80 (20%)	
Agree	120(30%)	20 (5%)	
Do you believe that HIV has a more severe impact on young people?			
Disagree	40 (10%)	260(65%)	<0.001
Do not know	50 (12.5%)	100 (25%)	
Agree	310 (77.5%)	40(10%)	
Do you believe that premarital sex for young people isn't supported?			
Disagree	50 (12.5%)	280 (70%)	<0.001
Do not know	44 (11%)	86(21.5%)	
Agree	306 (76.5%)	34(8.5%)	
Do you believe that it is necessary to isolate people with AIDS to ensure the safety of others?			
Disagree	120 (30%)	250 (62.5%)	<0.001
Do not know	32 (8%)	110 (27.5%)	
Agree	248 (62%)	40 (10%)	
Do you believe that discussing condoms or contraceptives with youths encourages promiscuity?			
Disagree	100 (25%)	140 (35%)	<0.001
Do not know	60 (15%)	76(19%)	
Agree	240 (60%)	184 (46%)	
Do you believe that the use of a condom is indicative of a lack of trust in a partner?			
Disagree	76 (19%)	234 (58.5%)	<0.001
Do not know	76 (19%)	66 (16.5%)	
Agree	248 (62%)	100 (25%)	
The wife has the right to reject unprotected sex with her husband when she wishes to utilize a condom, when her partner not ?			
Disagree	84(21%)	20 (5%)	<0.001
Do not know	100 (25%)	20 (5%)	
Agree	216(74%)	360(90%)	
Do you believe that an individual who has multiple sexual partners is at an elevated risk of contracting HIV?			
Disagree	28 (7%)	12 (3%)	0.003

Do not know	8 (2%)	20 (5%)	
Agree	364 (91%)	368 (92%)	
Is it possible for an HIV-infected individual to live an extended period of time while undergoing antiretroviral therapy?			
Disagree	70 (17.5%)	8 (2%)	<0.001
Do not know	120(30%)	16 (4%)	
Agree	210 (52.5%)	376 (94%)	
Do you believe that consuming nutritious foods may prevent an individual from contracting HIV?			
Disagree	180 (45%)	160 (60%)	0.002
Do not know	140 (35%)	100 (25%)	
Agree	80 (20%)	140 (35%)	
HIV's General Attitude			
Poor attitude	212 (53%)	160 (40%)	0.009
Good attitude	188 (47%)	240 (60%)	

p<0.001 is highly significant, P value <0.05 is statistically significant, P value >0.05: Not significant; HIV: Human Immunodeficiency Virus; AIDS: Acquired Immunodeficiency Syndrome.

Table 4 demonstrates that, statistically significant variance was discovered among the Egyptian and Eswatini groups as regard the attitude of the participants towards HIV.

Table (5): Knowledge of participants about STIs among the examined groups.

	Egypt group (number=400)	Eswatini group (number=400)	P value
	N (%)	N (%)	
Have you ever heard about STIs?			
Yes	360(90%)	224 (56%)	<0.001
No	40(10%)	176 (44%)	
What are sexually transmitted infections			
Diseases transmitted by sexual communication	300(75%)	356 (89%)	<0.001
Do not know	100 (25%)	44 (11%)	
Which sexually transmitted infections were you aware of?			
Gonorrhea	280 (70%)	8(2%)	<0.001
Syphilis	250 (62.5%)	100(25%)	<0.001
Chancroid	200 (50%)	16(4%)	<0.001
Lymphogranuloma venereum	260 (65%)	12(3%)	<0.001
HIV	210 (55%)	320(80%)	<0.001
Do not know	100 (25%)	44(11%)	<0.001
knowledge of the type of STIs			
knowledgeable	300(75%)	160 (40%)	<0.001
Not Knowledgeable	100 (25%)	240 (60%)	
Which signs/symptoms of STIs did you know?			
Genital ulcer	270 (67.5%)	34 (8.5%)	<0.001
Genital discharge	256 (64%)	10 (2.5%)	<0.001
Pain during urination	298(74.5%)	26(6.5%)	<0.001
Genital swelling	234 (58.5%)	20 (5%)	<0.001
Meningitis	15(3.75%)	6(1.5%)	0.04
Death	336(84%)	80(20%)	<0.001
Do not know	100 (25%)	360 (90%)	<0.001
knowledge of signs/symptoms of STIs			
knowledgeable	300(75%)	40(10%)	<0.001
Not knowledgeable	100(25%)	360(90%)	
Do all people with STIS show symptoms?			
Disagree	40(10%)	40(10%)	
Do not know	240(60%)	80(20%)	<0.001
Agree	120(30%)	280(70%)	
Do people always show similar symptoms when they have an STI?			
Disagree	60 (15%)	280(70%)	<0.001

Do not know	320(80%)	100(25%)	
Agree	20 (5%)	20(5%)	
Which possibilities for the transmission of sexually transmitted infections were you aware of?			
Unprotected gender	296 (74%)	120(30%)	<0.001
Inconsistent condom use	338 (84.5%)	96(24%)	<0.001
Having multiple partners	312 (76.5%)	52(13%)	<0.001
Sex work	380 (95%)	64(16%)	<0.001
Pregnancy	284 (71%)	40(10%)	<0.001
Sharing cloths	200 (50%)	10(2.5%)	<0.001
Do not know	13(3.25%)	26(6.5%)	0.032
knowledge of the possibilities associated with the transmission of sexually transmitted infections			
knowledgeable	352 (88%)	200 (50%)	<0.001
Not knowledgeable	48 (12%)	200 (50%)	
Which techniques of preventing sexually transmitted infections were you aware of?			
Diagnosis and screening of risky people	334 (83.5%)	26 (6.5%)	<0.001
Management of cases & their sexual partners	384 (96%)	84 (21%)	<0.001
Use of condom prevent STIs	134 (33.5%)	360 (90%)	<0.001
Do not know	16(4%)	80 (20%)	<0.001
knowledge of prevention methods of STIs			
knowledgeable	384 (96%)	240(60%)	<0.001
Not knowledgeable	16 (4%)	160 (40%)	
What is considered the most important preventative measure against the transmission of sexually transmitted infections (STIs)?			
Abstinence from casual sex	360(90%)	12 (3%)	
Consistent use of condoms during sexual activity	12(3%)	320 (80%)	
Regular STI testing	12 (3%)	(15%)	<0.001
Limiting the number of sexual partners	16(4%)	8(2%)	
How effective do you think condoms are in preventing STIs?			
Not effective at all	300(75%)	20(5%)	
Somewhat effective	80(20%)	100 (25%)	<0.001
Very effective	20(5%)	280(70%)	
What are the consequences of unmanaged sexually transmitted infections?			
Upper genital tract infections	324 (81%)	42 (10.5%)	<0.001
Infertility	354 (88.5%)	82 (20.5%)	<0.001
Cervical cancer	318 (79.5%)	24(6%)	<0.001
Enhanced transmission and acquisition of HIV	372 (93%)	36 (9%)	<0.001
Death	324(81%)	12(3%)	<0.001
Others (bleeding)	382(95.5%)	26 (6.5%)	<0.001
knowledge of complication of untreated STIs			
knowledgeable	382 (95.5%)	80 (20%)	<0.001
Not knowledgeable	18 (4.5%)	320 (80%)	
Overall Attitude of STIs			
knowledgeable	372 (93%)	106 (26.5%)	<0.001
Not knowledgeable	28(7%)	294(73.5%)	

p<0.001 is highly significant, P value <0.05 is statistically significant, P value >0.05: Not significant; STIs: Sexually Transmitted Infections

Table 5 demonstrates that, statistically significant variance was discovered among the Egyptian and Eswatini groups as regard the knowledge of participants about STIs.

Table (6): Attitude of the participants towards STIs between the studied groups.

	Egypt group (n=400)	Eswatini group (n=400)	P value
	N (%)	N (%)	
Do you believe that STIDs are not as harmful as they may appear due to their potential for treatment?			
Disagree	148(37%)	220(55%)	
Do not know	200(50%)	40(10%)	<0.001

Agree	52(13%)	140(35%)	
Are you of the opinion that screening for STIDs is beneficial?			
Disagree	32(8%)	40(10%)	
Do not know	80(20%)	80(20%)	0.6
Agree	288(72%)	280(70%)	
How often do you think individuals should get tested for STIs?			
Once a year	40(10%)	40(10%)	
Every 6 months	20(5%)	300(75%)	
After each new sexual partner	40(10%)	40(10%)	<0.001
Only if symptoms are present	280(70%)	20(5%)	
Never	20(5%)	0(0%)	
Is it necessary to administer treatment to an individual that acquired STDs?			
Disagree	24(6%)	40(10%)	
Do not know	54(13.5%)	80(20%)	0.002
Agree	322(80.5%)	280(70%)	
Do you believe that isolating an individual who acquired STIDs may aid in the prevention of the illness's transmission?			
Disagree	18(4.5%)	156(39%)	
Do not know	20(5%)	224(56%)	<0.001
Agree	362(90.5%)	20(5%)	
Do you believe that STIDs have an impact on the marital relationship?			
Disagree	28(7%)	172 (43%)	
Do not know	40(10%)	68(17%)	<0.001
Agree	332(83%)	160(40%)	
Do you believe that it is possible to treat an individual that acquired STDs?			
Disagree	102(25.5%)	70(17.5%)	
Do not know	178(44.5%)	50(12.5%)	<0.001
Agree	120(30%)	280(70%)	
Do you think traditional marathon can be effective than western medication?			
Disagree	300(75%)	40(10%)	
Do not know	60(15%)	200(50%)	<0.001
Agree	40(10%)	160(40%)	
In your opinion, do STIDs cases ultimately pay the price for their immoral lifestyle?			
Disagree	20(5%)	326(81.5%)	
Do not know	32(8%)	42(10.5%)	<0.001
Agree	348(87%)	32(8%)	
The overall attitude towards STIs			
Poor attitude	26(6.5%)	352(88%)	<0.001
Good attitude	374(93.5%)	48(12%)	

p<0.001 is highly significant, P value <0.05 is statistically significant, P value >0.05: Not significant; STIDs: Sexually Transmitted Infections Diseases.

Table 6 demonstrates that, statistically significant variance was discovered among the Egyptian and Eswatini groups as regard the attitude of the participants towards STIs. Egyptians generally exhibit a more positive, open, and treatment-oriented approach, and Eswatini participants show more uncertainty, hesitation, and stigma surrounding STIs. whereas statistically insignificant variance was discovered among the Egyptian and Eswatini groups regarding thinking screening for STIDs is good.

Discussion

The present research showed that, statistically significant variance was discovered among the Egyptian and Eswatini groups regarding social status, living place, and living condition, while statistically insignificant variance was discovered among the examined groups regarding gender, age, educational level, and working status.

In line with the present research, **Amin et al., (10)** whose An investigation carried out in Egypt to evaluate the impact of an educational intervention on the knowledge status and attitudes of a sample of females in reproductive age regarding sexually transmitted infections. The results indicated that the mean age of the 200 females who participated in the study was $.31.13 \pm 8.12$ years, ninety-five percent of

them were married, 79.5% were housewives, and eighteen percent were from rural areas.

Similarly, the present study aligned with **Jasumback et al.**, (11) who aimed to determine the necessity of and direct advancement of NAAT-based STI screening strategies for the most at-risk adolescents and young people with HIV. They reported that the median age of participants was 19.6 years, 141 (47.2%) participants were males, 158 (52.8%) participants were females, the majority of them 170 (56.9%) were high schoolers.

The present findings revealed that, highly statistically significant rise was discovered in knowledge of participants about ways of STID transmission in Egypt group than Eswatini group.

As well, the present study was supported by **Amin et al.**, (10) whose research highlighted the necessity of implementing educational programs to enhance female's preparation for STI screening and to enhance their understanding of STIs. They demonstrated that 42.4% of Egyptian women were aware that Sexual contact was a means of transmission of STIs and 33% of women demonstrated other modes of transmission involved contaminated syringes, from pregnant mother to her child and blood transfusion.

The obtained results demonstrated that, highly statistically significant rise was discovered in knowledge of participants about ways of STIS prevention in Egypt group than Eswatini group.

As well, the current study aligned with **Amin et al.**, (10) whose study showed the impact of educational intervention on the knowledge and attitudes of a sample of Egyptian females at the primary care level regarding sexually transmitted infections. They stated that 61 (31.9%) of the participants correctly determined that male condoms may decrease the possibility of sexually transmitted infections.

Also, the present findings agreed with **Jasumback et al.**, (11) who concluded that In high-risk populations, including young adults and adolescents with HIV, routine diagnostic testing significantly enhances the identification of sexually transmitted infections. They demonstrated that 91 (57.6%) of participants always used condom and 101 (63.1%) of them had only 1–2 sexual partners.

The findings of this study reveal notable differences in STI prevention knowledge between Egypt and eSwatini. In Egypt, 87% of participants emphasized abstinence as the primary prevention method, while 89% of eSwatini participants prioritized condom use. Despite these differences, both countries identified abstinence and consistent condom use as key preventative measures, with 90% of Egyptians and 80% of eSwatini respondents considering abstinence and condoms, respectively, as the most important methods. However, research has shown that even

with consistent condom use, STIs continue to be reported at significant rates. Studies in southern Africa have demonstrated that, despite widespread condom use, the incidence of STIs remains high due to factors such as incorrect usage, condom failure, and the presence of multiple concurrent sexual partners **Smith et al.**, (12); **Johnson & Davis**, (13).

This paradox is compounded by cultural and social factors, including stigma and lack of sexual health education, which may undermine the effectiveness of condoms in preventing transmission **Mokoena et al.**, (14).

These findings underscore the need for a more comprehensive approach to STI prevention that goes beyond promoting a single method, addressing not only condom use but also other behavioral, social, and cultural factors that contribute to STI transmission **Chirwa et al.**, (15).

The reported findings showed that, statistically significant variance was discovered among the Egyptian and Eswatini groups according to the attitude of the participants towards HIV.

Similarly, the current findings aligned with **Bakhoun et al.**, (16) who presented assessment of Knowledge, Attitude, and Practice of Risky Sexual Behavior Leading to HIV and Sexually Transmitted Infections among Egyptian Substance Abusers as they reported that 64 (15.6%) of participants showed Poor attitude and 111 (27.1%) of participants showed good attitude .

As well, the present study agreed with **Al Rabeei et al.**, (17) demonstrated that The average proportion of respondents with positive attitudes toward individuals living with HIV/AIDS was 59.8%, while a significant number of students (40.2%) held negative attitudes regarding HIV/AIDS cases.

The present research showed that, statistically significant variance was discovered among the Egyptian and Eswatini groups according to the knowledge of participants about STIs. The present findings revealed that, statistically significant variance was discovered among the Egyptian and Eswatini groups according to the attitude of the participants towards STIs. Egyptians generally exhibit a more positive, open, and treatment-oriented approach, and Eswatini participants show more uncertainty, hesitation, and stigma surrounding STIs. whereas statistically insignificant variance was discovered among the Egyptian and Eswatini groups according to thinking screening for STIDs is good.

Also, the presented study was supported by **Mahmoud et al.**, (18) who aimed evaluate the impact of educational sessions on the knowledge and attitudes of secondary school students in Zagazig City regarding sexually transmitted diseases, They reported that the (53.7%) of participants knew the

definition of STD, (11.7%) Knew types of sexually transmitted diseases, (2.7%) Knew the Methods of prevention and (19.3%) of them aware about the Complications of STDs.

Similarly, the current study agreed with **Maraee et al., (19)** who aimed to assess knowledge and attitude according to sexual health among medical students in Menoufia University as they demonstrated that 2 (0.7%) of participants showed poor attitude and 137 (45.6%) of participants showed good attitude.

As well, **Samkange-Zeeb et al., (20)** whose systematic review aimed to determine the level of knowledge and awareness of sexually transmitted diseases among school-aged male and female adolescents in Europe, as well as, when feasible, their perception of their own potential for contracting an STD. They inserted the study of Höglund et al., who cared about Knowledge of and attitudes to sexually transmitted diseases and focus on human papillomavirus, so the reported rate was 98% of participants.

Conclusion

There were significant differences were observed in social status, living conditions, and attitudes toward HIV and STIs between participants in Egypt and eSwatini. Egypt showed a notable increase in knowledge about STI transmission and prevention methods. While eSwatini prioritizes condom use as the best preventative measure, it is important to recognize that condoms, though effective, do not provide 100% protection against STIs. Both nations highlight the need for context-sensitive health promotion strategies, including awareness campaigns. Bridging cultural attitudes with public health goals requires tailored interventions that address misconceptions, enhance education, and improve healthcare access to achieve more effective STI prevention and better sexual health outcomes.

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