

SEXUAL KNOWLEDGE VERSUS ATTITUDES OF FEMALE ADOLESCENTS TOWARDS SEXUALLY TRANSMITTED DISEASES.

Nermeen Karam Khalil Nasr ⁽¹⁾ Amal Mohamed Eldakhakhny ⁽²⁾ Bataa Mahmoud Mohammed ⁽³⁾

⁽¹⁾ Nursing specialist in nursing science, Abu Hammad Hospital,

⁽²⁾ Professor of Pediatric Nursing , Faculty of Nursing , Zagazig University ,

⁽³⁾ Lecturer of Pediatric Nursing , faculty of Nursing, Zagazig University.

Abstract

Background: Adolescence refers to a sensitive stage of life in which adolescents of both sexes experience various changes in their bodies . **The present study aims** to identify sexual knowledge versus attitudes of female adolescents towards sexually transmitted diseases . **Descriptive comparative study** was conducted on **a sample of 154** students (77 nursing and 77 art) at the faculty of nursing and faculty of arts at Zagazig University . **Two tools** were used , a structured interview questionnaire sheet and attitude scale . **The results** revealed that 85.2% of female nursing students' mothers who had finished their secondary education compared to 39.4% of art students' mothers had good sexual knowledge. Also, 50% of nursing students and 35.3% of art students who had high social class had positive sexual attitudes. There was a statistically significant difference between female adolescent residence and their sexual knowledge for both nursing and art students. It can be **concluded** that more than two thirds of nursing students and less than one third of art students had good sexual knowledge. Concerning to overall attitude scale , there was a statistically significant difference between both nursing and art students groups . Therefore , **the study recommended that** Pediatric nurse , Psychiatric nurse , Community health nurse and School health nurse should offer sexual health teaching services for adolescents .

Key words : sexual knowledge, attitudes , adolescents and sexually transmitted diseases.

Introduction:

Adolescents in Egypt form around 25% of the country's population. Adolescents especially females have historically been neglected as an age group that requires particular attention ⁽¹⁾ .

Adolescence is the period in human growth and development which occurs after childhood and before adulthood, from ages 10 to19. It represents one of the critical transitions in the life span and characterized by a tremendous pace in growth. ⁽²⁾ .

Sexual health knowledge include information regarding sexuality, reproductive and sexual health care problems. Inadequate information on sexual health can lead to different types

of health risks and social problems. Health risks may involve ; acquiring sexually transmitted diseases such as HIV infection in early pregnancies , unsafe abortions ,adverse birth outcomes due to early marriages and maternal morbidity and mortality . Social risks may include initiation of smoking, drug abuse , physical and sexual violence and suicidal attempts ⁽³⁾ .

Attitude is defined as readiness for positive or negative reaction to certain appearances or events that based on experience and knowledge acquired during life time. Most attitudes can be changed through direct experience or observational learning from the environment.

Adolescents can be exposed to a wide range of experience and situations that form their attitudes regarding sexuality⁽⁴⁾.

⁽⁵⁾ defined sexual health teaching as; teaching about human sexuality including; anatomy and physiology of reproductive system, physical and emotional changes associated with puberty, reproduction and sexual relationships. It also includes education about sexually transmitted diseases, menstrual hygiene, in addition to masturbation, female genital cutting and other aspects of human sexual behavior like moral, spiritual and cultural aspects .

Healthy sexual development is fundamental milestone for all adolescents that relies on acquiring knowledge and forming attitudes toward sexuality . Taking into consideration that healthy sexuality is affected by cultural , religious, and moral values. Healthy sexuality includes maintain a significant interpersonal relationships , interact with both sexes in respectful and good manner and expressing love and intimacy . Adolescents should receive accurate information on sexual health from different healthy professionals⁽⁶⁾ .

Sexually transmitted diseases (STDs) are such diseases that are transmitted from one person to another through sexual contact or genital contact .The infection can be passed on via vaginal intercourse, oral sex, and anal sex. The infection can spread through the use of unsterilized drug needles , or from mother to baby during childbirth and blood transfusions⁽⁷⁾ . (STDs) continue to be the major and growing public health problem especially in developing countries⁽⁸⁾.

Therefore the objective of this study was to Determine adolescent's knowledge about female reproductive system, identify knowledge regarding, menstrual hygiene, masturbation and circumcision as well as sexually transmitted diseases and recognize attitude toward sexuality. The

findings of this study might help in strengthening the adolescents ' sexual knowledge to prevent sexual risk behaviors

Significance of the Study

The aim of the study was:

To identify the sexual knowledge versus attitude of female adolescents towards sexually transmitted diseases .

Research questions:

- . What is the level of sexual health knowledge among female adolescents?
- . What is the female adolescent's attitude toward sexual knowledge?
- . What is the female adolescents knowledge of sexually transmitted diseases?

Subjects and Methods:

Research design:

Descriptive comparative design was used to identify the relation between sexual knowledge versus attitude of female adolescents towards sexually transmitted diseases.

Study Setting:

This study was conducted at Faculty of Nursing and Faculty of Arts at Zagazig University to make comparison between the science and literary education of female adolescents .

Study Subjects:

The subjects of this study were composed of two main groups:

Group I : Nursing students group:

A convenient sample of female students from the first year amounted to 77 student who fulfill the following criteria constituted the sample :

Age: from (18 to 19)

Free from chronic diseases.

Un married.

Group II: Art students group:

A convenient sample of female students from the first year amounted to 77 student who fulfill the same criteria mentioned above constituted the sample .

Tools for data collection

Two tools were used in this study

Tool I : A structured interview questionnaire sheet

A structured interview questionnaire sheet It was developed by the researcher under the supervision of the supervisors after reviewing the related literature and it consisted of three parts:

Part I: Personal characteristics of the studied female students Including their age, residence, family type.....etc

Part II: Characteristics of the studied female student's parents Including their age and level of their parent educationetc

Part III: Female adolescent's knowledge related to sexuality including (I)Anatomy and physiology of the female reproductive systems , (II)Physical changes associated with puberty of females ,(III)Menstruation and its hygiene, (IV) anatomy of male reproductive system , (V) Physical changes associated with puberty of males, (VI) reproduction, (VII) Sexually transmitted diseases, (VIII) cultural aspects of sex education e.g . Masturbation , female genital cutting, ... etc.

Scoring System

The score for each correct answer set a point and a zero for the wrong one or the answer by didn't know. Then the obtained total percent score of female adolescents knowledge was transformed into a qualitative manner as good for the score 60% and more , poor for the score less than 60% .

Tool II: Female Adolescent Attitude Scale Toward Sexuality

It is developed by **Shawaat , (2015)** and some modifications will be done. The scale consists of 40 statements. It will be used to measure female adolescent's attitude toward sexuality. It will consist of positive and negative statements related to attitude toward sexuality. It consists of three responses,

Scoring System

The total attitude scores were 120, **for the positive** statements: agree=3, uncertain=2, disagree=1.**For the negative** statements disagree=3, uncertain=2, agree=1.The level of female adolescents attitudes was categorized as positive attitude for the score 60 % and more , negative attitude for the score less than 60 % .

Field work:

Upon securing all official permissions , the process of data collection was started from February 2017 to the end of March 2017. The researcher first introduce herself and explain the purpose of the research briefly to all adolescents. Each adolescent was interviewed individually in the faculty after taking their oral consent . The time consumed for answering the study questionnaire ranged from 20 – 30 minutes . The researcher performed the fieldwork three days weekly (Sunday, Monday and Wednesday) .

Pilot study:

It was carried on 10% of students assess the applicability of the data collection tool , arrangement of items, estimate the time needed for filling the sheets with the collected data and feasibility of the study and acceptance to be involved in the study.

Administrative design:

An official permission to conduct the study was directed from the faculty of nursing to the dean of faculty of arts . It was done after obtaining an official permission from the dean of faculty of arts in which the study will be conducted.

Ethical consideration:

All ethical issues were taken into consideration during all phases of the study. The researcher maintained anonymity and confidentiality of the subjects. The inclusion in the study was totally voluntary . The aim of the study was explained to every student before participation and an oral consent was

obtained from female adolescents to accept to participate in this study and the research approval was obtained from ethical committee before starting the study.

Statistical analysis:

Collected data was coded , computed and statistically analyzed using SPSS (statistical package of social sciences) and Microsoft Excel software . Qualitative data was presented as frequency and percentage , quantitative data was presented by mean \pm SD , the following tests were used to test differences for significance;. Differences between frequencies (qualitative variables) and percentages in groups were compared by Chi-square test. Differences between parametric quantitative independent groups by t test in non-parametric by Man Whitney. . P value was set at <0.05 for significant results .

Results :

Table (1): Characteristics of The Studied Subjects which revealed that the mean age of nursing students was 18.61 ± 0.49 years compared to 18.62 ± 0.48 years of art students. Regarding to residence , it was found that 88.3 % of nursing students and 84.4 % of art students were residing in rural areas . Also, it was found that 46.8% and 45.5% of nursing and art students respectively were in moderate class.The same table illustrated that 71.4% of nursing students were living in un crowded houses compared to 54.5% of art students.

Table (2): portrayed female adolescents' knowledge concerning sexually transmitted diseases . It was found that 71.43% of nursing students compared to 62.34% of art students mentioned AIDS when they asked about types of sexually transmitted diseases. Concerning symptoms of sexually transmitted diseases, 51.95% of nursing students compared to 15.58% of art students stated decrease body temperature , and 32.47 % compared to 12.99 % of nursing and art

students respectively reported disturbance of patient immunity. The results revealed that 41.56% and 25.97% of nursing and art students respectively answered use male condoms when they asked about the prevention of sexually transmitted diseases.

Table (3) : illustrated relation between total scores of adolescents' sexual knowledge and their characteristics . According to female adolescents ' age , the results revealed that 74.5% of nursing students aged 19 years had good knowledge compared to 31.2 % of art students.

Regarding to female adolescent' residence , it was found that 72.1% of nursing students were residing in rural areas had good knowledge compared to 30.8% of art students .There was a statistical significant difference between female adolescent' residence and their sexual knowledge for both nursing students (**P = 0.02**) and art students (**P = 0.004**)

As regarding social class , the results revealed that all nursing students who had high social class had good knowledge compared to 23.5% of art students . There was a statistical significant difference between social class and sexual knowledge for nursing students (**P = 0.00**) .

Table (4) : clarified relation between characteristics of female adolescents and their sexual attitudes. It was found that 80.9 % of nursing students aged 19 years had positive attitudes compared to 31.2 % of art students . There was a significant difference between art students ' age and their sexual attitudes (**P= 0.00**) . The results revealed that 88.9 % of nursing students residing in urban areas had positive attitudes compared to 16.7 % of art students . There was a significant difference between residence and sexual attitudes of art students (**P = 0.01**) .

As regarding social class , it was found that 96.8 % of nursing students who live

in low class had positive attitudes compared to 72 % of art students . There was a significant difference between social class and their sexual attitudes for both nursing students ($P = 0.002$) and art students ($P = 0.02$).

The same table clarified that 46.8% of nursing students who live in un crowded houses had positive attitudes compared to 50% of art students. There was a significant difference between art students' crowding index and their sexual attitudes ($P = 0.0009$)

Discussion:

Sexual health teaching is an important part of every person's life .There is no national policy on sexual health teaching in Egypt. So, Egyptian adolescents have in accurate information and poor sexual health services. They depend on their friends, television and internet to provide them with sexual knowledge which may be incorrect and lead to bad effects on their sexual health **El Shaawat, Sabry & Waziry** ⁽⁴⁾

Adolescents have the right to receive accurate and adequate knowledge regarding sexuality. Many organizations have collaborated to in putting strategies that provide adolescents with essential sexual and reproductive health services **Khanal** ⁽⁸⁾

The findings of the current study revealed that the sexual knowledge of the studied female adolescents of nursing students group was good as a result of their science education at secondary school . Also , this may be as a result of their high social class . **Kumar et al** ⁽⁹⁾ was in agreement with this results when they conducted a study on Knowledge Attitude and Perception of Sex Education among School going Adolescents in Ambala District, Haryana, India. A Cross-Sectional Study and concluded that adolescents ' knowledge and perception of sex education was good.

On the other hand , poor sexual knowledge of art students group related to their literary education and may related to their life in rural areas and this results go with **Alquaiz et al** ⁽¹⁰⁾ who conducted a study to assess sexual knowledge among female adolescents in Saudi Arabia . They found that female adolescents were not being knowledgeable about sexuality .

The educational level of adolescents' mothers could be another predictor for female adolescents' poor knowledge .Educated mothers had more tendencies to provide their children with information and guidance. They tend to be knowledgeable regarding their adolescents' sexual health . These facts were confirmed in the results of the present study as most of female adolescents of nursing group whose mothers had finished their secondary education ; got good scores and two thirds of art group whose mothers were illiterate had poor knowledge .

Living areas of female adolescents could be another factor of their poor sexual knowledge . In rural settings, many parents refuse to talk with their adolescents about sexual matters. The findings of the present study revealed that more than three quarters of studied female adolescents of art group live in rural areas. **Nozamile** ⁽¹¹⁾ was in agreement with this concept and cited that ; social believe system, peer group and cultural set up where adolescents grow up affect sexual knowledge of adolescents.

The present study reflected good knowledge of female nursing adolescents. These results were consistent with **Khanal** ⁽⁸⁾ who conducted a study on Nepal adolescents knowledge and perception of sexual and reproductive health and services and found that all participants were aware about some of the common sexual and reproductive health problems such as HIV/AIDS, gonorrhea and syphilis. Also , **Kaptanoğlu et al** ⁽¹²⁾ conducted a study on knowledge, attitudes

and behavior towards sexually transmitted diseases in Turkish Cypriot adolescents and their results revealed that the majority of students stated that they had knowledge about STDs.

On the other hand , art students' knowledge regarding Sexually transmitted diseases was poor . Lack of adolescents' knowledge regarding sexually transmitted diseases (STDs) in the current study could be affected by many factors such as lack of health services in Egypt and lack of school health programs which provide adolescents with knowledge about STDs. Also , there were deficiencies of school programs that provide health teaching for adolescents.

Conclusions

Based upon the findings of the present study . It was concluded that the majority of female adolescents of nursing group had good sexual knowledge . Also ,

they had a positive sexual attitude . On the other hand , art students group had poor sexual knowledge and negative sexual attitudes

Recommendations

. Pediatric nurse , psychiatric nurse , community health nurse and school health nurse should offer sexual health teaching services for adolescents.

. Sexual health teaching should contain age appropriate topics and knowledge about life skills, reproductive health, safe sex, pregnancy and STI's including HIV/AIDS. A socio cultural research is needed to find the right kind of sexual health teaching services for males and females

. Ministry of health should establish a hot line telephone to answer female adolescents, questions regarding sexually related matters.

Table (1):Characteristics of Female Adolescents.

Characteristics	Nursing (77)		Art (77)		Significance test
	No	%	No	%	
Age/years					
• 18	30	39	29	37.7	P 0.86
• 19	47	61	48	62.3	
Mean ± SD	18.61 ± 0.49		18.62 ± .048		-----
Residence					
• Rural	68	88.3	65	84.4	P 0.48
• Urban	9	11.7	12	15.6	
Social class					
• low	31	40.3	25	32.5	P 0.29
• Moderate	36	46.8	35	45.5	
• High	10	13.0	17	22.1	
Crowding index					
Over crowded	22	92.0	68	68.0	P 0.03**
Un crowded	55	8.0	32	32.0	

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Table (2): Female Adolescents Knowledge Concerning Sexually Transmitted Diseases.

Items	Nursing(77)		Art (77)		Significance test	
	N	%	N	%		
23- Types*						
-Aids.	55	71.43	48	62.34	0.065	1.86
-Herpes.	50	64.94	0	0.00		
-Gonorrhoea	48	62.34	0	0.00		
-Syphilis.	35	45.45	15	19.48		
-Chlamydia.	2	2.60	12	15.58		
-Didn't know.	1	1.30	19	24.68		
-Bird flu ^.	0	0.00	10	12.99		
24- Symptoms*						
-Decrease body temperature^ .	40	51.95	12	15.58	0.73	0.34
-Reproductive system inflammation.	32	41.56	12	15.58		
-Fever.	29	37.66	15	19.48		
-Disturbance of patient immunity.	25	32.47	10	12.99		
-Skin rash.	12	15.58	2	2.60		
-Weight loss.	10	12.99	2	2.60		
-Didn't know.	5	6.49	35	45.45		
25- Prevention*						
-Use male condoms.	32	41.56	20	25.97	0.066	-1.9
-Male genital cutting.	25	32.47	10	12.99		
-Use unsterile tools for blood transfusion & surgical operations ^.	12	15.58	14	18.18		
-Check blood well before use.	10	12.99	20	25.97		
-Avoid illegal sexual relationships.	10	12.99	15	19.48		
-Didn't know.	2	2.60	15	19.48		

Table (3): Relation between total scores of adolescents' sexual knowledge and their characteristics.

Characteristics	Group N = 154								P value	
	Nursing N = 77				P value	Art N = 77				
	Good		Poor			Good		Poor		
	N	%	N	%		N	%	N	%	
Age (years)										
18	17	56.7	13	43.3	0.10	14	48.3	15	51.7	0.13
19	35	74.5	12	25.5		15	31.2	33	68.8	
Residence										
Rural	49	72.1	19	27.9	0.02**	20	30.8	45	69.2	0.004**
Urban	3	33.3	6	66.7		9	75	3	25	
Social class										
Low	13	41.9	18	58.1	0.00**	14	56.0	11	44.0	0.66
Moderate	29	80.6	7	19.4		11	31.4	24	68.6	
High	10	100.0	0	0.0		4	23.5	13	76.5	

Table (4): Relation between characteristics of female adolescents and their sexual attitudes.

Characteristics	Nursing N= 77				P val ue	Art N= 77				P value
	Positive		Negative			Positive		Negative		
	N	%	N	%		N	%	N	%	
Age (years)										
18	23	76.7	7	23.3	0.65	23	79.3	6	20.7	0.00**
19	38	80.9	9	19.1		15	31.2	33	68.8	
Residence										
Rural	53	77.9	15	22.1	0.44	36	55.4	29	44.6	0.01**
Urban	8	88.9	1	11.1		2	16.7	10	83.3	
Social class										
low	30	96.8	1	3.2	0.002**	18	72	7	28	0.02**
Moderate	26	72.2	10	27.8		14	40.0	21	60.0	
High	5	50.0	5	50.0		6	35.3	11	64.7	
Crowding Index										
Over crowded	10	45.5	12	54.5	0.99	30	83.3	5	16.7	0.0009**
Un crowded	25	46.8	30	53.2		21	50.0	21	50.0	

** : P < 0.05 (significant)

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