

Assessment of Secondary School Female Students' Knowledge about Reproductive Health in Basra City

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ABSTRACT

The study started from November 2018 to April 2019. Validity of the questionnaire is determined through a panel of (12) experts and the reliability through the pilot study. Descriptive and inferential statistical analysis were employed for data analysis. The results show that the highest percentage of girls (82.5%) was in age (14-18) year's age, (60.2%) from student have between 1-4 brothers, (92%) of students was lives in urban area, (93.0%) of them was lives with their parents, (34.8%) of the student fathers was government employing, and (54.4%) of the student mothers have income, the majority of students' family have low income (34.9%), (34.9%) of student at good level of attainment, external books were the first source of information (62.5%) of respondents. This study shows that student knowledge toward all domain of reproductive health were moderate level which as the total means (0.81), while student's knowledge about Sexually transmitted diseases was low level of knowledge which of the total means was (0.68). this study present that there were significant association between the student knowledge and their frequency among brother, and external reading from internet, and there were no significant between the student knowledge and their age, and living of student at $P \leq 0.05$ level

Keywords: Assessment, Knowledge, Reproductive Health.

Introduction

Adolescence is the period of human growth and development that occurs after childhood and before adulthood, from 10 to 19 years of age¹. Adolescence is a period of potent developmental and emotional interval. Most of adolescents yet neither have approach to information and education on sexuality, reproduction, contraception and sexual and reproductive health and rights, nor do they have access to preventive and curative service². Teenage pregnancies look as high-risk pregnancies result in unsafe abortions, low birth weight, and high maternal morbidity and mortality. Almost 40% human immunodeficiency (HIV) virus infection is found within teenagers. Study was performing with objective to study the knowledge and attitude regarding

menstruation, contraception and sexually transmitted diseases among secondary and higher secondary school girls². Adolescents need to know how to keep themselves from Human immunodeficiency virus (HIV), sexual transmitted diseases (STDs) and early pregnancies, for this sex education is the best way, it should be a lifelong learning process based on the knowledge and skills and positive attitude, it helps the young people to enjoy sex and relationships that are based on qualities such as positive knowledge, cross respect, confidence, conversation and enjoyment³. Focusing on adolescent reproductive health is both a challenge and an occasion for health care providers. While adolescence generally is a healthy period of life, many adolescents are less informed, less experienced, and less comfortable accessing health services for reproductive health than adults. Adolescents often loss basic reproductive health information's, knowledge, and access to affordable confidential health services for reproductive health. Many do not sense comfortable in exploring reproductive health parents. Parents, health care workers, and educators frequently are unable to provide entire, accurate, and age-appropriate

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reproductive health information to young people. This is often due to their own discomfort about the topic or the false belief that providing the information will encourage sexual activity. Adolescents may also experience resistance or even hostility and bad attitudes from adults when young people effort to gain the reproductive health information and services they need. They therefore may be at an increased risk of sexually transmitted infections (STIs), unintended pregnancy, HIV, and other health consequences. For women aged 15 to 19, complications of pregnancy, childbirth, and serious abortion are the major causes of death ⁴.

Methodology

A descriptive analytic study was conducted to assess the level of knowledge about reproductive health among 287 school females students in the age (14-23) years from six secondary schools in Al-Zubair district in Basra city, the data was collected by direct interview using constructed questionnaire to obtain socio-demographic characteristics and level of knowledge related to reproductive health. The study started from November 2018 to April 2019. Validity of the questionnaire is determined through a panel of (12) experts and the reliability through the pilot study. The data was collected through students self-filling technique by using questionnaire which designed for the purpose of the study, which consist of two main parts (Socio-demographic characteristics, and knowledge of students about reproductive health). Descriptive and inferential statistical analysis were employed for data analysis.

Results and Discussion

The present study showed that the majority of the respondents 237 (82.5%) are at age group (14-18years), and (92%) of them live in urban area. The majority of participants (62.5%) reported that the major source of information from browsing internet, these results was in disagreement with the results of a study done by Mattebo, Elfstrand, Karlsson, and Erlandsson, (2015) who stated that 78% of participants were receive information from their friends ⁽¹³⁾. The findings of this study showed that the participants have moderate knowledge about menstruation (menstruation means, normal cycle length, causes of menstruation, and source of menstrual bleeding). This result is inconsistent with Fehintola et al., (2017) who stated that more than half of participants have good knowledge about menstruation ⁽¹⁴⁾.

The study findings revealed that the students have moderate knowledge about infertility (Alcohol can predispose to infertility, is easy for a woman to conceive after 40years, Smoking can predispose to infertility,, etc), consistent with Adesiyun et al., (2014) who stated that the knowledge of participants regarding infertility were moderate ¹⁵. The possible explanation for these could be that this students need more assistance in this subject. Regarding sexually transmitted diseases, the participants have poor information regarding STDS (Sexually transmitted diseases can be transmitted by Exposure to cough and sneeze from infected persons, Transfusion of blood from one person to another, Unprotected sexual intercourse,,etc),. This result is consistent with Ali, (2013) who stated that more than a half of adolescent girls had poor awareness regarding (AIDS) ⁸. the participants reported that they have moderate knowledge about prevention methods (Use of condom during sexual intercourse protect against sexual transmitted diseases, Don't share with others sharp or engraving tools, Having a single faithful partner),. This is inconsistent with Nwatu, Young, Adikaibe, Okafor, and Onwuekwe, (2017) who stated that knowledge of appropriate preventive measures and practices for STIs and HIV, more than a quarter of the students were not aware that having a single faithful partner was an effective method of prevention while only three quarters of have good knowledge of all preventive measures assessed ¹⁶. This results show that the participants have moderate knowledge about signs of maturity (Hair growth, Breasts enlarge in puberty, Hips enlargement in puberty,,etc),. This findings consistent with petter, (2013) who stated that Female students were more likely to have moderate knowledge regarding the physical changes of girls ¹⁷. This proves that the girls have aware about physical changes during puberty. The study revealed that the girls have moderate knowledge about premarital counselling (Thalassemia test, Screening for Hepatitis type B, Detection for hypertension,,etc),. This result inconsistent with kmail, (2011) who stated that the participants have good knowledge about premarital screening ¹⁸. This because to educational lessons that studied for adolescent in their schools. The study conducted moderate knowledge about preconception counselling of the participants (avoiding tobacco and other drugs, seeking further information about pregnancy and care of the children, Life styles change (healthy weight),,etc). This is inconsistent with Nascimento, Borges, Fujimori et al., (2015) who stated that there

was a small proportion of adolescents who have some preconception information ⁽¹⁹⁾. The researcher proves that the study done of unmarried adolescent, on another hand may didn't hear about this items, so they haven't enough of information about this mater.

Regarding the conditions of pregnancy the participants reported moderate knowledge about this topic (Hormone necessary for the occurrence and continuation of pregnancy is testosterone, The pregnancy with age more than 35 years occur without complication, There are no health contraindications for anemic woman to become pregnant,,etc),. This result is inconsistent with that Basyouni, and Aly, (2015) who showed that the participants have poor concerning about this subject ⁽²⁰⁾. This proves that lack of awareness and neglect of family members to talk about the importance of this subject. Concerning the ingredients of healthy pregnancy the study showed that the students have moderate knowledge about this item (Presence of birth defects in the couple's family does not increase the possibility of appearance of these defects among their

children, Regular antenatal checkup is essential during pregnancy, Folic acid deficiency has no relation with congenital anomalies),. This result is inconsistent with that Basyouni, and Aly, (2015) who showed that the participants have little information about this subject ²⁰. The researcher believes that health education topics didn't included within the curriculum of adolescent students. The study showed that the participants reported moderate knowledge regarding this item.this finding is inconsistent with Basyouni, and Aly, (2015) who stated that the participants have inadequate knowledge about this item ⁽²⁰⁾. This proves that the adolescent didn't visit the antenatal care because they are unmarred and ignore their family the necessity of the antenatal care. Concerning the tetanus vaccine the students showed that they have moderate knowledge about this vaccine (People who are not completely immunized and have wounds should receive a tetanus immunization,,etc),. This result of the study disagreement with Orimadegun, et al., (2014) who showed that Almost two- thirds (64.7%) of the respondents had poor knowledge about tetanus vaccine ²¹.

Table 1: Assessment of student's knowledge about Reproductive Health

No.	Items	Assessment knowledge		
		M.	S.D.	Ass.
Student's knowledge about Menstruation				
1	Menstruation is a pathological process	0.91	0.96	M
2	Normal cycle length > 35 days	1.13	0.96	M
3	Causes of menstruation are hormones	0.98	0.70	M
4	Source of menstrual bleeding is vagina	0.96	0.85	M
Total mean		0.9		M
Student's knowledge about Infertility				
5	Alcohol can predispose to infertility	0.72	0.79	M
6	Is easy for a woman to conceive after 40years	0.72	0.81	M
7	Smoking can predispose to infertility	0.59	0.75	P
8	Sexually transmitted infection can cause infertility	0.89	0.84	M
9	Being underweight or overweight effect on infertility	0.66	0.74	P
10	Infertility can only occur after 40 years of age in female	0.59	0.70	P
Total mean		0.7		M
Student's knowledge about Sexually Transmitted Diseases				
11	Sexually transmitted diseases can be transmitted by Exposure to cough and sneeze from infected persons	0.42	0.61	P
12	Transfusion of blood from one person to another	0.50	0.69	P
13	Unprotected sexual intercourse	0.64	0.64	P
14	Sharing the same plate with infected person may have effect	0.77	0.63	M
15	From needles and syringes	0.76	0.74	M

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16	Transfer from infected mother to her fetus	0.81	0.70	M
17	One types of STD is syphilis	0.90	0.75	M
Total mean		0.68		P
Student's knowledge about Preventive Methods from Sexual Transmitted Diseases				
18	Use of condom during sexual intercourse protect against sexual transmitted diseases	1.00	0.06	M
19	Don't share with others sharp or engraving tools	0.77	0.71	M
20	Having a single faithful partner	0.78	0.72	M
Total mean		0.85		M
Student's knowledge about Signs of Puberty				
21	Hair growth	0.76	0.64	M
22	Breasts enlarge in puberty	0.77	0.63	M
23	Hips enlargement in puberty	0.95	0.60	M
24	Start of menstrual cycle	0.87	0.60	M
25	Increase secretion of sweat glands and fat accumulation in certain areas of the body	0.94	0.58	M
Total mean		0.86		M

Table 2: Summary of total mean of the Students knowledge regarding Reproductive Health

No.	Domains of knowledge	M	SD	Ass.
1	Student's knowledge about Menstruation	0.9		M
2	Student's knowledge about Infertility	0.7		M
3	Student's knowledge about Sexually Transmitted Diseases	0.68		p
4	Student's knowledge about Preventive Methods from Sexual Transmitted Diseases	0.85		M
5	Student's knowledge about Signs of Puberty	0.86		M
6	Student's knowledge about premarital Counselling	0.83		M
7	Student's knowledge about preconception Counselling	0.81		M
8	Student's knowledge about Conditions of pregnancy	0.71		M
9	Student's knowledge about Ingredients of healthy pregnancy	0.87		M
10	Student's knowledge about the role of primary health care center in pregnant health	0.9		M
11	Student's knowledge about Tetanus vaccine	0.8		M
12	Student's knowledge about Dysmenorrhea (pain during menstrual cycle)	0.8		M
13	Student's knowledge about Breast Feeding	0.9		M
		0.81		

Table 3: Association between student Knowledge and their age, number of brothers, frequency of student among their brother, living, and external reading

Variables		Sum of Squares	df	Mean Square	F	Sig. P≤0.05
Age	Between Groups	8.417	57	.148	1.009	.467
	Within Groups	33.520	229	.146		NS
	Total	41.937	286			
Number of brothers	Between Groups	19.922	57	.350	.996	.491
	Within Groups	80.356	229	.351		NS
	Total	100.279	286			

Conted...

Frequency of student among brother	Between Groups	20.738	57	.364	1.430	.036 S.
	Within Groups	58.280	229	.254		
	Total	79.017	286			
Living	Between Groups	.139	57	.002	.653	.971 NS
	Within Groups	.857	229	.004		
	Total	.997	286			
External Information	Between Groups	83.987	57	1.473	1.390	.048 S.
	Within Groups	242.814	229	1.060		
	Total	326.801	286			

Table 4: Statistical Differences between Student Knowledge and their residency, father works, family income, attainment, and external information

	Variables	Mean	N	SD	t. test	df	Sig. P≤0.05
1	Residency	48.4843	287	13.03675	61.661	286	.019 HS.
	knowledge	1.0035	287	.05903			
2	Father works	1.1429	287	.49875	-61.321	286	.269 NS
	knowledge	48.4843	287	13.03675			
3	Family income	48.4843	287	13.03675	57.603	286	899 NS
	knowledge	4.0418	287	1.04363			
4	attainment	2.3589	287	1.24321	-59.732	286	.850 NS
	knowledge	48.4843	287	13.03675			
	knowledge	2.5575	287	1.06895			

Conclusion

The present study concluded that: Student knowledge toward all domain of reproductive health were moderate level and poor level of knowledge about sexual transmitted diseases.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the college of nursing, university of Basra, Iraq and all experiments were carried out in accordance with approved guidelines.

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