Proposed Nursing Guideline Regarding Sexual Transmitted Diseases Among Adolescent Girls

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ABSTRACT

Background: Sexually transmitted diseases (STDs) are major global public health problems that consider the main cause of acute illness, infertility, long-term disability and death. **Aim of this study** was to evaluate the proposed nursing guidelines regarding sexual transmitted diseases among adolescent girls. Materials and methods: **Design:** Quasi-experimental Design. **Sample**: a Purposive sample of a total 108 adolescent girls nursing students which included 75 in 1st academic year & 33 in 2nd year .**Setting**: data collected from Faculty of Nursing Assuit University. **Results:** the study revealed that there were mean age (19.20±.78251.On the other hand there was a highly significant difference between pre & post- test regarding knowledge of STDs (P< 0.001**). **Conclusion and Recommendation:** Further researches are still needed to implemented guideline of nursing education and practice for adolescent girls among STDs.

Key words: Guidelines Sexually transmitted diseases, adolescent girls

Introduction

Sexually transmitted diseases (STDs) amongst adolescents girls worldwide growing health problem. Approximately one million people contract sexually transmitted infections every day and 50% of them are adolescents aged 19-22 years **(Awang H, Wong L, Jani R. & Low W (2013**). A sexually transmitted infection may be benign, or it can become chronic with long-term consequences including infertility, cervical cancers, or pelvic inflammatory **disease (Hussain etal, 2011&Maan etal,2011).In 20**15, About 500 million were infected with either syphilis, gonorrhea, chlamydia or trichomoniasis. At least an additional 530 million people have genital herpes **(Global Burden of Disease 2016).**

Most STIs initially do not cause symptoms. This results in a greater risk of passing the disease on to others. Symptoms and signs of disease may include vaginal discharge, penile discharge, ulcers on or around the genitals, and pelvic pain. STIs acquired before or during birth may result in poor outcomes for the baby. Some STIs may cause problems with the ability to get pregnant**(Murray etal, 2013& Goering,Richard V 2012).**

Healthcare provider should encourage risk reduction after obtaining a sexual history by providing prevention counseling, which it is most effective if provided in a nonjudgmental and empathetic manner appropriate to the person's culture, language, gender, sexual orientation, age, and developmental level. Prevention counseling for STIs should be offered to all sexually

active adolescents and to all adults who have received a diagnosis, have had an STI in the past year, or have multiple sex partners**(STDs Treatment Guidelines, 2015).**

Vaccines that protect against some viral STIs are available such as Hepatitis A, Hepatitis B, and some types of HPV. Vaccination before initiation of sexual contact is advised to assure maximal protection. The development of vaccines to protect against gonorrhea is ongoing ***(*Baarda,&Sikora, 2015&CDC,2013).** There have been many different approaches used to educate the public about sexually transmitted diseases. Some approaches would include large-scale screening programs in family planning clinics, improved STD treatment programs, and various education Guidelines and programs.(**CDC,2013**).

The major ideas which must be addressed is that whatever program is used, it is specific to the population and relevant to their current levels of knowledge, beliefs, attitudes, interests, and behaviors. In addition, the content of the education program should be age appropriate. Which would help in reducing the rates of STDs. Programs can also be developed which can give parents knowledge about STDs, what the risky behaviors are, and how to talk to their children about sex (**Hogben&Leichliter, 2012*).***

Significance of the study

Not all STIs are symptomatic, and symptoms may not appear immediately after infection. In some instances a disease can be carried with no symptoms, which leaves a greater risk of passing the disease on to others. Depending on the disease, some untreated STIs can lead to infertility, chronic pain or even death. S0 adolescent girls must have theknowledge and practice apply active care regarding STIs**.(CDC,2013**

Aim of the study

The aim of the study was to determine effect of proposed nursing guideline regarding sexual transmitted diseases among adolescent girls.

Subject and methods

Research design:*Quasi-experimental Design was utilized in this study

Sample&Settings: a Purposive sample of a total 108 adolescent girls nursing students which included 75 in 1st academic year & 33 in 2nd year at Faculty of Nursing Assuit University.

Inclusion Criteria are as follow:

- Age from 16 to 21 years.
- Not married.
- 1st &2nd academic year's male students.
- The participants were willing to participate voluntarily.
- Free from any medical diseases

Tools for Data collection:

Interviewing questionnaire sheet:

It was developed by the researcher to collect the data related

I) Socio- demographic data such as (age, academic year,level of education of their parents, residence, …etc.).

II) History of STDs such as (having any type of STDs, many times of occurrences, causes of not going to doctor…….etc.).

III) Assessment of the participants' knowledge regarding STDs through in the form of multiple choice questions. these

questions was tested the participants' knowledge regarding causes, types, and ways of transmission of STDs, as well as signs &symptoms, high risk factors , complications of STDs and itspreventive measures……, etc.) These were used as (pre- post- test).

Knowledge's Scoring system

Each question was given a number of correct answers, and each student was asked to select for each given if correct or incorrect. Correct answer was scored as (1); incorrect answer was scored (0).

Total knowledge score was calculated as the following:-

- Poor: < 60% of total knowledge scores.
- Average: 60-<75%of total knowledge score.
- Good: ≥ 75% of total knowledge score.

Ethical considerations:

Before the implementation of the study an official permission was obtained and right for privacy and c0nfidentiality was taken.

Procedures

Field work: The study was conducted from the Ist of October 2016 to the end of December 2016.The data were collected in two main phases, assessment phase and intervention phase. **Assessment phase:** Adolescent girls were interviewed to collect data related to socio-demographic characteristics, History of STDs. Assessment of the participants' knowledge regarding STDs. The researcher visited the previously mentioned setting two days/week, (Sunday, Tuesday), from 9.00 Am to 2.00 Pm. The interview listed for 25-30 minutes(pre-test). To fulfill the aim of the study, the following phases were adopted. Interviewing and assessment phase, designing of the proposed guidelines phase, implementation phase and evaluation phase.

Intervention & Evaluation phase: Proposed guidelines was given to each participant. It contained brief information about causative organism, modes of transmission, signs and symptoms, consequences to infected persons, diagnostic tests, treatment and the preventive measures of the eight most common STDs: Herpes, Hepatitis B, Human papillomavirus (HPV), Syphilis, Chlamydia, Gonorrhea, Trichomonasis and HIV/AIDS. Proposed guidelines was designed and implemented through the following steps :

- Assessment of the knowledge of adolescent girls nursing students regarding S.T.D through using the developed tools as pre-test.
- Analysis of pre-test findings to detect adolescent girls student's needs toward STDs Based on results obtained from pre-test assessment. The Educational guidelines was developed, session's number and its contents, different methods of teaching, and instructional media were determined. The impact of educational guidelines students' knowledge regarding STDs was evaluated by the end of the sessions using post- test. Statistical significance was considered at P-value ≤0.05.

Statistical analysis:

Data were analyzed using the statistical package(SPSS) version (wind0ws Microsoft) continuous data were expressed as frequency, mean, SD, and the range. Discrete data were expressed as frequency and percentage. Comparison between variables was done using Chi-square test. Statistical significance was considered at P-value ≤0.05.

Results :

Table (1): Distribution of studied adolescent girls students regarding their personnel characteristics. (n= 108)

personnel characteristics	(N=108)	%
Age in years		
18-	30	27.8
19-	40	**37.0**
≥20	38	35.2
Mean ±SD	**19.20±.78251**	
Academic year		
First	78	**72.2**
Second	30	27.8
Working beside study		
Yes	68	**63.0**
No	40	37.0
Residence		
Urban	49	45.4
Rural	59	**54.6**
Students live with		
Parents	81	**75.0**
Friends	19	17.6
Alone	8	7.4

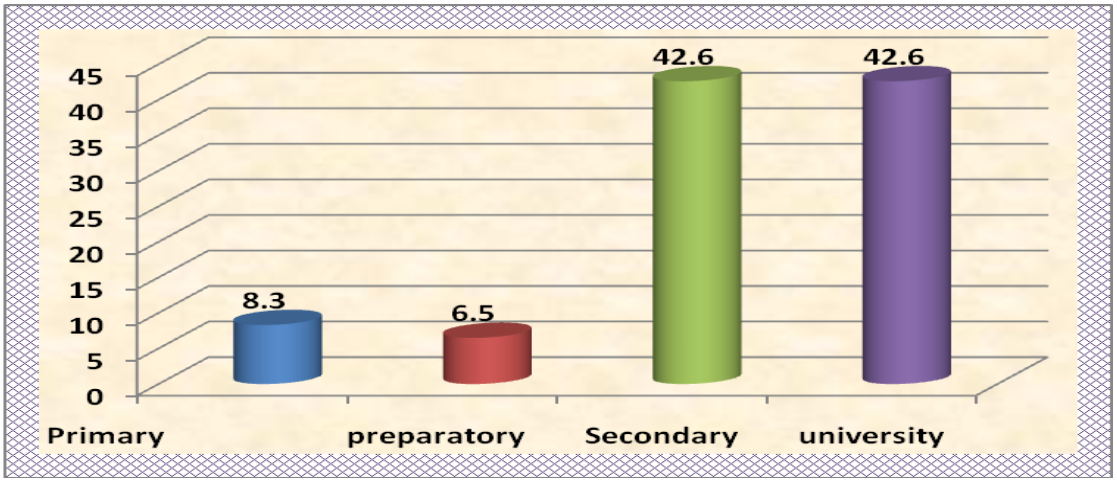

Figure (1): percentage distribution of studied students fathers' level of education.

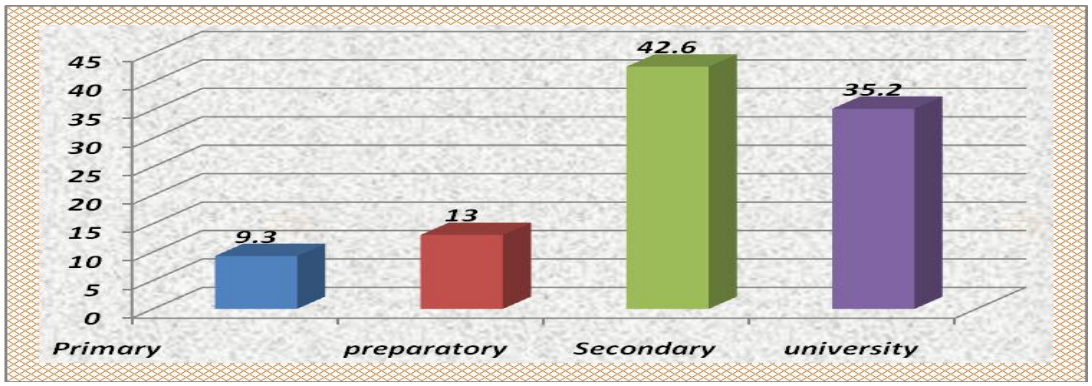

Figure (2): percentage distribution of studied students mothers's level of education.

Table (2): Distribution of studied adolescent girls students regarding history of sexual transmitted diseases (STDs).(n= 108)

girls students history of STDs.	(N= 108)	%
Complain of STDs.		
Yes	50	46.3
No	58	**53.7**
Times of occurrence of STDs through previous year (N=50).		
Once	26	**32.0**
Twice	14	28.0
three time	10	20.0
Go to doctor (N=50).		
Yes	26	**52.0**
No	24	48.0
what causes of not going to doctor (N=24)		
custom and habit	6	25.0
culture of society	8	33.3
feeling of shyness	10	**41.7**

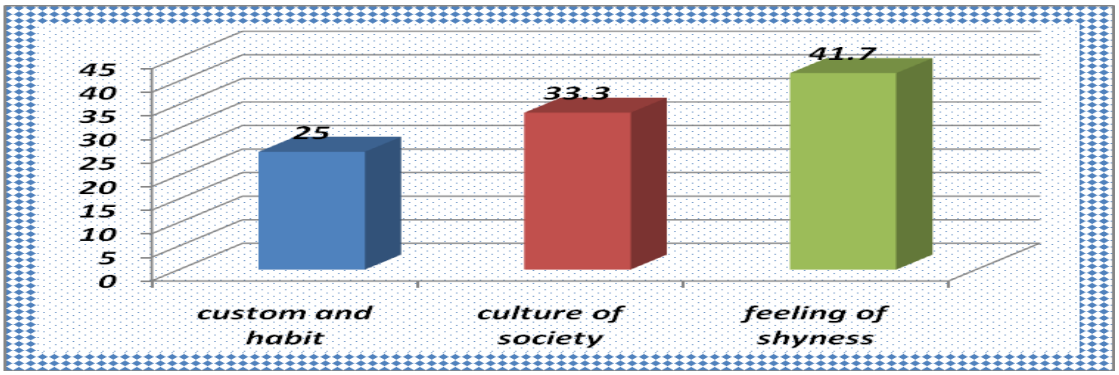

Figure (3): percentage distribution of causes of not counselling doctor among studied students.

Table (3): Distribution of studied adolescent girls students' general knowledge regarding sexual transmitted diseases pre and post intervention.(n= 108)

General knowledge regarding STDs.	Pre-intervention				Post-intervention				Chi square test	P value
	Incorrect		Correct		Incorrect		Correct			
	No	%	No	%	No	%	No	%		
STD also known as venereal diseases.	79	**73.1**	29	26.9	11	10.2	97	**89.8**	88.07	<0.001**
Most of the common STDs can be prevented.	78	**72.2**	30	27.8	18	16.7	90	**83.3**	67.50	<0.001**
Most of the common STDs can be cured with treatment.	81	**75.0**	27	25.0	27	25.0	81	**75.0**	45.00	<0.001**
STDs affect men and women of all ages and backgrounds, including children.	72	**66.7**	36	33.3	17	15.7	91	**84.3**	57.80	<0.001**
Many STDs can be passed from a mother to her baby before, during, or immediately after birth.	73	**67.6**	35	32.4	33	30.6	75	**69.4**	29.64	<0.001**

Table (4): Distribution of studied adolescent girls students' knowledge regarding causes of sexual transmitted diseases pre and post intervention.(n=108)

Causes of STDs.	Pre-intervention				Post-intervention				Chi square test	P value
	Incorrect		Correct		Incorrect		Correct			
	No	%	No	%	No	%	No	%		
Bacteria (gonorrhea, syphilis, chlamydia).	75	**69.4**	33	30.6	36	33.3	72	**66.7**	28.18	<0.001**
Parasites (trichomoniasis).	80	**74.1**	28	25.9	37	34.3	71	**65.7**	34.48	<0.001**
Viruses (human papillomavirus, genital herpes, HIV).	77	**71.3**	31	28.7	39	36.1	69	**63.9**	26.88	<0.001**

Table (5): Distribution of studied adolescent girls students' knowledge regarding signs and symptoms of sexual transmitted diseases pre and post intervention.(n=108)

Signs and Symptoms of STDs.	Pre-intervention				Post-intervention				Chi square test	P value
	Incorrect		Correct		Incorrect		Correct			
	No	%	No	%	No	%	No	%		
Sores or bumps on the genitals or in the oral or rectal area	70	**64.8**	38	35.2	12	11.1	96	**88.9**	66.12	<0.001**
Painful or burning urination	59	**54.6**	49	45.4	22	20.4	86	**79.6**	27.04	<0.001**
Discharge from the valva	55	**50.9**	53	49.1	22	20.4	86	**79.6**	21.97	<0.001**
Unusual or odd-smelling vaginal discharge	55	**50.9**	53	49.1	15	13.9	93	**86.1**	33.81	<0.001**
Unusual vaginal bleeding	57	**52.8**	51	47.2	21	19.4	87	**80.6**	26.00	<0.001**
Pain during sex	65	**60.2**	43	39.8	24	22.2	84	**77.8**	32.12	<0.001**
Sore, swollen lymph nodes, particularly in the groin but sometimes more widespread	85	**78.7**	23	21.3	33	30.6	75	**69.4**	50.50	<0.001**
Lower abdominal pain	70	**64.8**	38	35.2	28	25.9	80	**74.1**	32.94	<0.001**
Fever	73	**67.6**	35	32.4	24	22.2	84	**77.8**	44.92	<0.001**
Rash over the trunk, hands or feet	60	**55.6**	48	44.4	28	25.9	80	**74.1**	19.63	<0.001**
Pain with urination or having a bowel movement	66	**61.1**	42	38.9	14	13.0	94	**87.0**	53.68	<0.001**
Pain or swelling of glands in groin area	57	**52.8**	51	47.2	24	22.2	84	**77.8**	21.51	<0.001**
Loss of weight	51	**47.2**	57	52.8	23	21.3	85	**78.7**	16.11	<0.001**
Blood in urine	46	**42.6**	62	57.4	17	15.7	91	**84.3**	18.84	<0.001**

Table (6): Distribution of studied adolescent girls students' knowledge regarding complications of sexual transmitted diseases pre and post intervention.(n=108)

Complications of STDs if untreated.	Pre-intervention				Post-intervention				Chi square test	P value
	Incorrect		Correct		Incorrect		Correct			
	No	%	No	%	No	%	No	%		
Discomfort in the genital area	75	**69.4**	33	30.6	17	15.7	91	**84.3**	63.69	<0.001**
Infertility	72	**66.7**	36	33.3	17	15.7	91	**84.3**	57.80	<0.001**
Reproductive system cancers	65	**60.2**	43	39.8	19	17.6	89	**82.4**	41.22	<0.001**
Pelvic Inflammatory Disease (PID)	61	**56.5**	47	43.5	28	25.9	80	**74.1**	20.81	<0.001**
Enhanced transmission of HIV	51	**47.2**	57	52.8	22	20.4	86	**79.6**	17.40	<0.001**
Epididymitis	50	**46.3**	58	53.7	22	20.4	86	**79.6**	16.33	<0.001**
Premature birth	57	**52.8**	51	47.2	29	26.9	79	**73.1**	15.14	<0.001**
Still birth	56	**51.9**	52	48.1	21	19.4	87	**80.6**	24.72	<0.001**

Table (7): Distribution of studied adolescent girls students' knowledge regarding preventive measures of sexual transmitted diseases pre and post intervention.(n= 108)

Preventive measuresof STDs.	Pre-intervention				Post-intervention				Chi square test	P value
	Incorrect		Correct		Incorrect		Correct			
	No	%	No	%	No	%	No	%		
Have regular medical checkups even if you do not have symptoms of an STD.	67	**62.0**	41	38.0	26	24.1	82	**75.9**	31.74	<0.001**
Learn the symptoms of STDs.	67	**62.0**	41	38.0	32	29.6	76	**70.4**	22.84	<0.001**
Vaccines against HPV and hepatitis B are available	88	**81.5**	20	18.5	37	34.3	71	**65.7**	49.39	<0.001**
safer sexual behavior	70	**64.8**	38	35.2	27	25.0	81	**75.0**	34.60	<0.001**
support and counseling services for both STDs and HIV patients	76	**70.4**	32	29.6	21	19.4	87	**80.6**	56.60	<0.001**
Clinical protective measure	66	**61.1**	42	38.9	24	22.2	84	**77.8**	33.60	<0.001**

Table (8): Distribution relation between of studied adolescent girls students' total knowledge score at pre and post intervention.(n= 108)

total knowledge score	Pre-intervention		Post-intervention		Chi square test	P value
	No	%	No	%		
Poor	88	**81.5**	5	**4.6**	135.62	<0.001**
Average	12	**11.1**	25	**23.1**		
Good	8	**7.4**	78	**72.3**		

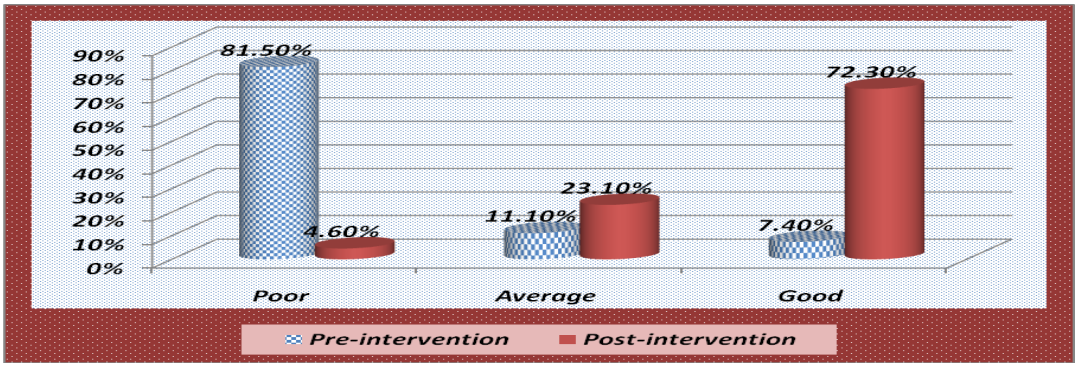

Figure (4): percentage distribution of total knowledge score of the studied adolescent girls students at both pre- post intervention phases.

Table (1): As regarding their personnel characteristics table (1) :showed that 37.0% of adolescent girls had age from 19 years old, with the mean age of (19.20±.78251) and (72.2%) of them at the first academic year.54.6% of them were resident at rural settings.

Table(2): Indicated that(46.3 %) of them had a history of STD,. On the other hand 48.0% of them didn't go to doctor.

Table(3,4,5): Showed that general knowledge of adolescent girls regarding sexual transmitted diseases, causes and signs and symptoms was a highly significant difference (p<0.001**).Also

Table (6,7): Illustrated that general knowledge of adolescent girls regarding sexual transmitted diseases in relation to complication and preventive measures was a highly significant difference (p<0.001**).

Table (8): Found thata highly statistical significant difference between their total knowledge score pre and post intervention among adolescent girls (p<0.001**). (81.5%) of them their total knowledge score pre intervention was poor but 72.3% of them their total knowledge score post intervention was good.

Discussion:

Sexually transmitted diseases (STDs) are a major public health problem in both developed and developing countries . The adolescent remain the age group at greatest risk for acquiring these infections (**Murray etal, 2013&Goering,Richard V 2012**).

As regarding their personnel characteristics table (1) : showed that 37.0% of adolescent girls had age from 19 years old, with the mean age of (19.20±.78251) and (72.2%) of them at the first academic year.54.6% of them were resident at rural settings. On The same line, most of the studies considered this age as risk factor to infection, (**STDs Treatment Guidelines, 2015**) where it was mentioned that, advanced female age compared with younger age ,was associated with significantly high rates of infections ,and infection complications.

The result of this study Indicated that (46.3 %) of them had a history of STD,. On the other hand 48.0% of them didn't go to doctor. This indication was in congruence with (**Murray et al, 2013& Goering, Richard V 2012**) who observed lack of awareness about STDS symptoms among adolescent girls. This is serious because it can cause more misconceptions about many illnesses. Motivate a adolescent girls to seek treatment from professional resources .

In this study the result revealed that general knowledge of adolescent girls regarding sexual transmitted diseases in relation to complication and preventive measures are low . This finding agreed with that of (**STDs Treatment Guidelines, 2015**) who foud a low level of awareness about the consequences of these complications .

The study Found that a highly statistical significant difference between their total knowledge score pre and post intervention among adolescent girls (p<0.001**). (81.5%) of them their total knowledge score pre intervention was poor but 72.3% of them their total knowledge score post intervention was good. This finding was in the same line with (**Lazarus etal, 2012**) who found that a significant difference between guidance and had high satisfactory given to the study sample who received guidance and had high satisfactory level of knowledge are more than those didn't receive the guidance and had high satisfactory level of knowledge.

Conclusion & Recommendations

From the results of the present study , it can be concluded that adolescent girls don't have enough information about STDs to help them go through adolescent successfully and prepare them to prevent its complications .This may be due to the Egyptian culture. Traditionally in Egypt, adolescents were shielded from information about reproduction and STDs until the time of their marriage . Today Egyptian has become more exposed to mass media explaining the dangers of STDs . So the parents must be more aware to the needs and experience of their kids. The results illustrated that a highly significant difference related to items of knowledge regarding STDs (pre-post test) (P< 0.001**).It is necessary to design and implement other educational programs for university students with different methods on the subject of STDs. implementation of a practical training course to improve the students' nurses' knowledge.

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