

# THE PERCEPTIONS OF VLORA UNIVERSITY STUDENTS ABOUT SEXUAL BEHAVIOR AND THE RISK OF HIV INFECTION

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## Abstract

**Introduction:** Although various studies have shown that the young albanians have a satisfactory level of knowledge about HIV / AIDS, other studies prove that there is a significant difference between the level of the knowledges and their healthy sexual behaviors.

**Purpose:** To establish the perceptions of the students at the University of Vlora towards the sexual behaviour which could make them vulnerable to HIV and AIDS.

**Methodology:** This is a descriptive study where quantitative method was used for the data and information resulting from a survey structured in the form of a questionnaire. The study participants were 721 randomly selected students from the Vlora University.

**Results:** The average age of the students was  $20.75 \pm 2.2$  years, 56.45% were female and 43.55% male. Regarding sexual behaviour, there are students who think that sexual relations make them more popular (36%), that a person cannot contract HIV the first time he/she has sex (37%), that sexual intercourse with same sex is safe (41%),there is no risk if they use alcohol or drugs before / during sexual intercourse (36%).There is a statistically significant difference between the two sexes and knowledge about sexual behavior ( $p < 0.0001 < 0.05$  Chi-Square),between students with different ages at first intercourse and sexual behavior ( $p = 0.0036 < 0.05$  Chi-Square),sexual behaviors of students with different levels of knowledge about HIV / AIDS ( $P < 0.0001$  Chi-Square  $< 0.05$ ).

**Conclusions:** The students have misconceptions about certain sexual behaviors. The level of knowledge about HIV / AIDS affects sexual behavior of students.

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**Keywords:** Sexual behavior, knowledge, HIV infection, University of Vlora

## **Introduction**

Globally, university students are in the age range with the highest rates of new Human Immunodeficiency Virus (HIV) infections (Lewis JE, et al. 1997). The university environment with its attendant relative lack of parental supervision offers great opportunity for young people, who are bridging from adolescence to adulthood, to test the limits of their new found freedom through sexual experimentation (Duncan C, et al. 2002). Such experimentation frequently involves engagement in risky sexual activities such as multiple partners, inconsistent use of condoms, and having sex under the influence of alcohol or drugs (Nakornkhet N, et al. 1998). Literature on health related behavior emphasizes the perception of being at risk of infection as one of the necessary conditions for behavioral change (Lavra B. 2004). According to Avery L, 2010 the early initiation of sexual activity increases the risk to get a sexually transmitted infection. The global evidences have shown that the age of onset of sexual intercourse has declined sharply (Wellings K et al. 2006). Moreover, the degree of the perceived risk seems to affect individual actual control in adopting preventive measures. Individual risk perception as well as individual knowledge, is likely to be subjected to socio-environmental influences, as long as social interaction allows information exchange, facilitates common evaluation and definition of the meaning and of its validity (UNAIDS; 2001). Universities may be an ideal institution for implementation of preventive intervention programs in such a way that the youth of today "are armed" with good knowledge in terms of protecting their general health and healthy sexual behavior in particular. Moreover, the nursing students will use this information and knowledge at the same time towards community care and individuals in need or towards self care activities. Students, including those who study health care or who are established in other areas, could be affected by HIV/AIDS pandemic throughout the world (Twahafifwa Ndahekeleka Tupavali Nghaamwa, 2013).

In **Albania**, the sexual health of young people, is being considered as a public health problem, despite the fact that existing data and studies show that **Albania** has no generalized or concentrated epidemics of HIV/AIDS infection. To date, in Albania there are only 172 cases diagnosed and reported with HIV, while 40 have died. In 2003, WHO/UNAIDS estimated the number of persons who might be affected by HIV using Spectrum model

and calculations revealed that could have 400-700 people affected by HIV / AIDS in Albania. While, this same assessment showed that unless measures were taken, in 2015 the number of persons affected by HIV / AIDS can reach 10.000 to 15.000 (James Chin, 2002).

Sexual health education is a lacking culture and only after 1992 the public began to discuss these issues openly. Sex education has been included in education curricula in grades 8's, of elementary school, but is insufficient and does not always develop properly. Also, if we refer to the fact that the age of first sexual intercourse has slightly declined, sexual education in schools starts at a later age and it doesn't precede the start of sexual activity of young people (Harxhi A, et al. 2005). The trend of starting sexual intercourse at an early age, as well as the involvement of young people in premarital sex are the features of current period in Albania (Albanian Ministry of Health, 2007). Early age of first sexual intercourse implies the beginning of exposure of youth to various health risks, such as sexually transmitted infections including HIV/AIDS, with health, social and economic consequences. The average age of first sexual intercourse, based on various studies is reducing and is reported to be 15 - 19 years (Institute of Statistics, Institute of Public Health Albania and ICF Macro. 2010). The median age of the first sexual intercourse between women is lower than that of men (Merkuri L. et al. WHO/UNFPA *Entre Nous*, 2012, 76: 16-18 ). Some of these studies have reported that women have begun first sexual intercourse under 15 years (*Albania Health Behavior in School-Aged Children Study*, 2009-2010). Another study found that early initiation of sexual activity is observed more in some women (Albania Bio-BSS, 2006). These data seem consistent on all findings.

Although various studies (Bitri E. et al. 2014; Krasniqi M. 2014) have shown that the young albanians have a satisfactory level of knowledge about HIV / AIDS, but these studies prove that there is a significant difference between the level of the knowledge and their healthy sexual behaviors. Also, they show that young people are involved in **sexual behavior with high risk**.

In general, due to the very nature of the students; because of their age, ambition to experience new events and other factors described in the few paragraphs above, students of higher education (Vlora University in this context) are likely to be at risk of HIV/AIDS. Thus, this study intends to assess the knowledge of the students at the University of Vlora towards the sexual behaviour which could make them vulnerable to HIV and AIDS, in order to design appropriate informative, educational programs and preventive activities.

## **Purpose**

The main aim of this study is to establish the perceptions of the students at the University of Vlora towards the sexual behaviour which could make them vulnerable to HIV and AIDS.

## **Objectives of the study**

To determine socio-demographic data of the study participants.

To establish students' general knowledge on HIV / AIDS

To identify sexual behaviour that expose students to contracting HIV

To evaluate the correlations between socio-demographic variables and knowledge on sexual behaviors, between general knowledge about HIV / AIDS and sexual behavior of students to Vlora University.

## **Methodology of the study**

In addition to a descriptive-type-of-study, this is a quantitative method which uses the data and information resulting from a survey structured in the form of a questionnaire. The survey was conducted among 721 randomly selected UV students during May-June 2014. During the drafting of the questionnaire was consulted a range of materials and questionnaires were considered models used roughly similar studies. The format of the questions followed a Likert scaling also known as a summated rating scale. In Likert scaling each participant's rates multiple items designed to measure one construct (Christensen, et al. 2011).

## **Data analysis**

An expert in statistic was used for data coding and analyses to enhance the research validity. For statistical analysis of the data was used statistical program SAS (Statistical Analysis System) version 9.1. For numerical variables it was used arithmetic average and size dispersion (standard deviation). For categorical variables were reported absolute numbers and percentages respective. To assess the links between different variables were used statistical tests in accordance with the nature of the variables that participate in a certain relation. We used mainly non-parametric test Kruskal - Wallis to compare the homogeneity of the various groups compared. To assess the associations between categorical variables was used Chi-square statistical test, the preferred test for the evaluation of associations between categorical variables. This test P-value reports, as well as scales of freedom. Cross tabs were used to assess the relationship between different variables (knowledge, behavior) in which was awarded the Pearson correlation index, which the values 0.1-0.29 shows weak correlation, for the values 0.3-0.49 shows moderate correlation, for the values 0.5-0.69 shows

substantial correlation and over 0.7 strong correlation. A P values  $\leq 0,05$  were accepted as statistically significant.

### Pilot study

The validity and reliability of measuring instruments was tested in a pilot study in a group of 30 students of Public Health Faculty. These 30 students did not know that they were part of a pilot group. After evaluation was certified that there were not evident problems or difficulties in understanding the questions.

### Ethical principles

For the realization of this study initially assured permission from the rector of Vlora University and the deans of various faculties and the approval to conduct this research study was obtained from the University "Ismael Qemali" Vlore Council of Ethics before the study commences. Studies which collect personal information on subjects, to be designed in an ethical manner to protect individuals participating in the study, also based in Helsinki Declaration. Informed consent was obtained from the participants after informing them about all the relevant issues of the study. There was no discomfort observed during questionnaire completion and the participants were assured of confidentiality.

### Results of the study

Sexual behavior was assessed according to the answers of the 10 questions in the knowledge section about the sexual behavior. Each correct answer had 1 point and the total was classified in this category:

- 8 - 10 point - Very appropriate behavior
- 5- 7 point - Appropriate behavior
- 0 - 4 point - Not appropriate behavior

**Table 1.** *The distribution of students according to responses for the assessment of knowledge about sexual behavior*

<i>Variables</i>	<i>Number (n)</i>	<i>Percentage (%)</i>	<i>Correct answer</i>
1. Sexual intercourse makes a boy and a girl more popular	261	36.55	Strongly disagree
Strongly disagree	126	17.65	
Agree	89	12.47	Disagree
Don't know	208	29.13	
Disagree	30	4.20	
Strongly agree	714	100.00	
Total			

2. Sex with multiple partners is not risky			
Strongly disagree	356	349.86	Strongly disagree
Agree	78	10.92	disagree
Don't know	85	11.90	
Disagree	161	22.55	Disagree
Strongly agree	34	4.76	
Total	714	100.00	
3. Having sex with several partners at the same time can put at risk of HIV infection(sex in group)			
Strongly disagree	39	5.46	
Agree	331	46.36	Agree
Don't know	46	6.44	
Disagree	67	9.38	
Strongly agree	231	32.35	Strongly agree
Total	714	100.00	
4. It is good to engage in sexual activities for money,gifts or favor			
Strongly disagree	511	71.57	Strongly disagree
Agree	39	5.46	
Don't know	28	3.92	
Disagree	122	17.09	
Strongly agree	14	1.96	Disagree
Total	714	100.00	
5. Having sex with a partner whose HIV status is unknown can put at risk of contracting HIV			
Strongly disagree	46	6.44	
Agree	287	40.20	Agree
Don't know	75	10.50	
Disagree	49	6.86	
Strongly agree	257	35.00	Strongly agree
Total	714	100.00	
6. A person cannot contract HIV the first time he/she has sex			
Strongly disagree			Strongly disagree
Agree	280	39.27	disagree
Don't know	91	12.76	
Disagree	150	21.04	
Strongly agree	169	23.70	Disagree
Total	23	3.23	
	714	100.00	
7. Sexual intercourse with same sex is safe			
Strongly disagree	303	42.50	Strongly disagree
Agree	73	10.24	disagree
Don't know	188	26.36	
Disagree	115	16.13	
Strongly agree	34	4.77	Disagree
Total	714	100.00	
8. A person cannot get HIV by having unprotected sex with a person younger than him/her			
Strongly disagree	343	48.39	Strongly disagree
Agree	45	6.31	disagree
Don't know	115	16.13	
Disagree	192	26.93	
Strongly agree	16	2.24	Disagree

Total	714	100.00	
9. It is risky to engage in sexual activities after taking alcohol or intravenous drugs			
Strongly disagree	63	8.84	
Agree	248	34.78	Agree
Don't know	117	16.41	
Disagree	76	10.66	
Strongly agree	209	29.31	Strongly agree
Total	714	100.00	
10. It is important to talk with your parents or counselors about your sexual doubts/behaviors			
Strongly disagree	70	9.82	
Agree	314	44.04	Agree
Don't know	100	14.03	
Disagree	83	11.64	
Strongly agree	146	20.48	Strongly agree
Total	714	100.00	

**Table 2.** Distribution of students by assessing their sexual behaviors

Variables( Sexual behaviour)	Number (n)	Percentage (%)
Not appropriate behavior	106	14.85
Appropriate behavior	256	35.85
Very appropriate behavior	352	49.30
Without answer	7	-
Total	721	100.00

**Table 3.** Correlation between knowledge about sexual behavior and socio- demographic variables

Variables	Sexual behavior			
	Not appropriate behavior	Appropriate or behavior	Very appropriate behavior	Total
	N (%)	N (%)	N (%)	N (%)

Age-groups(years)	18-20 years	61	140	188	389
	21-24 years	(8.54%)	(19.61	(26.33	(54.48
	25-28 years	41	)	)	)
	More than 28 years	(5.74%)	105	150	296
	Total	4	(14.71	(21.01	(41.46
		(0.56%)	)	)	)
		0	5	9	18
		(0.00%)	(0.70%	(1.26%)	(2.52
		106	)	5	)
		(14.84%	6	(0.70%)	11
		)	(0.84%	352	(1.54
		)	(49.30	)	)
			256	)	714
			(35.86	)	(100%
			)	)	)

**Chi-Square 0.6350**

Variables		Not appropriate behavior	Appropriate behavior	Very appropriate behavior	Total
		N (%)	N (%)	N (%)	N (%)
Gender	Female	41	120	242	403
	Male	(5.74%)	(16.81	(33.89	(56.44
	Total	65	)	)	)
		(9.10%)	136	110	311
		106	(19.05	(15.41	(43.56
		(14.84%	)	)	)
		)	256	352	714
			(35.86	(49.30	(100.0
			)	)	0%)

**Chi-Square < 0.0001**

Variables		Sexual behavior		
		Not appropriate behavior	Appropriate behavior	Very appropriate behavior
		N (%)	N (%)	N (%)
Residence	Rural areas	35 (4.90%)	98 (13.73%)	110 (15.41%)
	Urban Areas	71 (9.94%)	158 (22.13%)	242 (33.89%)
	Total	106 (14.84%)	256 (35.86%)	352 (49.30%)

**Chi-Square 0.1901**

Variables		Sexual behavior			
		Not appropriate behavior	Appropriate behavior	Very appropriate behavior	Total
		N (%)	N (%)	N (%)	N (%)
Economic level	Low level	10 (1.40%)	18 (2.52%)	14 (1.96%)	42
	Moderate level	89 (12.46%)	225 (31.52%)	315 (44.12%)	(5.88%)
	High level	7 (0.98%)	13 (1.82%)	23 (3.22%)	629
	Total	106 (14.84%)	256 (35.86%)	352 (49.30%)	(88.10%)
				43	
				(6.02%)	
				714	
				(100.00%)	

**Chi-Square 0.12071**



**Table 3.1.**Correlation between knowledge about sexual behavior and socio- demographic variables

Variables		Sexual behavior				Total
		Not appropriate behavior	Appropriate behavior	Very appropriate behavior		
		N (%)	N (%)	N (%)	N (%)	
Religione	Atheist	61 (8.54%)	140 (19.61%)	4 (0.56%)	5	
	Catholic	41 (5.74%)	105 (14.71%)	27 (3.78%)	(0.70%)	
	Muslim	4 (0.56%)	5 (0.70%)	268 (37.54%)	49	
	Orthodox	0 (0.00%)	6 (0.84%)	53 (7.42%)	(6.86%)	
	Total	106 (14.84%)	256 (35.86%)	352 (49.30%)	571	
					(79.97%)	
					89	
					(12.46%)	
					714	
					(100.00%)	
<b>Chi-Square</b>		<b>0.0920</b>				

  

Variables		Not appropriate behavior	Appropriate behavior	Very appropriate behavior	Total
		N (%)	N (%)	N (%)	N (%)
		Civil status	Cohabitant	8 (1.12%)	23 (3.22%)
Single	93 (13.03%)		211 (29.55%)	289 (40.48%)	(8.82%)
Married	5 (0.70%)		19 (2.66%)	28 (3.92%)	593
Divorced	0 (0.00%)		3 (0.42%)	3 (0.42%)	(83.06%)
Total	106 (14.84%)		256 (35.86%)	352 (49.30%)	52
					(7.28%)
					6
					(0.84%)
					714
					(100.00%)
<b>Chi-Square</b>		<b>0.8124</b>			

**Table 3.2.**Correlation between knowledge about sexual behavior and socio- demographic variables

Variables		Sexual behavior			
		Not appropriate behavior	Appropriate behavior	Very appropriate behavior	Total
		N (%)	N (%)	N (%)	N (%)
Subject	Public Health	19 (2.66%)	70 (9.81%)	197 (27.59%)	286
	Faculty	87 (12.18%)	186 (26.05%)	155 (21.71%)	(40.06%
	Others	106 (14.84%)	256 (35.86%)	352 (49.30%)	)
	Faculties				428
Total					(59.94%
					)
					714
					(100.00
					%)
<b>Chi-Square</b>		<b>&lt;0.0001</b>			

  

Variables		Not appropriate behavior	Appropriate behavior	Very appropriate behavior	Total
		N (%)	N (%)	N (%)	N (%)

Years of the study	I	43 (6.02%)	83 (11.62%)	106 (14.85%)	232
	II	36 (5.04%)	96 (13.45%)	120 (16.81%)	(32.49%
	III	27 (3.78%)	77 (10.78%)	126 (17.65%)	)
	Total	106 (14.84%)	256 (35.85%)	352 (49.31%)	252
					(35.30%)
				)	230
				(32.21%	)
				714	(100.00
				)	%)

**Chi-Square 0.1616**

Variables		<i>Sexual behavior</i>			
		Not appropriate behavior	Appropriate behavior	Very appropriate behavior	Total
		N (%)	N (%)	N (%)	N (%)
At what age you have sexual intercourse for the first time	14 years or less	5 (1.03%)	9 (1.85%)	7 (1.44%)	21
	15-18 years	48 (9.88%)	107 (22.02%)	95 (19.55%)	(4.32%)
	More than 19 years	32 (6.58%)	64 (13.17%)	119 (24.49%)	250
	Total	85 (17.49%)	180 (37.04%)	221 (45.47%)	(51.44%)
					215
				(44.24%)	485
				(100.00%)	

**Chi-Square 0.0036**

Variables		<i>Sexual behavior</i>			
		Not appropriate behavior	Appropriate behavior	Very appropriate behavior	Total
		N (%)	N (%)	N (%)	N (%)
During your life how many partners you have sexual intercourse	1 partner	34 (8.02%)	71 (16.75%)	134 (31.60%)	
	2 partners	15 (3.54%)	36 (8.49%)	21 (4.95%)	
	3 partners	13 (3.07%)	24 (5.66%)	22 (5.19%)	
	4 partners	5 (1.18%)	20 (4.72%)	9 (2.12%)	
	5 partners	4 (0.94%)	6 (1.41%)	7 (1.65%)	
	6 partners	0 (0.00%)	0 (0.00%)	3 (0.71%)	
	Total	71 (16.75%)	157 (37.03%)	196 (46.22%)	

**Chi-Square 0.0005**

### General knowledge of students about HIV/AIDS

General knowledge was assessed according to the answers of the 10 questions in the general knowledge section about HIV/AIDS infection. Each correct answer had 1 point and the total was classified in this category:

8-10 points - Very good knowledge

5-7 points - Good knowledge

0-4 points - Not very good knowledge

**Table 4.** *Distribution of students according to general knowledge about HIV/AIDS*

<i>Variables</i>	<i>Number(n)</i>	<i>Percentage (%)</i>	<i>Correct answer</i>
1. A person with HIV can look healthy for many years			
Strongly disagree	89	12.38	Agree
Agree	265	36.86	
Don't know	170	23.64	Strongly agree
Disagree	105	14.60	
Strongly agree	90	12.52	
Total	719	100.00	
2. HIV can be transmitted through saliva, kissing infected person			
Strongly disagree	267	37.13	Strongly disagree
Agree	138	19.19	
Don't know	88	12.24	Disagree
Disagree	134	18.64	
Strongly agree	92	12.80	
Total	719	100.00	
3. HIV can be transmitted through a mosquito bite when it first bites an infected person			
Strongly disagree	153	21.28	Strongly disagree
Agree	192	26.70	
Don't know	155	21.56	Disagree
Disagree	82	11.40	
Strongly agree	137	19.05	
Total	719	100.00	
4. HIV can be transmitted through shaking hands with infected people			
Strongly disagree	559	77.75	Strongly disagree
Agree	1	0.14	
Don't know	10	1.39	Disagree
Disagree	28	3.89	
Strongly agree	115	15.99	
Total	719	100.00	
5. A pregnant woman can transmit the virus to her unborn child			
Strongly disagree	12	1.68	Agree
Agree	218	30.62	
Don't know	102	14.33	Strongly agree
Disagree	18	2.53	
Strongly agree	362	50.84	
Total	719	100.00	
6. HIV is a disease of poor people			
Strongly disagree	466	64.82	Agree
Agree	32	4.45	
Don't know	39	5.42	Strongly agree
Disagree	173	24.06	
Strongly agree	9	1.25	
Total	719	100.00	
7. Having a quick bath after unprotected sex can reduce the risk of contracting HIV			
Strongly disagree	248	34.49	Strongly disagree
Agree	94	13.07	
Don't know	203	28.23	Disagree
Disagree	152	21.14	
Strongly agree	19	2.64	
Total	716	100.00	

8. ARV therapy provides treatment of AIDS			
Strongly disagree	427	59.39	Strongly disagree
Agree	28	3.89	
Don't know	114	15.86	
Disagree	140	19.47	
Strongly agree	10	1.39	Disagree
Total	719	100.00	
9. A person would not contract HIV by having sexual intercourse with a newly infected person with HIV			
Strongly disagree	294	40.89	Strongly disagree
Agree	94	13.07	
Don't know	139	19.33	
Disagree	138	19.19	
Strongly agree	54	7.51	Disagree
Total	714	100.00	
10. Sharing needles could increase the chances of contracting HIV			
Strongly disagree	21	2.92	
Agree	200	27.82	Agree
Don't know	28	3.89	
Disagree	27	3.76	
Strongly agree	443	61.61	Strongly agree
Total	719	100.00	

**Table 5.** Responses of students regarding to general knowledge about HIV / AIDS

Knowledge about HIV/AIDS	Number (n)	Percentage (%)
Not very good	249	34.63
Good	360	50.07
Very good	110	15.30
Without answer	2	-
Total	721	100.00

**Table 6.** Evaluation of correlation between knowledge about sexual behavior and general knowledge about HIV / AIDS

Sexual behavior		General knowledge about HIV/AIDS			
The scale of measuring		Not very good	Very Good	Good	Total
		N (%)	N (%)	N (%)	N (%)
Not appropriate behavior		74 (10.36%)	3 (0.42%)	29 (4.06%)	106
		96 (13.45%)	24 (3.36%)	136 (19.05%)	(14.85%)
Appropriate behavior		77 (10.78%)	82 (11.48%)	193 (27.03%)	256
		247 (34.59%)	109 (15.27%)	358 (50.14%)	(35.85%)
Very appropriate behavior					352
Total					(49.30%)
					714 (100%)

**Chi-Square < 0.0001**

**Table 6.1.** Evaluation of correlation between sexual behavior and general knowledge on HIV / AIDS

Knowledge 6 <i>HIV is a disease of poor people</i>	Behavior 1					
	<i>Sexual intercourse makes a boy and a girl more popular</i>					
	Strongly disagree	Agree	Don't know	Disagree	Strongly agree	Total
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Strongly disagree	192	71	49	132	18 (2.52%)	462
Agree	(26.89%)	(9.94%)	(6.86%)	(18.49%)	4 (0.56%)	(64.71%)
Don't know	9 (1.26%)	12	2	5	1 (0.14%)	32
Disagree	10 (1.40%)	(1.68%)	(0.28%)	(0.70%)	7 (0.98%)	(4.48%)
Strongly agree	47 (6.58%)	6	10	11	0 (0.00%)	38
Total	3 (0.42%)	(0.84%)	(1.40%)	(1.54%)	30 (4.20%)	(5.32%)
	261	36	25	58		173
	(36.55%)	(5.04%)	(23.50%)	(8.12%)		(24.23%)
		1	3	2		9
		(0.14%)	(0.42%)	(0.28%)		(1.26%)
		126	89	208		714
		(17.65%)	(12.46%)	(29.13%)		(100.00%)

**Pearson Correlation P=0.09**

**Table 6.2.** Evaluation of correlation between sexual behavior and knowledge of general knowledge on HIV / AIDS

Knowledge 9 <i>A person would not contract HIV by having sexual intercourse with a newly infected person with HIV</i>	Behavior 4					
	<i>It is good to engage in sexual activities for money, gifts or favor</i>					
	Strongly disagree	Agree	Don't know	Disagree	Strongly agree	Total
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Strongly disagree	233	16	8	32	4 (0.56%)	293
Agree	(32.63%)	(2.24%)	(1.12%)	(4.48%)	2 (0.28%)	(41.04%)
Don't know	55 (7.70%)	9	2	24	5 (0.70%)	92
Disagree	98	(1.26%)	(0.28%)	(3.36%)	3 (0.42%)	(12.89%)
Strongly agree	(13.73%)	8	7	20	0 (0.00%)	138
Total	89	(1.12%)	(0.98%)	(2.80%)	14 (1.96%)	(19.33%)
	(12.46%)	3	8	34		137
	36 (5.04%)	(0.42%)	(1.12%)	(4.76%)		(19.19%)
	511	3	3	12		54
	(71.57%)	(0.42%)	(0.42%)	(1.68%)		(7.56%)
		39	28	22		714
		(5.46%)	(3.92%)	(17.09%)		(100.00%)

**P=0.13**

## Discussion

**Table 1** shows that most students have misconceptions in the following statements: in statement number 1, 6, 7, 9, 10 there are respectively these wrong answers 34% , 37%, 41%, 36%, 34%. So the students think that sexual relations make them more popular (34%), that the first time they can not get infected from HIV (37%), that the same sex sexual relations are safer ( 41%), that the use or drugs and alcohol during sexual relations is not risky (36%) and they think that is not necessary to talk to

their parents about their doubts regarding HIV/AIDS (35%). The results of this study are in concordance with similar studies in Colombia (Hernandez, Zulma 2003) for the statement number 7 and in a very significant contrast for the other statements in a study done in Namibia (Twahafifwa Ndahekelekwa Tupavali Nghaamwa, 2013) whose results were more positive than ours.

**Table 2** shows that around 49% of the students are assessed to have very good perceptions about the sexual behaviour, 36% have the right perceptions and 15% do not have the right perceptions for these behaviours. The results presented in tables 1 and 2 show a considerably high number of students who do not have safe sexual behaviour, the same results as in the following studies (Ebot, Mathias Ebot 2009; Twahafifwa Ndahekelekwa Tupavali Nghaamwa 2013; Namaitijiang Maimaitiet al. 2010).

**Tables 3; 3.1; 3.2** show a correlation between the knowledge on sexual behaviour and socio demographic variables. There is no statistical significance in age group for the sexual behaviour ( $p = 0.6350 > 0.05$  Chi-square); place of living and sexual behaviour ( $p = 0.1901 > 0.05$  Chi-square); between the students with various economic status and sexual behaviour ( $p = 0.2071 > 0.05$  Chi-square); their religious belief does not affect the sexual behaviour ( $p = 0.0920 > 0.05$  Chi-square); civil status ( $p = 0.8124 > 0.05$  Chi-square); Accommodation ( $p = 0.9007 > 0.05$  Chi-square); There is no statistical significance in students according to their academic year of study and sexual behaviour ( $p = 0.1616 > 0.05$  Chi-square); these results are in contrast with another study conducted in Ethiopia (Wondemagegn Mulu et al, 2014) which showed the influence of these factors in the knowledge and sexual behaviour in students. Furthermore, according to Twahafifwa Ndahekelekwa Tupavali Nghaamwa (2013) religion ethnicity can influence sexually behaviour through intermediate factors such as the age at first sex, marital status and access to information and services. While another study from Bongaart as cited in Akwara, et al. (2003; p. 385) it states “sexual behaviour is probably responsible for much of the differences in heterosexual HIV and AIDS epidemics among countries, as well as for the equally large differences among regions and demographic groups within countries.

**Sexual behaviours and gender:** There is important statistical significance between both genders on sexual perceptions ( $p < 0.0001 < 0.05$  Chi-square). Females have more appropriate behaviour than males. 60% of the females have very appropriate behaviour, 30% appropriate behaviour and 10 % not very appropriate behaviour. 35 % of males have very appropriate behaviour, 44% appropriate behaviour and 21 % not very appropriate behaviour. These results are similar to the following studies (Wondemagegn Mulu et al. 2014; Namaitijiang Maimaitiet et al. 2010)

**Sexual behavior and the field of study:** There is important statistical significance between students in various fields of study on their

sexual behavior ( $p < 0.0001$  Chi-square). The results show that nursing students have better behavior than others. 69% have very appropriate behavior, 24% appropriate behavior and 7% not very appropriate behavior. The students of other faculties: 36% very appropriate behavior, 44 % appropriate and 20% not very appropriate behavior. The impact of the field of study on the students' perception was similar to other findings from a study done in Mylazia (Namaitijiang Maimaiti et al. 2010) and a Greek study (Christina Ouzounitaking et al. 2012) took into consideration that the target population of the present study was nursing students, their knowledge on HIV/AIDS was inaccurate and insufficient for future health care professionals.

**Sexual behavior and the age of the first sexual relation:** There is important statistical significance between students with different age on the first sexual relation on their sexual behavior ( $p = 0.0036 < 0.05$  Chi-square). The students who had their first intercourse after the age of 19 have more appropriate behavior than other students. This age group had 55% with very appropriate behavior, 30% appropriate behavior and 15% not very appropriate behavior. The age less than 14 had 33% with very appropriate behavior, 43% appropriate behavior and 24% not very appropriate behavior. Age "15-18 years old" have 38% very appropriate behavior, 43% appropriate behavior and 19% not very appropriate behavior. This shows that the students who started sexual relations early have worse perceptions, similar to other studies (Avery L, 2010).

**Sexual behavior and the number of sexual partners during life:** There is important statistical significance between students with different number of partners during life and their perceptions on their sexual behavior ( $p = 0.0005 < 0.05$  Chi-square). So the students who had one partner have more appropriate behavior than those with multiple partners. 56% of them have very appropriate behavior, 30% appropriate behavior and 14% not very appropriate behavior.

**Table 4** shows that 94% of the students answer wrong or do not know that HIV is a disease of the poor people, so that it has a higher prevalence in the countries with low socio-economic status (Knowledge 6); 67% state that HIV is transmitted through the mosquito bites which is still wrong (K3); about 49% of the students think that a person with HIV may seem healthy for many years (K1), while 51% are wrong, showing that they do not have knowledge on this infection incubation time period; 44% state mistakenly that HIV can be transmitted through the saliva and/or kissing (K2) answers these in contrast with the study conducted from Twahafifwa Ndahekelekwwa Tupavali Nghaamwa 2013 where most of the students answer these statements correct.

**Table 5** shows that in the most part of the participating students around 50% have good knowledge on HIV/AIDS, 15% have very good knowledge and 35 % not very good knowledge. These results show that eventhough the students of Vlore University have good knowledge on HIV/AIDS, there is still a percentage to take into consideration, which shows misconceptions, this similar to other studies in the reference section.

**Table 6** shows a strong statistical significance on sexual behavior of students with different levels of knowledge on HIV/AIDS. The students who have not very appropriate behavior (14.85%) the higher percentage is from students with not very good knowledge (10.36%). In students with very appropriate behavior (49.30%) 39% are the students who have good and very good knowledge. This shows that the level of knowledge about HIV/AIDS affects the sexual behavior. The indicators ( $P < 0.0001$  Chi-Square  $< 0.05$ ) show that this significance is not casual, this is similar to other studies (Wondemagegn Mulu et al, 2014; Hernandez, Zulma 2003).

**Table 6.1:** Pearson Coefficient  $p = 0.09$  of the correlation between the variables of HIV/AIDS knowledge between Knowledge 7 and sexual behavior B.1 shows a poor correlation. So, the students who think that HIV is a disease of the poor people have the same opportunity to have sexual relation only for the fact that it makes them more popular than the ones who think the opposite. From 6% (41) of the students that state the right answer on knowledge, 42% of them (17 students) think that sexual relation makes a person more popular. While from the students (89%, or 635 students) that think that HIV/AIDS is not a disease of the poor people, about 21% of them (132 students) think that sexual relation makes a person popular.

**Table 6.2:** Pearson coefficient  $p = 0.13$  of the correlation between the variables of the knowledge for HIV/AIDS through K.10 and sexual behavior B.4 shows a poor correlation. So, the students who think that a person may acquire HIV from sexual relation with a recently infected person, have the same opportunity to engage in sexual relation in exchange for money and gifts with the ones who think the opposite. From 61% (430 students) who answered right the knowledge question, 6% of them (26 students) think that is better to engage in sexual relation for money or gifts. While from 21 % (146) of the students who answered right the knowledge question, 10 % (14 students) think that is better to engage in sexual relation for gifts or money.

## Conclusions

In studies where information is gathered by self reporting, it is known that the answers are subject to an over or under reporting. This is even more evident, especially when it comes to sensitive issues such as sexual behavior of subjects in the study. Given that the survey data derive precisely from self-report guess it could be subject to this limitation (Brener ND et al. J



Adolescent Health 2003;33:436–57). One other limitation to this study was compilation of the questionnaire with closed questions, thereby limiting exploration in detail the issues of the study and so it has not been possible to obtain more in-depth information of the respondents, especially when it comes to sensitive issues such as sexual health. The students of Vlora University have some misperceptions for some sexual behaviors that expose them to the risk of getting HIV/AIDS. There is important statistical significance between students' knowledge on sexual behaviors and their socio demographic data: Females have more appropriate sexual behavior than males. Nursing students have more appropriate behavior than the students of other fields of study. Students with age of the first sexual intercourse over 19 years, have more appropriate behavior than the students of lower age groups. The level of knowledge on HIV/AIDS affects the sexual behavior of the students. The students with better knowledge of HIV/AIDS have better sexual behavior and vice versa.

### **Recommandations**

Promoting healthy sexual behavior should be an important focus of the health education profession. Periodical update of the existing information of the school curriculum and making sure that the sexual education teachers get ongoing education and training. It is necessary to perform periodical studies in this area in order to evaluate the trends and to asses the progress.

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