RESULTS

The results of the study are presented in the following parts:

Part I: Socio-demographic characteristics of study sample: Tables 1-3

Part II. Medical and menstrual history of students: Tables 4-6

Part III: Knowledge about STDs among students: Tables 7-9,Figures 1-3.

Part IV: Attitude towards STDs among students: Tables 10-11

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Part VI: Relation between knowledge and attitude about STDs & students characteristics:: Table 16-18.

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Part I: Socio-demographic characteristics of study sample

Table 1. Socio-demographic characteristics of students in the study sample (n=420)

Items	No.	%
Age (years):		
<15	61	14.5
15-	145	34.5
16+	214	51.0
Range	13.0-17.0	
Mean±SD	15.6±1.0	
Father education:		
Illiterate	5	1.2
Read/write	20	4.8
Primary/preparatory	19	4.5
Secondary	113	26.9
University	263	62.6
Father job:		
Employee	316	75.2
Manual worker	98	23.3
Unemployed/retired	6	1.4
Mother education:		
Illiterate	23	5.5
Read/write	22	5.2
Primary/preparatory	16	3.8
Secondary	148	35.2
University	211	50.2
Mother job status:		
Housewife	226	53.8
Working	194	46.2

The socio-demographic characteristics of students in the study sample are described in Table 1. Their age ranged between 13 and 19 years, with a mean±SD 15.6±1.0. Slightly more than half (51.1%) were in the age group 16 or more years. As regards father education, the table shows that more than three-fifth (62.6%) were university graduates, while a very small minority (1.2%) were illiterate. Mothers had a lower percentage of university education about half of them (50.2%), and a higher percentage of illiterates (5.5%). about three quarters of fathers (75.2%) were employees, and more than half of the mothers (53.8%) were housewives.

Table 2. Socio-economic characteristics of students in the study sample (n=420)

Socio-economic variables	No.	%
Family size:		
3-4	46	11.0
5-6	275	65.5
7+	99	23.6
Range	3-11	
Mean±SD	5.8±1.3	
Number of brothers:		
0	80	19.0
1-2	304	72.4
3+	36	8.6
Range	0-5	
Mean±SD	1.3±0.9	
Number of sisters:		
0	74	17.6
1-2	268	63.8
3+	78	18.6
Range	0-7	
Mean±SD	1.5±1.2	
Birth order:		
1	151	36.0
2-3	204	48.6
4+	65	15.5
Range	1-9	
Mean±SD	2.3±1.4	
Family income:		
Enough and saving	40	9.5
Enough	112	26.7
Insufficient	268	63.8
Crowding index (person/room):		
<2	286	68.1
2+	134	31.9

Table 2 illustrates the socio-economic characteristics of students in the study sample. As the table shows, their family size ranged between 3 to 11, with a mean±SD 5.8±1.3. The number of brothers and sisters ranged between 0 to 5 and 0 and 7, respectively. The corresponding means±SD were 1.3±0.9 and 1.5±1.2, respectively. Less than half of students (48.6%) second or third in birth order, whereas more than one third (36.0%) were first rank order. As for family income, in slightly less than two thirds (63.8%) it was insufficient. Also, more than two thirds (68.1%) had a crowding index less than two.

Table 3. Home environment of students in the study sample (n=420)

	No.	%
Residence:		
Rural	95	22.6
Urban	325	77.4
Home:		
Private	375	89.3
Shared	45	10.7
Water source:		
Inside	416	99.0
Outside	4	1.0
Sewage disposal:		
Municipal system	377	89.8
Trench	43	10.2
Bathroom:		
Private	417	99.3
Shared	3	0.7
Type of toilet:		
Pit type	57	13.6
Seat type	353	84.0
Both	10	2.4

Table 3 describes the home environment of students in the study sample. More than three-fourth (77.4%) were from urban areas. Most of them had water source inside and a private bathroom (99.0%and 99.3%) respectively and the majority had sanitary sewage disposal and a seat type toilet (89.8% and 84.0 %) respectively.

Part II: Medical and menstrual history of students

Table 4. Medical history of students in the study sample (n=420)

	No.	%
Medical history:		
Anemia	95	22.6
Bronchial asthma	32	7.6
Obesity	18	4.3
Rheumatic fever	10	2.4
Hypertension	4	1.0
Parasitic diseases	4	1.0
Viral hepatitis	3	0.7
Chronic dermatitis	1	0.2
Take regular medications:	88	21.0
Medications taken: @		
Tonics	56	13.3
Bronchial asthma	26	6.2
Long acting penicillin	11	2.6
Antihypertensives	3	0.7
Had previous surgery:	134	31.9
Types of surgery:@		
Tonsillectomy	110	82.1
Appendectomy	20	14.9
Hernia	1	0.7
Piles	1	0.7
Others (feet/eye/ear)	9	6.6

(@) Not mutually exclusive

The medical history of students in the study sample is presented in Table 4. less than one quarter of students (22.6%) was anemic& few of them (7.6%)had bronchial asthma . Slightly more than one-fifth of the students (21.0%) were taking regular medications, mostly tonics (13.3%). The table also shows that slightly less than one-third of the students (31.9%) had previous surgery, the majority (82.1%) tonsillectomy.

Table 5. History of FGM among students in the study sample (n=420)

	No.	%
History of circumcision:	222	52.9
Age at FGM (years):		
<10	73	32.9
10-	133	59.9
12+	16	7.2
Range	5.0-14.0	
Mean±SD	9.9±1.5	
Done by:		
Doctor	195	87.8
Nurse	14	6.3
Daya	13	5.9
Had complications (bleeding/infection)	9	4.1

Table 5 illustrates students' history of circumcision. As the table shows, slightly more than half of them (52.9%) were circumcised. Their age at circumcision ranged between 9 to 15 years, with a mean±SD 9.9±1.5 years. The majority of the circumcisions (87.8%) were done by doctors, and only 4.1% of the students had at least one related complication.

Table 6. Menstrual history of students in the study sample (n=420)

	No.	%
Had menarche	409	97.38
Age at menarche (years):		
<12	40	9.8
12-	276	67.5
14+	93	22.7
Range	10.0-15.0	
Mean±SD	12.8±1.0	
Period duration (days):		
2-3	35	8.6
4-5	238	58.2
6+	136	33.3
Range	2.0-10.0	
Mean±SD	5.2±1.4	
With associated pain	385	94.1
Severity of pain (n=385):		
Mild	85	22.1
Moderate	193	50.1
Severe	107	27.8
Needed analgesic	178	46.2
Needed medical advice	44	11.4
Sleep during menses:		
Regular	225	55.0
More	104	25.4
Less	80	19.6

Students' menstrual history is displayed in Table 6. most of students (97.38%) had menarche, mostly at the age 12 to 13 years. As regards cycle duration, the table shows that its mean±SD was 37.1±29.8 days. The period duration ranged between 2 and 10 days, with a mean±SD 5.2±1.4 days. Most students (94.1%) had associated pain, all most half of them had moderate pain (50.1%), and less than half (46.2%) had needed analgesics. Slightly more than half of the students (55.0%) had regular sleep during menses.

Part III: Knowledge about STDs among students

Table 7. Knowledge about sexually transmitted diseases transmission and symptoms among students in the study sample (n=420)

Knowledge about sexually transmitted diseases (STD)s:	No.	%
Normal vaginal secretion	291	69.3
Meaning of STDs	264	62.9
Types:[@]		
AIDS	375	89.3
Gonorrhea	263	62.6
Syphilis	261	62.1
HCV	66	15.7
Herpes	21	5.0
Itching	8	1.9
Chlamydia	4	1.0
Mode of transmission:[@]		
Sexual intercourse	356	84.8
Blood transfusion	278	66.2
Use of contaminated needles	269	64.0
Using others' underwear	191	45.5
Unclean WC	100	23.8
Symptoms:[@]		
Ulcers/nodules on genitalia	253	60.2
Dysuria	195	46.4
Vaginal secretions with abnormal color/odor	154	36.7
Low abdominal pain	146	34.8
Fever	125	29.8
Itching	121	28.8
Greenish-yellow vaginal secretion	88	21.0

(@) Not mutually exclusive

Table 7 illustrates the knowledge about the transmission and symptoms of sexually transmitted diseases (STDs) among students in the study sample. Slightly less than two thirds (62.1%) knew the correct meaning of STDs. As for the types, the most commonly known STD was AIDS (89.3%), followed by less than two third (62.6% and 62.1%). Respectively were gonorrhea and syphilis . Herpes was known by few of them only 5.0% of the students. As regards the mode of transmission, the majority had a correct knowledge about sexual intercourse (84.8%). However, only less than fourth had the correct knowledge about unclean WC (23.8%). Concerning symptoms of STDs, the same table indicates that the less than two thirds had a correct knowledge about ulcers/nodules on genitalia (60.2%). Conversely, only slightly more than one-fifth had correct knowledge about greenish-yellow vaginal secretion as a symptom (21.0%).

Table 8. Knowledge about sexually transmitted diseases complications and treatment among students in the study sample (n=420)

Knowledge about sexually transmitted diseases (STD)s:	No.	%
Complications:[@]		
Infertility	320	76.2
Abortion	240	57.1
Vaginal ulcers	128	30.5
Pelvic inflammations	95	22.6
Ectopic pregnancy	60	14.3
Treatment available for:[@]		
Syphilis	209	49.8
Gonorrhea	177	42.1
Itching	102	24.3
HCV	83	19.8
AIDS	56	13.3
Herpes	25	6.0
Chlamydia	16	3.8

(@) Not mutually exclusive

Table 8 presents students' knowledge about the complication and treatment of STDs. Infertility was more than three quarters correctly known complication (76.2%), and more than half of students (57.1%) told abortion . However, knowledge about treatment was low, with less than related to syphilis (49.8%), and the lowest related to herpes and chlamydia,(6.0% and 3.8%), respectively.

Table 9. Knowledge about menstruation and menstrual hygiene among students in the study sample (n=420)

Knowledge about:	No.	%
Menstruation problems:		
Low abdominal pain	374	89.0
Low back pain	230	54.8
Mood changes	211	50.2
Depression	139	33.1
Headache	116	27.6
Nausea/vomiting	78	18.6
Breast pain	66	15.7
Diarrhea	50	11.9
Numbness	23	5.5
Constipation	22	5.2
Itching	21	5.0
Fever	5	1.2
Management of menstrual pain:		
Hot fluids	229	71.2
Hot bath	248	59.0
Hot herbal drinks	161	38.3
Analgesics	155	36.9
Frequent change of underwear	147	35.0
Physical exercise	117	27.9
Perineal toilet	116	27.6
Hot compresses	108	25.7
Longer sleep hours	58	13.8
Cold shower	22	5.2
Personal hygiene during menses:		
Washing hands:		
Before WC	31	7.4
After WC	243	57.9
After changing pads	338	80.5
Bathing daily as usual	308	73.3
Wearing cotton underwear	286	68.1
Cleaning perineum front to back	250	59.5
Perineal toilet with soap and water	216	51.4
Boiling underwear	190	45.2
Changing pads regularly	178	42.4
Using running water	83	19.8

Students' knowledge about menstruation and menstrual hygiene is presented in Table 9. The majority commonly reported symptoms were low abdominal pain (89.0%) and more than half were low back pain (54.8%), while the least ones were itching (5.0%) and fever (1.2%). As for management of associated pain, hot fluids was known by less than three quarters (71.2%), followed by more than half was knew hot bath (59.0%), while (5.2%) of the students cited cold shower as a means of management of menstrual pain. Concerning menstrual hygiene, the majority had correct knowledge about washing hands after changing pads (80.5%), while only (7.4%) have mentioned washing hands before. Also, bathing daily as usual was correctly known by about three-fourth of the students (73.3%), while only slightly more than two-thirds (42.4%) mentioned changing pads regularly.

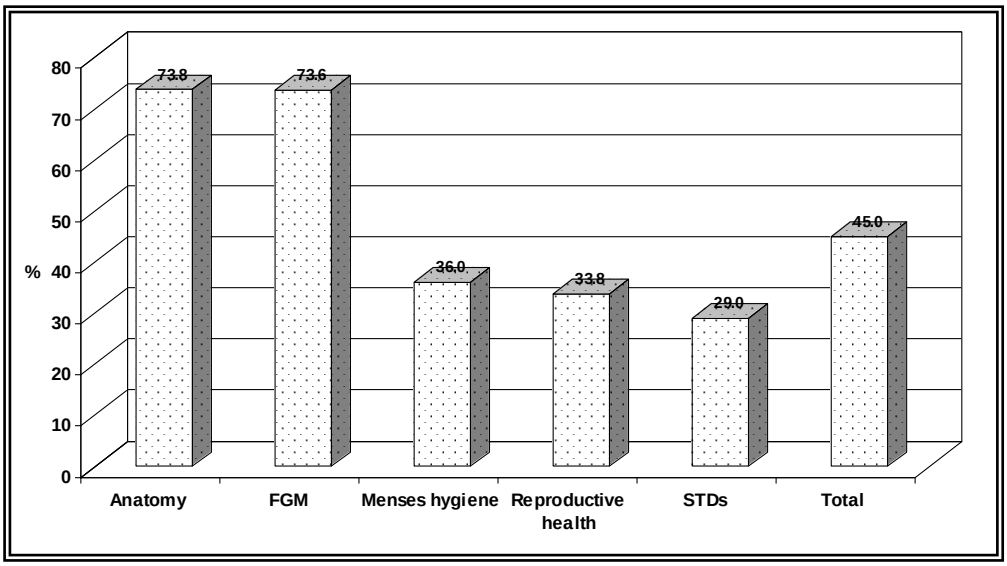

Figure 1. Total knowledge about sexually transmitted diseases and reproductive health among students in the study sample (n=420)

Figure 1 summarizes students' knowledge about sexually transmitted diseases and reproductive health. It indicates that the highest levels of satisfactory knowledge were related to anatomy of reproductive system (73.8%), followed by female genital mutilation (73.6%). Conversely, the percentages of satisfactory knowledge were very low regarding sexually transmitted diseases (29.0%), reproductive health (33.8%), and menstruation and menstrual hygiene (36.0%).

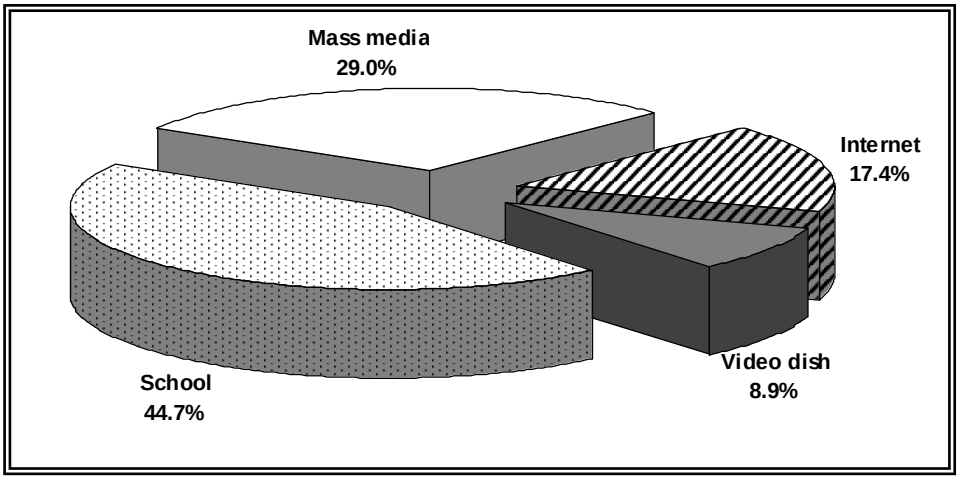

Figure 2. Sources of information of knowledge about sexually transmitted diseases and reproductive health among students in the study sample (n=420)

Figure 2 displays the source of information about STDs and reproductive health as reported by students in the study sample. It indicates that the highest percentage (44.7%) got their information from the school in the sciences subject, followed by mass media (29.0%).

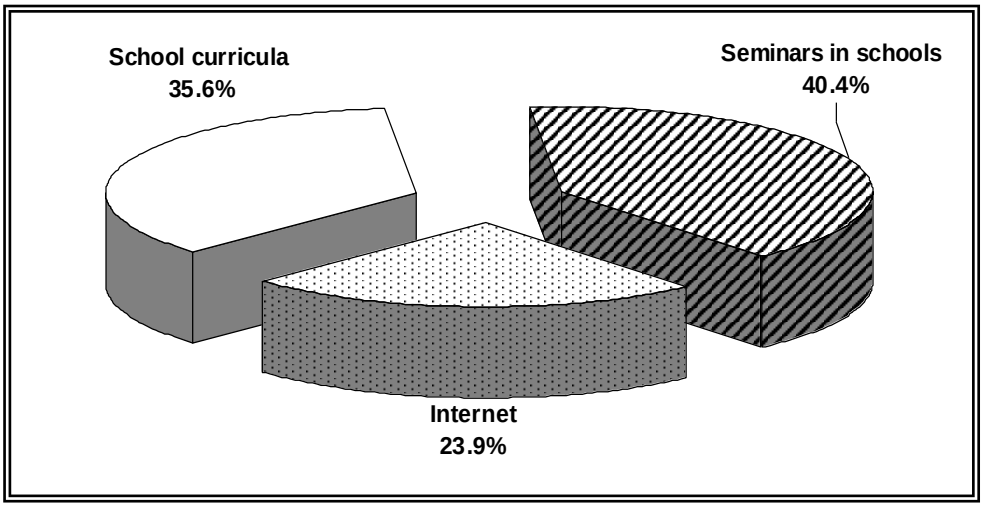

Figure 3. Preferred means of improvement of knowledge about sexually transmitted diseases and reproductive health suggested by students in the study sample (n=420)

Figure 3 illustrates students' opinions about their preferred means of improvement of knowledge regarding STDs and reproductive health. It shows that the highest percentage (40.4%) preferred seminars in schools, while about one-fourth (23.9%) preferred the internet.

Part IV. Attitude towards STDs among students

Table 10. Attitudes towards sexually transmitted diseases among students in the study sample (n=420).

Attitude	Attitude					
	Disagree		Uncertain		Agree	
	No.	%	No.	%	No.	%
Cannot consult doctor when feeling symptom of STD	302	71.9	75	17.9	43	10.2
STDs are unacceptable socially	57	13.6	107	25.5	256	61.0
STDs patients should be totally isolated from society	110	26.2	127	30.2	183	43.6
* "Orfi" marriage increases STDs	45	10.7	52	12.4	323	76.9
STDs are religiously condemned	62	14.8	105	25.0	253	60.2
STDs may affect the embryo	35	8.3	94	22.4	291	69.3
STDs are only transmitted in extra-marital relations	113	26.9	146	34.8	161	38.3
Both partners must be treated if one has a STD	42	10.0	73	17.4	305	72.6
STDs have no relation to infertility	142	33.8	199	47.4	79	18.8
STDs patients should be totally isolated from family	93	22.1	136	32.4	191	45.5
Some contraceptive methods may decrease the risk of STDs	114	27.1	228	54.3	78	18.6
STDs affect older age more than youth	172	41.0	191	45.5	57	13.6
STDs are more prevalent among addicts	60	14.3	138	32.9	22	52.9
Feel shame complaining of genital secretions	147	35.0	89	21.2	184	43.8
Consult doctor in case of genital problem	121	28.8	68	16.2	231	55.0
Consult mother in case of genital problem	63	15.0	56	13.3	301	71.7
Consult friends in case of genital problem	296	70.5	88	21.0	36	8.6
Consult teacher in case of genital problem	286	68.1	92	21.9	42	10.0
Consult school health nurse in case of genital problem	270	64.3	81	19.3	69	16.4
Consult nobody in case of genital problem	216	51.4	56	13.3	148	35.2

Orfi: marriage without documentation

Table 10 describes students' attitudes towards sexually transmitted diseases. It indicates that more than three quarters agreed upon important positive attitudes such as the relation of "Orfi" marriage on STDs (76.9%), treatment of both partners if one is affected by STDs less than three quarters (72.6%), and seeking the advice of doctor in case of any problems with genital system (71.7%). Moreover, most students disagreed upon the negative attitude of not seeking medical advice in case of appearance of STDs symptoms (71.9%). Mean while , most of them considered STDs un accepted socially (61.0%) and religiously (60.2%) . The table also shows high percentages of uncertain or ambivalent attitudes related to effect of extra-marital relation of STDs less than two fifth of them (38.3%), effect of use of contraceptives in prevention of STDs more than half of them (54.3%), effect of STDs on fertility less than half (47.4%), and age incidence of STDs (45.5%).

Table 11. Attitudes towards sexually transmitted diseases and reproductive health among students in the study sample (n=420)

Positive attitude related to:	No.	%
Nutrition	294	70.0
Menstruation / menstrual hygiene	211	50.2
STDs	189	45.0
Pregnancy and labor	154	36.7
Getting information about STDs	143	34.0
positive attitude to all	219	52.1

The total attitudes towards sexually transmitted disease and reproductive health among students in the study sample are presented in Table 11. The highest percentage of positive attitude towards was related to nutrition (70.0%), about half of students followed by menstruation and menstrual hygiene (50.2%). However, as regards STDs, only less than half of the students (45.0%) had positive attitudes, and more than one third had a positive attitude towards getting information about STDs (34%). Overall, slightly more than half (52.1%) of the students had positive attitude.

Part V. Relation between knowledge about STDs and students characteristics

Table 12. Relation between students' knowledge about sexually transmitted diseases and reproductive health and their scholar years.

	Knowledge				X^2	p-value
	Satisfactory		Unsatisfactory			
	No.	%	No.	%		
School grade						
1	67	47.9	73	52.1		
2	55	39.3	85	60.7	2.77	0.25
3	67	47.9	73	52.1		

(*) Statistically significant at p<0.05

The relation between students' knowledge about STDs and reproductive health and their scholar grades is illustrated in table 12. As evident from the table, no statistically significant differences were revealed among students in the three scholar grades (p= 0.25).

Table 13. Relation between students' knowledge about sexually transmitted diseases and reproductive health and their demographic characteristics

Demographic Characteristics	Knowledge				X^2	p-value
	Satisfactory (60%+)		Unsatisfactory (<60%)			
	No.	%	No.	%		
Age (years):						
<15	27	44.3	34	55.7		
15	63	43.4	82	56.6	0.29	0.86
16+	99	46.3	115	53.7		
Father education:						
Illiterate	9	36.0	16	64.0		
Basic/secondary	62	47.0	70	53.0	1.03	0.60
University	118	44.9	145	55.1		
Father job:						
Employee	134	42.4	182	57.6		
Manual worker	52	53.1	46	46.9	--	--
Unemployed/retired	3	50.0	3	50.0		
Mother education:						
Illiterate	19	42.2	26	57.8		
Basic/secondary	77	47.0	87	53.0	0.47	0.79
University	93	44.1	118	55.9		
Mother job status:						
Housewife	98	43.4	128	56.6	0.53	0.47
Working	91	46.9	103	53.1		

(--) Test result not valid

The relation between student's knowledge about sexually transmitted diseases and reproductive health and their socio-demographic characteristics are illustrated in Table 13. It points to no statistically significant associations with any of the tested characteristics as age, parents' education, and jobs.

Table 14. Relation between students' knowledge about sexually transmitted diseases and reproductive health and their home environment

Home Environment	Knowledge				X^2	p-value
	Satisfactory (60%+)		Unsatisfactory (<60%)			
	No.	%	No.	%		
Residence:						
Rural	29	30.5	66	69.5		
Urban	160	49.2	165	50.8	10.39	0.001*
Home:						
Private	172	45.9	203	54.1		
Shared	17	37.8	28	62.2	1.06	0.30
Crowding index:						
<2	134	46.9	152	53.1		
2+	55	41.0	79	59.0	1.24	0.26
Water source:						
Inside	189	45.4	227	54.6		
Outside	0	0.0	4	100.0	Fisher	0.13
Sewage disposal:						
Municipal system	178	47.2	199	52.8		
Trench	11	25.6	32	74.4	7.30	0.007*
Bathroom:						
Private	188	45.1	229	54.9		
Shared	1	33.3	2	66.7	Fisher	1.00

(*) Statistically significant at p<0.05

Table 14 illustrates the relation between students' knowledge about STDs and reproductive health their home environment. It indicates statistically significant associations with residence ($p<0.001$), and sewage disposal system ($p=0.007$). It is evident that more students residing in urban areas had satisfactory knowledge (49.2%), compared to those in rural areas (30.5%). Similarly, more students having municipal system for sewage disposal had satisfactory knowledge, compared to those having trench latrines, 47.2% and 25.6%, respectively.

Table 15. Relation between students' knowledge about sexually transmitted diseases and reproductive health and their sources of information.

Sources of Information	Knowledge				X^2	p-value
	Satisfactory (60%+)		Unsatisfactory (<60%)			
	No.	%	No.	%		
Mass media:						
No	84	38.5	134	61.5		
Yes	105	52.0	97	48.0	7.66	0.006*
Video films / dish:						
No	158	44.1	200	55.9		
Yes	31	50.0	31	50.0	0.73	0.39
Computer / internet:						
No	132	44.1	167	55.9		
Yes	57	47.1	64	52.9	0.30	0.58
School (science subject):						
No	25	22.9	84	77.1		
Yes	164	52.7	147	47.3	28.95	<0.001*
School curricula:						
No	74	36.3	130	63.7		
Yes	115	53.2	101	46.8	12.20	<0.001*
Seminars in schools:						
No	55	31.4	120	68.6		
Yes	134	54.7	111	45.3	22.33	<0.001*

(*) Statistically significant at p<0.05

The relation between students' knowledge about STDs and reproductive health their source of information is illustrated in table 15. Statistically significant associations were demonstrated with mass media (p=0.006), school science subject (p<0.001), school curricula (p<0.001), and seminars in schools (p<0.001). Students having had information through these sources had higher percentage of satisfactory knowledge, compared to those not depending on these sources. Conversely, information sources such as video films, and internet had no statistically significant association with knowledge.

Part VI. Relation between attitude about STDs and students characteristics.

Table 16. Relation between students' attitude towards sexually transmitted diseases and reproductive health and their school and scholar years

	Attitude				X^2	p-value
	Positive		Negative			
	No.	%	No.	%		
School grade						
1	74	52.9	66	47.1		
2	62	44.3	78	55.7	6.35	0.04*
3	83	59.3	57	40.7		

(*) Statistically significant at p<0.05

Table 16 displays the relation between students' attitude towards STDs and reproductive health and their scholar grades. It points to statistically significant differences among the three scholar grades. The highest percentage of positive attitude was in the third year (59.3%), while the lowest percentage was in the second years (44.3%).

Table 17. Relation between students' attitude towards sexually transmitted diseases and reproductive health and their demographic characteristics

	Attitude				X^2	p-value
	Positive		Negative			
	No.	%	No.	%		
Age (years):						
<15	27	44.3	34	55.7		
15	77	53.1	68	46.9	1.79	0.41
16+	115	53.7	99	46.3		
Father education:						
Illiterate	10	40.0	15	60.0		
Basic/secondary	68	51.5	64	48.5	1.73	0.42
University	141	53.6	122	46.4		
Father job:						
Employee	167	52.8	149	47.2		
Manual worker	48	49.0	50	51.0	--	--
Unemployed/retired	4	66.7	2	33.3		
Mother education:						
Illiterate	18	40.0	27	60.0		
Basic/secondary	89	54.3	75	45.7	3.03	0.22
University	112	53.1	99	46.9		
Mother job status:						
Housewife	107	47.3	119	52.7	4.51	0.03*
Working	112	57.7	82	42.3		

(*) Statistically significant at p<0.05 *(--) Test result not valid*

Table 17 shows the relation between students' attitude towards STDs and reproductive health and their socio-demographic characteristics. The only statistically significant association was with mother job status (p=0.03). It is evident that students with working mothers had a higher percentage of positive attitude (57.7%) compared to those whose mothers were housewives (47.3%).

Table 18. Relation between students' attitude towards sexually transmitted diseases and reproductive health and their medical history and history of FGM.

Items	Attitude				X^2	p-value
	Positive		Negative			
	No.	%	No.	%		
Chronic diseases:						
Absent	146	53.3	128	46.7		
Present	73	50.0	73	50.0	0.41	0.52
Intake of drugs:						
No	174	52.4	158	47.6		
Yes	45	51.1	43	48.9	0.05	0.83
Previous surgery:						
No	146	51.0	140	49.0		
Yes	73	54.5	61	45.5	0.43	0.51
Had FGM:						
No	114	57.6	84	42.4		
Yes	105	47.3	117	52.7	4.43	0.04*
Age at FGM (years):						
<10	146	53.9	125	46.1		
10-	65	48.9	68	51.1	0.93	0.63
12+	8	50.0	8	50.0		
FGM done by:						
Doctor	96	49.2	99	50.8		
Nurse	4	28.6	10	71.4	2.67	0.26
Daya	5	38.5	8	61.5		
Had FGM complications						
No	105	49.3	108	50.7		
Yes	0	0.0	9	100.0	Fisher	0.004*

(*) Statistically significant at p<0.05

The relation between students' attitude towards STDs and reproductive health and their medical history and history of FGM is displayed in Table 18. It indicates statistically significant associations with having a history of FGM (p=0.04), and having related complications (p=0.004). It is noticed that students with a history of FGM and who had related complications had lower percentages of positive attitudes (47.3% and 0.0%, respectively), compared to those with negative history. The corresponding figures in these latter were 57.6% and 49.3%, respectively.

Part VII. Relation between knowledge and attitude about STDs

Table 19. Relation between students' knowledge and attitude towards sexually transmitted diseases and reproductive health

	Knowledge				X^2	p-value
	Satisfactory		Unsatisfactory			
	No.	%	No.	%		
Attitude:						
Positive	130	59.4	89	40.6		
Negative	59	29.4	142	70.6	38.13	<0.001*

(*) Statistically significant at p<0.05

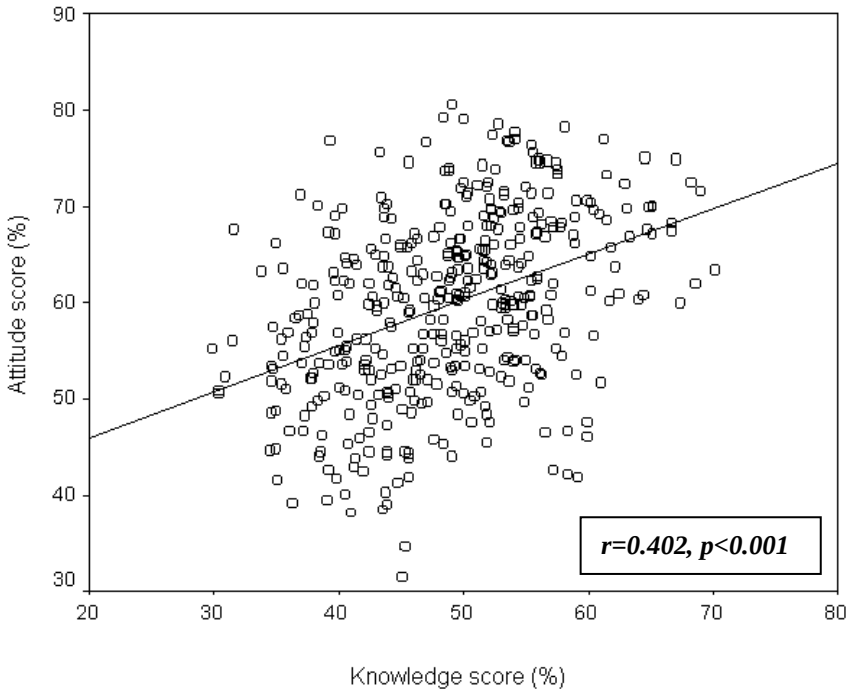

Figure 4. Correlation between students' scores of knowledge and attitude towards sexually transmitted diseases and reproductive health

Table 19 and figure 4 illustrate the relation between students' knowledge towards sexually transmitted diseases and reproductive health and their attitudes. It is evident that more than half of the students with positive attitude had satisfactory (59.4%), compared to (29.4%) of those with negative attitudes, and difference was statistically significant ($p<0.001$). Also, the figure illustrates a statistically significant moderate positive correlation between students' scores of knowledge and attitude towards sexually transmitted diseases and reproductive health ($r= 0.402$, $p<0.001$).