

**Reproductive health: knowledge and attitude among Sohag university students, Egypt.**

Fouad M. A. Yousef\*, Ahmed Fathy Hamed and Nour alhoda Mostafa Mohamed Raswan\*\*

\*Public Health and Community Medicine department, Sohag Faculty of Medicine.

\*\* Obstetric and Gynecological nursing Sohag University

[fouad3s@yahoo.com](mailto:fouad3s@yahoo.com)

**Abstract: Introduction:** The area of reproductive health is under investigated in Egypt due to cultural sensitivities. The aim of this study is to explore the knowledge and attitude toward reproductive health of university students and to identify factors affecting these knowledge and attitude. **Subjects and Methods:** This is a cross sectional study. Well structured questionnaire was used to collect the data from students in Sohag University, Sohag, Egypt. Statistical analysis was performed using STATA program. **Results:** This study included 863 students (55% males and 45% females). The knowledge score achieved was 56% with is no significant difference between males and females. The score was significantly affected by faculty and grade of study, residence, religions of students, parents' educations and work, and health education. The attitude score achieved was 60.5%. It was significantly affected by faculty type, religions of students, parents' educations and health education. **Conclusion and recommendations:** The level of knowledge about reproductive health is low. We recommend that inclusion of reproductive health in the curriculums will improve reproductive health of the students and will protect them from sexually transmitted disease.

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**Keywords:** Reproductive health, knowledge, attitude, Egypt.

**1. Introduction:**

Reproductive health is a basic precondition for a good life, and is necessary for better health of future generations. About half of the populations were less than 25 years and one third aged 10-24 (McCauley *et al.*, 1995). Youth throughout the world are exposed to many risk factors related to sexual life (Ajuwon *et al.*, 2006) and thus they are a particular concern for reproductive health.

In Egypt, Young people constitute a significant proportion of the Egyptian population (20% aged 10–19 years, and 30% aged 10–24 years (El-Zanaty and Way, 2009). There is an increase in the age at first marriage (the median age at first marriage among urban women was 22.2 years and 19.4 years for rural women). Recently, the proportion of never married was 46 percent among women age 20-24 (El-Zanaty and Way, 2009). These data suggest that young people may engage in potentially risky premarital sexual activities. Also, in spite of increase age at first marriage the percentage of women married by exact age 18 years is still high was 17 percent among women 20-24. Also the Egyptian women tend to have children early in the reproductive period (El-Zanaty and Way, 2009). This exposed women to complication of early pregnancy. The area of reproductive health is still under investigated due to cultural sensitivities and lack of programs provides sexuality education to youth. Our aim in this study is to explore the knowledge and attitude toward

reproductive health of young adult (both males and females), in Sohag University, Egypt and to explore factors that may affect knowledge and attitude of students towards reproductive health.

**2. Subjects and Methods**

This cross sectional study was conducted to assess the knowledge and attitude of adolescent and young adults toward reproductive health in Sohag University, Egypt. Egypt is divided in three regions: Upper Egypt, Lower Egypt and Sinai. It to consists of 26 governorates. Sohag is one of the nine governorates of Upper Egypt. It consists of 11 municipalities with a total area of 11 218 km<sup>2</sup>. The total population of Sohag was 4,004,613 in 2010 according to Central Agency for Public Mobilization and Statistics, Egypt (2010). Approximately 16,000 students were studied in Sohag University 2012. Based on a confidence level of 95 percent and confidence interval 4%, the necessary sample size was calculated as 600. The sample size was taken from students in university students from half of faculties i.e. five faculties (Agriculture, Arts, Commence, Nursery and Education) using simple random sample. Well structured questionnaire was established guided by that used by El-Sadek *et al.* (El-Sadek *et al.*, 2008). Questionnaires were distributed for collection of the required data. The study was explained to the students and questionnaires were completed anonymously. The questionnaire included open and closed-ended

questions covering demographic data and knowledge & attitude towards reproductive health. The knowledge sections include knowledge about reproductive health at the pre-marriage, marriage, conception & child bearing and family planning and sexually transmitted diseases. The attitude section is towards some elements concerning reproductive health.

Although we show only the total score for each section, each question had its own score of either one or two. The total score of knowledge section was 28 and for attitude section was 10 marks.

Administrative and ethical issues including confidentiality and verbal consent were obtained. The

questionnaire was pre-tested on 50 students. Statistical analysis was performed using STATA program version 9.2. For categorical data chi square test was used and for quantitative data we used student t-test to compare the mean of two group and ANOVA test to compare three or more group.

### 3. Results:

#### Demographic characteristic:

Eight hundred and sixty eight students from five faculties in Sohag University were included in this study. Their mean age was  $19.90 \pm 1.43$  years. About 55% were males and 45% were females. The demographic characteristic of the respondents were shown in table (1).

**Table 1.** The demographic characteristics of studied populations

Characteristics	No.	(%)
Age		
Mean (SD)	19.90	(1.43)
Median (range)	20	(17-23)
Sex		
Male	471	(54.58)
Female	392	(45.42)
Faculty of		
Agriculture	142	(16.45)
Arts	155	(17.96)
Commence	225	(26.07)
Nursery	178	(20.63)
Education	163	(18.89)
Grade		
1	181	(20.97)
2	165	(19.12)
3	359	(41.60)
4	158	(18.31)
Residence		
Rural	470	(54.46)
Urban	393	(45.54)
Religion		
Muslim	705	(81.69)
Christian	158	(18.31)
Religious Commitment		
Religious	236	(27.35)
To some extent	548	(63.50)
Not Religious	79	(9.15)
Father education		
< Secondary	313	(36.27)
>=Secondary	550	(63.73)
Mother education		
< Secondary	470	(54.46)
>=Secondary	393	(45.54)
Father work		
No	156	(18.08)
Yes	707	(81.92)
Mother work		
No	777	(90.03)
Yes	86	(9.97)

### Knowledge of university students about reproductive health:

Knowledge of the students about pre-marriage period was shown in table (2). Only 36% of studied population can correctly define reproductive health. About 90% students reported that suitable age for marriage were  $\geq 20$  years. Half of students (54%) reported that early marriage have disadvantage, but only about 26% knew some of these advantage. Most of student (92%) heard about pre-marital examination and counseling. Majority of them (86%) knew that examination and counseling should be done for both men and women, and 65% knew one or more of components of premarital examination and counseling. Males had better knowledge than females related to definition of reproductive health. However, females had better knowledge related to suitable age of marriage, disadvantage of early marriage and necessity of premarital examination for both sexes ( $p < 0.000$ ). The total knowledge score about pre-marriage period was 7.5 out of 12 with no statistically significant difference between male and female students.

Knowledge concerning marriage, conception & child bearing and family planning was shown in table (3). About (82 %) reported that 20-30 years is the suitable age for childbearing and 78 % of students knew that pregnant women should be immunized with tetanus toxoid during pregnancy. As regard breast feeding, 81% mentioned that breast feeding are the best for infant feeding, 67 knew some advantage of breast feeding and only 49% knew that breast feeding should be given to baby directly after birth . Only 43% of student can correctly define family planning. Forty four percent of students knew one type or more of the family planning methods and 52% knew the benefits of family planning. Female students knew that, breast feeding is the best for babies better than males. Male students had more knowledge than female student as regard family planning. The total knowledge score about marriage, conception and family planning was 6.2/12 with no statistically significant difference between both sexes.

Table (4) showed the Knowledge concerning sexually transmitted diseases. Sexually transmitted diseases were known by 62% of the studied student and 61% mentioned examples of these diseases. Only 28% knew that sexually transmitted diseases could cause infertility. Male students have better knowledge about sexual transmitted disease and possibility of causing infertilities than females, while females can mentioned more examples of these diseases ( $p < 0.05$ ). The total knowledge score about sexually transmitted diseases was low (1.92/4 i.e.

48%). Male showed statistically significant higher score (2.09/4) than females (1.73/4),  $p=0.0008$ .

### Source of university student's Knowledge of about reproductive health:

The two main sources of information for reproductive health were T.V & mass media and internet (28.39 for each). Health education sessions, study, friends and family were the source of information reported by a minority (13.09%, 10.08, 11.82 and 8.23% respectively). A bout two third of students were at least had some degree of satisfaction about their knowledge about reproductive health (Table 5).

### Attitudes of university students about reproductive health:

Attitudes of the studied population towards different items of reproductive health were shown in table (6). About 85% of students saw that, person shouldn't practice sex before marriage with no significant difference between males and females ( $p=0.51$ ). Slightly higher than two-thirds of students (70.45%) disagreed about consanguinity with female had better attitude than male student ( $p < 0.0001$ ). Large percent of students (79%) agreed about best care during pregnancy to be with a Physician and 78.3% agreed about its importance to all pregnant with no statistical difference between both sexes. Eighty one percent of student had positive attitude towards breast feeding and health education session especially female students  $P=0.004$ . Few numbers of students (18%) saw premarital examination and counseling as essential with male student had better attitude than female students ( $p < 0.0001$ ).

### Grand total knowledge and attitudes scores and factor affecting the scores:

The mean grand total knowledge score achieved was 15.65/28 i.e. (55.86%). Students were divided into 3 more or less equal groups; (36.04%) of them had poor knowledge, (31.40%) had fair knowledge (score is 50% - <65%) and (32.56%) achieved satisfactory knowledge (score >65%). There is no significant between total knowledge score and sex of student. The total score was significantly affected by faculty of study with higher score achieved by faculty nursery [18.36 (3.73)], by grade of study with higher score achieved grade 1 [18.57 (3.59)]. Student from urban achieved significant higher score than those from rural area [16.61 (3.65) vs.14.78 (4.50)]. Muslims significantly achieved higher score [16.28 (4.36)] than Christians [12.83 (2.47)], with highest score is achieved by those consider themselves as religious to some extent [17.35 (4.05) vs. 12.23 (2.96) for religious and 14.03 (1.99) for not religious]. Student with father or mother educated to secondary level or higher has achieved better score than those with parents of lower level of education. If

the fathers work the knowledge score is higher than if not but, if the mothers work the score is lower than if not (see table 7). Higher score was achieved by students who attended health education session or whose curriculum include information about reproductive health [18.85 (3.57)] than those who receive information about reproductive health from other sources [14.68 (4.01)].

The mean grand total attitude score achieved was 6.05/10 i.e. (60.5%). More than half of student (56.32%) showed neutral attitude towards reproductive health (score is 50% - <65%), one third (34.88) showed positive attitude (score  $\geq$ 65%), while only few student (8.81) showed negative attitude (score <50%). There is no significant between total attitude score and sex of student, grade,

residence, and work of both parents. The total score was significantly affected faculty of study with higher score achieved by faculty nursery [6.56 (0.94)]. Christian significantly achieved higher score [6.35 (1.11)] than Muslims [5.99 (1.07)], with highest score is achieved by those consider the self as religious to some extent [6.15 (0.99) vs. 5.97 (1.25) for religious and 5.59 (1.04)]. Student with father or mother educated to secondary level or higher has achieved better score than those with parents of lower level of education. Higher score was achieved by students who attended health education session or who study reproductive health in the curriculum [6.46 (0.96)] than those who received information about reproductive health from other sources [5.93 (1.09)].

**Table 2.** Knowledge of the studied populations about reproductive health concerning pre-marriage period

Characteristics	Males (471)		Females (392)		Total (863)		P value
	No.	(%)	No.	(%)	No.	(%)	
Can correctly define reproductive health	190	(40.34)	126	(32.14)	316	(36.62)	0.01
Suitable age of marriage							0.045
<17 years	4	(0.85)	6	(1.53)	10	(1.16)	
17-19 years	53	(11.25)	26	(6.63)	79	(9.15)	
20 years or more	414	(87.90)	360	(91.84)	774	(89.69)	
Know disadvantages of early marriage	228	(48.41)	241	(61.48)	469	(54.35)	<0.0001
Know some items of disadvantage of early marriage	109	(23.14)	112	(28.57)	221	(25.57)	0.07
She/he heard about pre-marital examination and counseling	433	(91.93)	360	(91.84)	793	(91.89)	0.96
Examination and counseling should be done for							0.04
Men	41	(8.70)	19	(4.85)	60	(6.95)	
Women	35	(7.43)	22	(5.61)	57	(6.60)	
Both	395	(83.86)	351	(89.54)	746	(86.44)	
Know some components of ex. & counseling	305	(64.76)	256	(65.31)	561	(65.01)	0.87
Total knowledge score about pre-marriage period/ (12)	7.46	(2.34)	7.54	(2.22)	7.50	(2.29)	0.52
	8	(1-12)	8	(1-12)	8	(1-12)	

**Table 3.** Knowledge of the studied populations about reproductive health concerning marriage, conception & child bearing and family planning

Characteristics	Males (471)		Females (392)		Total (863)		P value
	No.	(%)	No.	(%)	No.	(%)	
Suitable age for children bearing:							0.06
<20	43	(9.13)	31	(7.91)	74	(8.57)	
20-30 years	373	(79.19)	333	(84.95)	706	(81.81)	
>30 years	55	(11.68)	28	(7.14)	83	(9.62)	
Immunization during pregnancy by tetanus	363	(77.07)	309	(78.83)	672	(77.87)	0.54
Breast feeding is the best for infant	366	(77.71)	335	(85.46)	701	(81.23)	0.004
Know advantages of breast feeding	323	(68.58)	255	(65.05)	578	(66.98)	0.27
Breast feeding should be given to baby directly after birth	218	(46.28)	202	(51.53)	420	(48.67)	0.13
Can correctly define family planning	242	(51.38)	126	(32.14)	368	(42.64)	<0.0001
Know one or more of types of family planning	199	(42.25)	185	(47.19)	384	(44.40)	0.15
Know benefits of family planning	275	(58.39)	170	(43.37)	445	(51.56)	<0.0001
Total knowledge score about marriage, conception and family planning/ (12)	6.21	(1.73)	6.23	(1.39)	6.22	(1.59)	0.98
	6	(2-9.86)	6.29	(2.28-9.56)	6.29	(2-9.86)	

**Table 4.** Knowledge of the studied populations about reproductive health concerning sexually transmitted diseases:

Characteristics	Males (471)		Females (392)		Total (863)		P value
	No.	(%)	No.	(%)	No.	(%)	
Know sexually transmitted Diseases	316	(67.09)	221	(56.38)	537	(62.22)	0.001
Mention examples of sexually transmitted diseases	312	(33.76)	221	(56.38)	533	(61.76)	0.003
sexually transmitted diseases can cause infertility	144	(30.57)	94	(23.98)	238	(27.58)	0.008
Total score/4	2.09	(1.51)	1.73	(1.57)	1.92	(1.55)	0.0008
	2.5	(0-4)	2.5	(0-4)	2.5	(0-4)	

**Table 5.** Sources of students' information about reproductive health

Characteristics	Males (471)		Females (392)		Total (863)		P value
	No.	(%)	No.	(%)	No.	(%)	
Sources of information:							
Family	68	(14.44)	3	(0.77)	71	(8.23)	<0.0001
Friends	48	(10.19)	54	(13.78)	102	(11.82)	
T.V & mass media	138	(29.30)	107	(27.30)	245	(28.39)	
H.E. sessions	86	(18.26)	27	(6.89)	113	(13.09)	
Study	31	(6.58)	56	(14.29)	87	(10.08)	
Internet	100	(21.23)	145	(36.99)	245	(28.39)	
Satisfied about reproductive health knowledge							
Not at all	87	(18.47)	37	(9.44)	124	(14.37)	<0.0001
To some degree	125	(26.54)	258	(65.82)	383	(44.38)	
To great extent	103	(21.87)	50	(12.76)	153	(17.73)	
Can't conclude	156	(33.12)	47	(11.99)	203	(23.52)	

**Table 6.** Attitude of the studied population towards different items of reproductive health

Characteristics	Males (471)		Females (392)		Total (863)		P value
	No.	(%)	No.	(%)	No.	(%)	
Person shouldn't practice sex before marriage	397	(84.11)	336	(85.71)	733	(84.84)	0.51
importance of premarital examination & counseling							
sort of luxury	78	(16.56)	42	(10.71)	120	(13.90)	<0.0001
essential	100	(21.23)	56	(14.29)	156	(18.08)	
not so important	293	(62.21)	294	(75.00)	587	(68.02)	
Consanguinity							
Agree	164	(34.82)	91	(23.21)	255	(29.55)	<0.0001
Disagree	307	(65.18)	301	(76.79)	608	(70.45)	
The best care for pregnant is:							
by physician	362	(76.86)	320	(81.63)	682	(79.03)	0.09
family advice	109	(23.14)	72	(18.37)	181	(20.97)	
Care for pregnant is:							
For all pregnant	361	(76.65)	315	(80.36)	676	(78.33)	0.19
For at risk pregnant	110	(23.35)	77	(19.64)	187	(21.67)	
Breast feeding is beneficial	366	(77.71)	335	(85.46)	701	(81.23)	0.004
Health education sessions is important	366	(77.71)	335	(85.46)	701	(81.23)	0.004

**Table 7.** Total score by different characteristics of students

Characteristics	Total knowledge score		Total attitude score	
	Mean (SD)	P value	Mean (SD)	P value
Grand total score	15.65 (4.29)		6.05 (1.09)	
Sex				
Male	15.77 (4.61)	0.37	6.05 (1.14)	0.98
Female	15.50 (3.87)		6.05 (1.01)	
Faculty of				
Agriculture	15.83 (4.53)	<0.0001	6.06 (1.00)	<0.0001
Arts	13.92 (3.84)		5.61 (1.21)	
Commence	14.36 (3.84)		5.84 (1.11)	
Nursery	18.36 (3.73)		6.56 (0.94)	
Education	15.93 (4.14)		6.19 (0.88)	
Grade				
1	18.57 (3.59)	<0.0001	6.17 (0.92)	0.15
2	15.42 (5.36)		5.90 (1.22)	
3	14.14 (3.48)		6.06 (1.08)	
4	15.94 (3.67)		6.04 (1.10)	
Residence				
Rural	14.78 (4.50)	<0.0001	6.02 (1.14)	0.40
Urban	16.61 (3.65)		6.09 (1.01)	
Religion				
Muslim	16.28 (4.36)	<0.0001	5.99 (1.07)	<0.0001
Christian	12.83 (2.47)		6.35 (1.11)	
Religious Commitment				
Religious	12.23 (2.96)	<0.0001	5.97 (1.25)	<0.0001
To some extent	17.35 (4.05)		6.15 (0.99)	
Not Religious	14.03 (1.99)		5.59 (1.04)	
Father education				
< Secondary	14.91 (3.49)	0.0002	5.85 (1.06)	0.0001
>=Secondary	16.02 (4.57)		6.16 (1.08)	
Mother education				
< Secondary	15.08 (4.60)	<0.0001	5.87 (1.07)	<0.0001
>=Secondary	16.31 (3.78)		6.27 (1.06)	
Father work				
No	14.28 (3.11)	<0.0001	6.00 (1.21)	0.56
Yes	15.95 (4.45)		6.06 (1.05)	
Mother work				
No	15.89 (4.30)	<0.0001	6.04 (1.06)	0.43
Yes	13.35 (3.43)		6.14 (1.25)	
Source of information				
Study or HE	18.85 (3.57)	<0.0001	6.46 (0.96)	<0.0001
Other source	14.68 (4.01)		5.93 (1.09)	

HE= health education

#### 4. Discussion:

This study is – to our knowledge – is the 2<sup>nd</sup> study that discusses the reproductive health issue in young adult (university student) in Egypt. The first study was by EL Gelany and Mousa (El Gelany and Moussa, 2013) who study the reproductive health awareness among 220 female Egyptian university students at El Minya University, El Minya, Egypt. Our study has the advantage of being the first study that includes males in a study about reproductive health in Egypt. Our study has also the advantage of

reporting factors that may affect knowledge and attitude of students towards reproductive health.

This study showed that the students were divided into 3 more or less equal groups according to their knowledge; (36.04%) of them had poor knowledge, (31.40%) had fair knowledge and (32.56%) achieved satisfactory knowledge. The overall all score was 56%. The highest score was achieved by the component of pre-marriage period (62.5%), followed by that related to marriage and conception (51.83%) followed by knowledge that related to sexually transmitted diseases (48%). The low level of

knowledge reported in this study was reported by other studies in Egypt (El-Sadek *et al.*, 2008, El Gelany and Moussa, 2013) and in many other countries ( Rani and Lule, 2004, Chen *et al.* , 2008, Williamson *et al.* , 2009, Regmi *et al.* , 2010, Wong, 2012). This may be because of the norm of the Egyptian population which prohibited talking about matters related to sex including reproductive health.

We found that most of student showed neutral (56.32%) or positive (34.88%) attitude. Only few student (8.81%) showed negative attitude. El-Sadek *et al.* (El-Sadek *et al.*, 2008) found that most respondents had positive attitude 84.1% compared to neutral (15.3%) and negative attitude (0.6%). Better attitude that found by El-Sadek *et al.* (El-Sadek *et al.* , 2008) may be because of adolescences tend to learn than older persons and this is confirmed in our study by high score in first grade students. However our results and that of El-Sadek *et al.* (El-Sadek *et al.* , 2008) indicated that students in secondary school or university students want to learn about reproductive health.

Most of students know suitable age for marriage and child bearing, heard about pre-marital examination and counseling and mentioned that breast feeding are the best for infant feeding. This finding was confirmed by other studies in Egypt (Abdel Megeid *et al.* , 1996, Qayed, 1998, Sallam *et al.* , 2001, El-Sadek, *et al.*, 2008,). However, only 18% of students had positive attitude towards premarital examination and counseling as essential. This finding should be considered and programs should be initiated to emphasize on the benefits and importance of premarital examination.

Only 43% of student can correctly define family planning and 44% know one type or more of the family planning methods. This low level may be because that most students were single and had little interest about family planning. However, this finding is higher than that from El-Sadek *et al.* (El-Sadek *et al.* , 2008) study who found only 31.8 of students know one type or more of the family planning methods. This can be explained by that, some of university student from nursery or some student educational faculties studied the family planning in their curriculums.

The total knowledge score about sexually transmitted diseases was low (score is 48%). Sexually transmitted diseases were known by 62% of the studied students and 61% mentioned examples of these diseases. This finding is lower than that reported by El-Sadek *et al.* (El-Sadek *et al.* , 2008) who reported that about 84.1% knew about sexually transmitted diseases this may be due to location of the study. El-Sadek *et al.*(El-Sadek *et al.* , 2008) do his study in Cairo where is more civilization than

Sohag (where our study was done). In the other hand it is slightly higher that reported by Qayed (Qayed, 1998) who found that only 48% had heard of STDs. The lower level reported in Qayed's study and in our study may be because of them were done in Upper Egypt (Assuit and Sohag) where the norm prevent taking about sex. The difference in the level of knowledge between our study and that of Qayed (Qayed, 1998) , may be due to difference of time at which the studies were done.

T.V and mass media were reported as main sources of information for reproductive health in many studies(Abdel Megeid *et al.*, 1996, El-Tawila *et al.* , 1999, Sallam *et al.*, 2001 El-Sadek *et al.* , 2008, El Gelany and Moussa, 2013) This is also our finding in this study. We find that internet also was one of main sources of information. El Gelany and Mousa (El Gelany and Moussa, 2013) found that television and the Internet were the most common types of media used as a source of reproductive health in university students. The same finding was reported in study in India (McManus and Dhar, 2008). This may because of availability of internet for university to students. Families play a minor role in acquiring knowledge about reproductive health because of the norm of the society.

Many students (70.45%) disagree about consanguinity. This is similar to the finding by El-Sadek *et al.* (El-Sadek *et al.* , 2008) Large percent of students (79%) agree about pregnancy care by Physician and had positive attitude towards breast feeding and health education session. This finding also reported by other studies(Abdel Megeid *et al.*, 1996, Qayed, 1998, El-Sadek *et al.*, 2008, El Gelany and Moussa, 2013).

Most previous studies about reproductive health not include males. Our study included males and we found no significant difference between both sexes as regard total knowledge and attitudes scores.

The knowledge and attitude scores have been affected by many factors. High score achieved by faculty nursery as their study include some items of reproductive health. First grade had higher score than other grade. This because that, this is the first time they communicate with opposite sex, so they try to find knowledge about this subject. Students from urban achieved significant higher score than those from rural area. This finding also were reported by a study conducted in India (Mahajan and Sharma, 2005).

Muslims significantly achieved higher knowledge score but Christian had more positive attitude towards reproductive health. Highest score is achieved by those consider themselves as religious to some extent. These findings reported also in study in Tehran, Iran (Mohammadi *et al.* , 2006), where those

who did not consider themselves religious achieved better knowledge about reproductive health than those who see themselves as religious. Those who consider themselves religious achieved low score because they are strictly limiting communication about sex.

This study showed that Better parents' education associated with better knowledge and attitude of students towards reproductive health. EL Gelany and Mousa (El Gelany and Moussa, 2013) also found that higher education of parents was associated with better knowledge about reproductive health. Parents work did not affect attitude but affect knowledge. If the fathers work the knowledge score is higher than if not this may be because of the work associated with higher socioeconomic score. Wong (Wong, 2012) found that there is an increase of knowledge scores with increase family socioeconomic status. If the mothers work the score is lower than if not. This is may be because of working women have less time to talk about these matters with her sons or daughters than those not work. Health education session or studying a curriculum including reproductive health were associated with higher score. This indicates these factors playing an important role in improving knowledge and attitude towards reproductive health.

#### **Conclusion and recommendations:**

In spite of our student are enrolled in higher education, the level of knowledge about reproductive health is low. We recommend that inclusion of reproductive health in the curriculum will improve reproductive health of the students and will protect the students of sexually transmitted disease.

#### **Corresponding author:**

Fouad Yousef, PhD, Epidemiology and Public Health from Queen University of Belfast, UK  
Lecturer in Public health and community medicine department, Sohag faculty of medicine, Egypt. E mail: [fouad3s@yahoo.com](mailto:fouad3s@yahoo.com)

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