

Women's knowledge, beliefs and attitude toward sexually transmitted diseases such as AIDS (HIV)

Amera Bekhatroh Rashed¹; Nevin Adel Amer Ismael¹; Azza Ismail El Sayed¹; Watin Arif Alkhelaiwi¹; Miad Janab Alruwaili¹; Haifa Abdullah Alfouzan²; Zeinab Abd El Fattah Ali Hamada^{*2,3}

¹Department of Nursing, College of Applied Medical Sciences, Jouf University, Saudi Arabia.

²Department of Physical Therapy, College of Applied Medical Sciences, Jouf University, Saudi Arabia.

³Department of Physical Therapy for Surgery, Faculty of Physical Therapy, Cairo University, Giza, Egypt.

Abstract

The study assessed women's knowledge, beliefs and attitude towards sexually transmitted diseases (STDs), especially human immunodeficiency virus (HIV). A descriptive co-relational cross-sectional study was conducted on 268 married women at two family planning clinic in the Maternal and Child Health Centres in Shebin El-Kom, Egypt. A structured questionnaire containing socio-demographic data included the medical, surgical and obstetric history with knowledge, beliefs and attitude. The mean age of studied women was 30.8 ± 5.7 years; 54% of the sample were from urban residents, about half of them had secondary education, 57% had enough income and 52.2% were employed. The study outcomes showed that 38% of did not know about STDs. Most women (72.4%) had negative beliefs and about one-third of women (64.9%) had a negative attitude towards STDs especially for HIV. There was a significant correlation between women's perception (knowledge, beliefs and attitude) towards STD with age, level of education, residence, income and occupation.

Key words: Knowledge, beliefs, attitude, STDs, HIV

Introduction

Sexually transmitted diseases (STDs) are a predominant health disorders affecting younger folks, especially women in developing and developed countries. If untreated, these can lead to serious complications and long-term consequences in women [1]. Sexually transmitted diseases are infections that are mainly transmitted through sexual contact [2]. More than 30 different sexually transmissible bacteria, viruses and parasites are known. The most common STDs include gonorrhoea, chlamydia infection, syphilis, trichomoniasis, chancroids, genital herpes, genital warts, human immunodeficiency virus (HIV) infection and hepatitis B infection [3]. STDs like gonorrhoea, chlamydia, syphilis, trichomoniasis, HIV and hepatitis are caused when exchange of body fluids occurs during sexual transmission (genital-anal, genital-genital, oral-genital/anal). Other STDs like genital warts, herpes, scabies and pubic lice are transmitted by skin-to-skin contact (i.e., kissing, non-penetrative sex or body rubbing). STDs like chlamydia, gonorrhoea, hepatitis B, HIV, human papillomavirus, herpes and syphilis can also be transmitted from a pregnant woman to her unborn foetus or infants during vaginal delivery or through breast milk. STDs do not spread through social contact such as shaking hands or hugging [4,5].

Women especially, of reproductive age group are physically, mentally and socially more vulnerable to

reproductive tract infections and STDs [6]. Women's reproductive organs are more susceptible to damage if an infection is left untreated, and STDs in women often remain undetected and untreated as many women are asymptomatic [7]. Besides, women are more prone to STDs due to social factors such as lower social status and difficulties in gaining control over their own reproductive lives [8,9].

The objectives of the study are

- To assess women's knowledge, beliefs and attitude toward STDs.
- To find out if there is a relationship between perception (knowledge, beliefs and attitude) of women toward STDs and their socio-demographic data (age, education, residence, income and occupation)?

Materials and methods

Research design

A descriptive correlational cross-sectional design was used in this study.

Setting

The study was conducted in two Maternal and Child Health Centres (Qebli and Bahary) in Shebin El-Kom, Egypt.

Sample size

Two hundred sixty-eight women between 25–35 years visiting the Maternal and Child health centres were included.

Data collection instruments

Interviewing questionnaire

This instrument was devoted to select the eligible women who fulfil the proposed inclusion criteria.

Perception of women toward STDs questionnaire

This instrument assessed the knowledge, beliefs and attitude) of women in their reproductive age towards STDs.

Study instruments validation

The instruments were validated by a group of subject area experts (four experts from the Faculty of Nursing and one expert from Faculty of Medicine of the Maternal and Child Health Centres), who reviewed the instruments for content and internal validity. They also judged the items for appropriateness, completeness and clarity. Suggestions given by them were incorporated into the instrument.

Reliability of the instruments

The test-retest reliability was applied for testing the consistency of the instruments. It was checked by administrating the same instruments to the same participants under similar conditions on two or more occasions. Scores of the repeated testing were compared, and some questions were modified.

Ethical consideration

Written permissions were obtained from the dean of Faculty of Nursing, Menoufia University and the directors of the Maternal and child health centres in Shebin El-Kom. Approaches to ensure ethics were considered in the study regarding confidentiality and informed consent. Confidentiality was achieved using locked sheets with the names of the participating women replaced by numbers. All the pregnant women were informed that the information they provided during the study would be kept confidential and used only for statistical purpose before presenting the group data with no personal information. Informed consent was obtained verbally from all women after explaining the study protocol. Every woman was informed that participation in the study was voluntary and they could withdraw whenever they decided to. The women could also free to ask any details or questions .

Pilot study

Piloting was conducted on 10% of the total sample (27) to test the applicability of the instruments, the feasibility of the study and to estimate the time required

for data collection. Based on the outcomes, some questions and sentences were rephrased to obtain the final fieldwork schedule. The piloting sample were excluded from the main study.

Data collection procedure

This study was carried out in two consecutive phases, preparatory and implementation.

Preparatory phase

An extensive investigation and review concerning the study was performed by browsing electronic dissertations, available books and articles to formulate it as the study knowledge base.. The literature was tested for plagiarism and the probability of plagiarism was 17%.

Implementation phase

This phase consisted of three steps. First, the researcher introduced themselves to the study participants and provided a verbal explanation of the study. Informed consent was obtained verbally from all participants.

Second, the researcher visited the Maternal and Child Health Centres four days a week (Saturday, Monday, Wednesday and Thursday) from 9 am to 1 pm. On Saturday and Wednesday, they went to the Maternal and Child Health Centre, Qebli. The daily flow rate was around 20 women in Qebli, and only 17–20 participated in this study. On Monday and Thursday, the researcher went to the Maternal and Child Health Centre, Bahari. The daily flow rate was around 12 women, and only 8–11 participated in this study. Third, the researcher used questionnaires to assess the knowledge, beliefs and attitude of women toward STDs. Each woman was handed the questionnaire and was asked to answer it under the observation of the researcher. The researcher read the questions to illiterate women and wrote their answers. The approximate time taken to complete the questionnaire was about 7–10 minutes.

Statistical design

Upon completion of data collection, the collected data were organized, tabulated and scored. Each answer sheet was analysed using SPSS software (version 20, SPSS Inc. Chicago, IL). For quantitative data, the mean and standard deviation were calculated. Qualitative data, was analysed using Pearson's correlation. Knowledge scoring was categorized into three levels: lack of knowledge < 50% (scored from 0–5), fair knowledge 50–75% (scored from 6–9) and -adequate knowledge > 75% (scored from 10–12) [10]. Score of beliefs: negative beliefs < 50% (scored from 0–1) and positive beliefs > 50% (scored from 2–3). Score of attitudes: negative attitude < 50% (scored from 0–4) and positive attitude > 50% (scored from 5–10). The score of perception: low level of perception < 60%, moderate level of perception 60–75% and high level of perception >75%.

Results

Table 1 displays the socio-demographic data of study participants. The mean age of study participants was 30.8 ± 5.7 years, and 54% were urban residents. Half of them were secondary educated, while only 10% of sample was illiterate. Fifty-seven percent of sample had enough income. As for occupation, 140 women (52.2%) were employed.

Knowledge score about STDs is displayed in Table 2. As evident from the table, 32.5 and 38.1% of participants had adequate and inadequate knowledge about STDs, respectively.

Women beliefs about STDs are displayed in Figure 1. The majority of participants (72.4%) had negative beliefs, while only 27.6% had positive beliefs about STDs.

Women attitude towards STDs is displayed in Figure 2. Only 35.1% had positive attitude, and 64.9% had negative attitude towards STDs.

The correlation between women’s perception (knowledge, beliefs and attitude) towards STDs and the socio-demographic data are shown in Table 3. There was a negative correlation between woman’s perception toward STDs and age, residence, income and occupation. There was a positive correlation between woman’s perception toward STDs and the level of education.

Discussion

In this study, the sample was distributed according to the socio-demographic data as following. Concerning age, near to one-third of women ages ranged from 20–25 years old, and this finding agreed with the Egyptian study by Ibrahim,¹¹ who found that three-quarter of the sample (71%) between 20–35 years. This data disagreed with the research of Aliyu et al.,¹² that found that nearly half (44.2%) of the respondents were in the age group of 15–20 years old. Regarding educational level, this study showed that about half of women had passed secondary

Table 1: Socio-demographic characteristics of the study sample (n=268)

Variables	n (%)	
<i>Age, years</i>		
20–25	86	(32.1)
26–30	77	(28.7)
31–35	72	(26.9)
>35	33	(12.3)
Mean age: 30.8 ± 5.7		
<i>Women occupation</i>		
Employee	140	52.2
House-wife	128	47.8
<i>Husband occupation</i>		
Employee	239	89.2
Unemployed	29	10.8
<i>Level of women education</i>		
Illiterate	26	9.7
Secondary	136	50.8
University	34.3	92
Post-graduate	14	5.2
<i>Residency</i>		
Rural	123	45.9
Urban	145	54.1
<i>Income</i>		
Sufficient	153	57.1
Un-sufficient	115	42.9
<i>Years of marriage</i>		
1 to < 5	103	38.4
5 to < 10	74	27.6
≥10	91	34.0

Table 2: Knowledge score about STDs (n=268)

Score	Knowledge	n (%)
>75%	Adequate	87 (32.5)
50 to ≤75%	Average	79 (29.4)
< 50	Poor	102 (38.1)

STDs: sexually transmitted diseases.

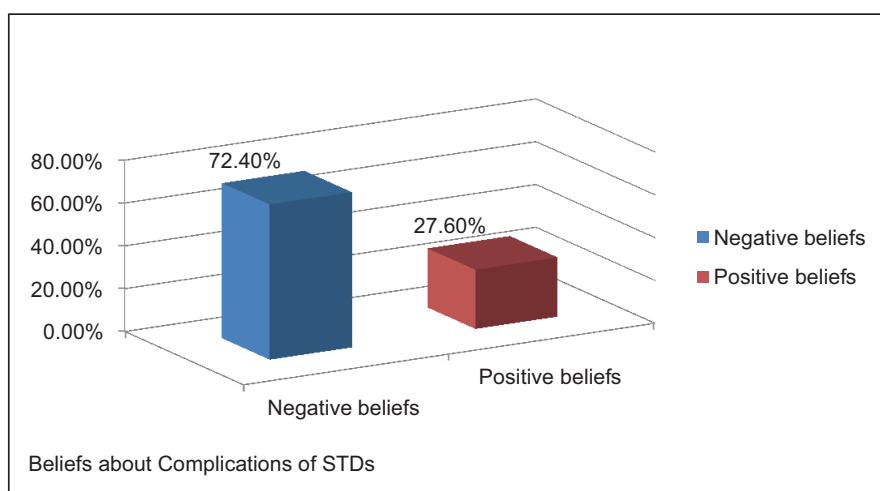


Figure 1: Beliefs about complications of STDs

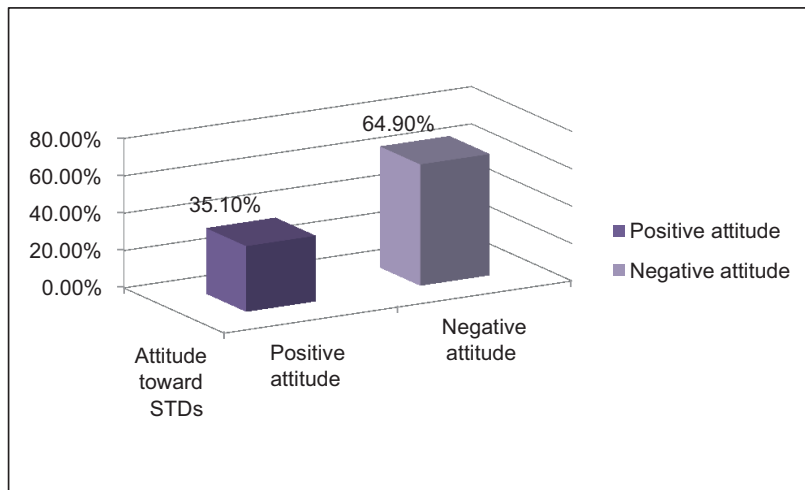


Figure 2: Attitude towards STDs

Knowledge	Low perception	Moderate perception	High perception	Pearson’s coefficient
<i>Age (years)</i>				
20–25	30	25	31	-0.712
25–30	30	26	22	
30–35	22	27	12	
>30	20	4	9	
<i>Education</i>				
Illiterate	65	8	0	0.752
Secondary	43	35	6	
University	4	36	57	
Post graduate	0	3	11	
<i>Residence</i>				
Urban	29	47	69	0.764
Rural	83	35	5	
<i>Income</i>				
Sufficient	35	49	69	0.751
Un-sufficient	77	33	5	
<i>Occupation</i>				
Employed	22	48	70	0.757

education and one-third of women had a university degree. The findings of educational level agreed with the study of Sekirime,¹³ differed from the Ethiopian study by Yitoyal et al.,¹⁴ that reported that all participants had only preparatory education.

Concerning the occupation and residence, about half of the sample were housewives living in rural area. This finding was consistent with the Egyptian study of Ibrahim,¹¹ which found that near three-quarter of the sample were housewives. The findings of Mohamed et al.¹⁵ showed that more than three-quarters (83.3%) were housewives and more than half of them (60.7%) were living in rural areas.

As for women’s knowledge about sexually transmitted diseases, the current findings showed a poor knowledge level among educated women attributed to the lack of sex education in school and at home due to

the cultural restrictions. This occurrence is predominant in Egypt and many other foreign countries. The study by Ibrahim¹¹ with 507 women reported that, the local population of Egypt lacked STDs awareness. Moreover, Linn and Waern¹⁶ showed similar findings in Sweden. Likewise, Zübeyde and Kömürçü¹⁷ reported similar outcome in Istanbul and determined that students lacked STDs knowledge. Furthermore Edvinsson et al.¹⁸ showed similar finding in study conducted in Ho Chi Minh City, Vietnam, and reported that the Vietnamese students also lacked knowledge about STDs.

In contrast, a study conducted in Northern Nigeria by Aliyu et al.¹³ reported that more than half of adolescents were aware of STDs. Likewise, a in Malaysian study by Awang et al.¹⁹ reported that respondents were aware of STDs. The study of Oluyemi et al.²⁰ also

approved that adolescents in Nigeria had a fair knowledge of the STDs. These contradictory review studies, proved that some countries imparted education on STD at schools.

As for women's beliefs and attitude toward STDs, this study showed that more than half of the participants had negative faith and attitude towards STDs. This finding contrasted with that of Yitoyal et al.¹⁴ that reported a 66% positive attitude towards HIV, AIDS and other STDs. Moreover, Uike et al.²¹ showed a similar finding in a study conducted in Maharashtra, India, which showed a 95% positive attitude towards STDs and 80% positive beliefs about STDs. This contrast may be due to the women attitude and knowledge level towards STDs in different cultures.

As for correlation between women's perception (knowledge, faith and attitude) toward STDs and socio-demographic data, the current findings showed a negative correlation between women's perception and age, residence, income and occupation. This correlation infers that women tend to gain more information and knowledge about STDs with age and the difference between rural vs. urban culture. Regarding employment, it gives women more opportunity to meet and talk with people from different cultures. A positive correlation between perception and educational level can be explained by the fact that increased education enhances sex and sex-related health knowledge. These findings agree with the study of Yitoyal et al.¹⁴ that reported occupation and income differences in attitudes towards STDs.

Conclusion

Many women had low levels of knowledge toward STDs, negative beliefs about STDs and negative attitude toward STDs. There was a negative correlation between women's perception (knowledge, believes and attitude) towards STD and their age, residence, income and occupation. A positive correlation was found only with education.

Recommendations

Strategies for creating reproductive health education targeted at young female are essential for the prevention of STDs. Integrated use of mass media and posters in family planning clinics for changing negative beliefs about STDs is suggested. Encourage women routinely to follow up in family planning clinic. Further research is needed, both in rural and urban areas, to get a broader perspective of women's knowledge and attitudes in this issue.

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Conflict of interest

The authors declare no conflicts of interest.

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Correspondence: Zeinab Abd El Fattah Ali Hamada
Zeinaboh4@gmail.com