

RESEARCH ARTICLE

PREVALENCE AND AWARENESS OF SEXUALLY TRANSMITTED DISEASES AMONG STUDENTS OF CALIFORNIA LUTHERAN UNIVERSITY.

Abdulrahman Abuhaimed, Saeed Badhiduh, Abdulmajeed Al Zahrani, Meshari al Jamei, Hussam Faqieh and Sayed Junaid.

Manuscript Info	Abstract
Manuscript History Received: 19 October 2016 Final Accepted: 20 November 2016 Published: December 2016	 Background: sexually transmitted diseases are very common among college students, and data shows that the problem is on the rise. We wanted to study Impact among CLU students. Method: During a public community awareness exhibition for CLU students at the university's campus, individuals were asked to conduct our survey regarding prevalence and awareness of sexually transmitted diseases. Human subjects were randomly selected, not targeted individuals whom attended the exhibition. Result: Our data shows that the majority of subjects have reported history of sexual activity (86.1%), with (32.3%) of them reporting multiple sex partners, and up to (16.1%) of them reporting sexually transmitted diseases symptoms. More than half of the subjects (54.8%) got tested for sexually transmitted diseases, and (6.5%) diagnosed with it.Our data also shows that (17.7%) of the subjects report having unprotected sex on a usual basis, and (61.3%) have had unprotected sex at least once in their life. Trading money for sex (prostitution) is very uncommon among the subjects, with only (6.5%) reported previous experience with prostitution. Conclusion: We conclude that although prevalence of sexual activity is significant, data shows healthy sexual behavior among subjects, and very good results in comparison with research done on other colleges and universities.

Introduction:-

Sexually Transmitted diseases are infections that usually spread by sexual activity, particularly vaginal intercourse, anal sex, also oral sex. Majority of STDs at first don't cause any symptoms. This brings about a higher risk of spreading the illness to others. Symptoms and signs of disease may include vaginal discharge, penile discharge, ulcers on or around the genitals, and pelvic pain. STDs obtained prior to or throughout conception might bring about poor results for the baby. Some STDs may cause problems with the ability to get pregnant. The most effective way of preventing STDs is by not having sex. Chances of getting an STD increases with having multiple sexual partners, having unprotected sex,

In 2008, it was estimated that 500 million people were infected with syphilis, gonorrhea, chlamydia or trichomoniasis. At least an additional 530 million people have genital herpes and 290 million women have human

papillomavirus. STDs other than HIV resulted in 142,000 deaths in 2013. In the United States there were 19 million new cases of sexually transmitted infections in 2010.

Design of survey:-

On March 2016, The Saudis club at CLU organized a public community awareness exhibition for CLU students at the university's campus, sponsored by the Multicultural program of CLU, to spread awareness regarding the dangers of sexually transmitted diseases, symptoms, prevalence, and how to prevent them.

We prepared a questionnaire form that would be filled at the end of the tour. After filling the questionnaire, the individual would place it directly in a sealed box to assure privacy and avoid any social embarrassments. The tour would discuss types, prevalence, physical complications, and prevention, finally at the end of the tour one of the investigators would explain in details the survey and its contents to avoid any misunderstandings, then the individual would be left to fill the form privately and help would be provided upon request. The exhibition lasted for five hours, and at the end of the exhibition a total of (n=72) forms were collected. After data collection, the program Statistical Package for the Social Sciences (SPSS) was used for data entry and analysis.

Human subjects were randomly selected, not targeted individuals whom attended the exhibition.

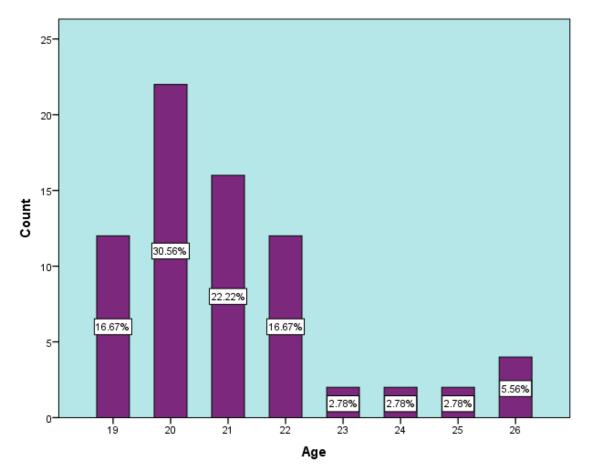
Inclusive criteria are: any subject, who went on the tour, was explained the form in details with full understanding, completed the questionnaire, and placed it inside the box.

Exclusive criteria are: any subject, who didn't go on the tour, didn't have complete understanding of the form, didn't complete the questionnaire.

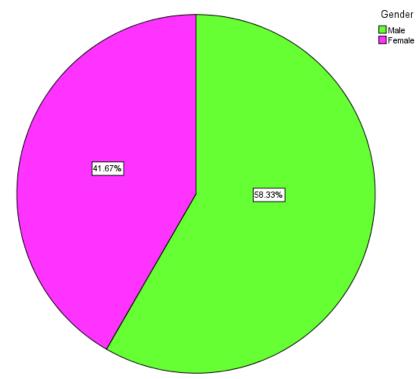
Sexually Transmitted Diseases awareness questionnaire
Age: Gender: Male Female
1) Have you ever been involved in any sexual activity?
2) Do you have multiple sex partners? 🔲 Yes 📄 No
3) Did you ever experience any of the following symptoms (Painful urination, vaginal discharge, strong vaginal odor, penile discharge, pain during sex or intercourse, anal itching, blisters on the genitalia or around the mouthetc)?
4) Have you ever been tested for STDs?
5) Have you ever been diagnosed with a sexually transmitted disease? 🔲 Yes 🔲 No
Which one was it?
6) Do you usually have unprotected sex? 🔲 Yes 🔲 No
7) Have you ever had unprotected sex? Yes No
8) Have you ever traded sex for money? (Prostitutionetc) 🔲 Yes 🔲 No

Our variables in the form are checklist designed, and yes or no answers, were as followed:

- 1- Age.
- 2- Gender.
- 3- History of sexual activity (Involving all forms of sexual conduct).
- 4- Multiple sex partners.
- 5- Previous experience with any sexually transmitted diseases symptoms.
- 6- Previous STD checkup.
- 7- Previous confirmed diagnosis of a sexually transmitted disease.
- 8- Frequent unprotected sex.
- 9- History of unprotected sex.
- 10- Trading money for sex (Prostitution). <u>Results</u>
- 1- Students ages averaged from 19 to 26 years old.



2. Gender.



3. History of sexual activity (Involving all forms of sexual conduct).

	Frequency	Percent
No	10	13.9
Yes	62	86.1
Total	72	100.0

4. Multiple sex partners.

Multiple Sex Partners Crosstabulation					
Multiple Sex Pa					Total
			No	Yes	
Sexually Active?	Yes	Count	42	20	62
		% within Sexually Active?	67.7%	32.3%	100.0%

5. Previous symptoms of any sexually transmitted diseases symptoms.

Sexually Active? * STD Symptoms? Crosstabulation						
	STD Symptoms?		Total			
			No	Yes		
Sexually Active?	Yes	Count	52	10	62	
		% within Sexually Active?	83.9%	16.1%	100.0%	

6. Previous STD checkup.

Sexually Active? * Tested for an STD? Crosstabulation					
			Tested for	an STD?	Total
			No	Yes	
Sexually Active?	Yes	Count	28	34	62
		% within Sexually Active?	45.2%	54.8%	100.0%

7. Previous confirmed diagnosis of a sexually transmitted disease.

Sexually Active? * Diagnosed with an STD? Crosstabulation					
			Diagnosed w	ith an STD?	Total
			No	Yes	
Sexually Active?	Yes	Count	58	4	62
		% within Sexually Active?	93.5%	6.5%	100.0%

8. Frequent unprotected sex.

Sexually Active? * Usually Have Unprotected Sex? Crosstabulation						
	Usually Have Unprotected Sex?					
			No	Yes		
Sexually Active?	Yes	Count	51	11	62	
		% within Sexually Active?	82.3%	17.7%	100.0%	

9. History of unprotected sex.

Sexually Active? * Have you ever had unprotected sex? Crosstabulation						
			Have you ever had	l unprotected sex?	Total	
			No	Yes		
Sexually Active?	Yes	Count	24	38	62	
		% within Sexually Active?	38.7%	61.3%	100.0%	

10. Trading money for sex (Prostitution).

Sexually	Sexually Active? * Have you ever traded sex for money? (Prostitution) Crosstabulation					
			Have you ever t	traded sex for	Total	
			money? (Pro	ostitution)		
			No	Yes		
Sexually Active?	Yes	Count	58	4	62	
		% within Sexually Active?	93.5%	6.5%	100.0%	

Cross tabulation of Gender against the previous variables:

	Gender * Sexually Active? Crosstabulation							
			Sexually Active?		Total			
			No	Yes				
Gender	Male	Count	4	38	42			
		% within Gender	9.5%	90.5%	100.0%			
	Female	Count	6	24	30			
		% within Gender	20.0%	80.0%	100.0%			
Total		Count	10	62	72			
		% within Gender	13.9%	86.1%	100.0%			

	Gender * Multiple Sex Partners * Sexually Active? Crosstabulation								
Sexually Active?			Multiple Sex Partners		Total				
				No	Yes				
Yes	Gender	Male	Count	24	14	38			
			% within Gender	63.2%	36.8%	100.0%			
		Female	Count	18	6	24			
			% within Gender	75.0%	25.0%	100.0%			
	Total		Count	42	20	62			
			% within Gender	67.7%	32.3%	100.0%			

	Gender * STD Symptoms? * Sexually Active? Crosstabulation								
Sexually	Active?		STD Symptoms?		Total				
				No	Yes				
Yes	Gender	Male	Count	36	2	38			
			% within Gender	94.7%	5.3%	100.0%			
		Female	Count	16	8	24			
			% within Gender	66.7%	33.3%	100.0%			
	Total		Count	52	10	62			
			% within Gender	83.9%	16.1%	100.0%			

	Gender * Tested for an STD? * Sexually Active? Crosstabulation								
Sexually	Active?		Tested for an STD?		Total				
				No	Yes				
Yes	Gender	Male	Count	20	18	38			
			% within Gender	52.6%	47.4%	100.0%			
		Female	Count	8	16	24			
			% within Gender	33.3%	66.7%	100.0%			
	Total		Count	28	34	62			
			% within Gender	45.2%	54.8%	100.0%			

	Gender * Diagnosed with an STD? * Sexually Active? Crosstabulation								
Sexually	Active?			Diagnosed with an STD?		Total			
				No	Yes				
Yes	Gender	Male	Count	36	2	38			
			% within Gender	94.7%	5.3%	100.0%			
		Female	Count	22	2	24			
			% within Gender	91.7%	8.3%	100.0%			
	Total		Count	58	4	62			
			% within Gender	93.5%	6.5%	100.0%			

	Gender * Usually Have Unprotected Sex? * Sexually Active? Crosstabulation									
Sexually	y Active?			Usually Have Unprotected Sex?		Total				
				No	Yes					
Yes	Gender	Male	Count	31	7	38				
			% within Gender	81.6%	18.4%	100.0%				
		Female	Count	20	4	24				
			% within Gender	83.3%	16.7%	100.0%				
	Total		Count	51	11	62				
			% within Gender	82.3%	17.7%	100.0%				

	Gender * Have you ever had unprotected sex? * Sexually Active? Crosstabulation									
Sexuall	y Active?			Have you ever had unprotected sex?		Total				
				No	Yes					
Yes	Gender	Male	Count	16	22	38				
			% within Gender	42.1%	57.9%	100.0%				
		Female	Count	8	16	24				
			% within Gender	33.3%	66.7%	100.0%				
	Total		Count	24	38	62				
			% within Gender	38.7%	61.3%	100.0%				

6	Gender * Have you ever traded sex for money? (Prostitution) * Sexually Active? Crosstabulation								
Sexuall	y Active?			Have you ever traded sex for money?		Total			
				(Prostitut					
				No	Yes				
Yes	Gender	Male	Count	34	4	38			
			% within Gender	89.5%	10.5%	100.0%			
		Female	Count	24	0	24			
			% within Gender	100.0%	0.0%	100.0%			
	Total		Count	58	4	62			
			% within Gender	93.5%	6.5%	100.0%			

Discussion:-

Our data shows that the majority of subjects have reported history of sexual activity (86.1%), with (32.3%) of them reporting multiple sex partners, and up to (16.1%) of them reporting sexually transmitted diseases symptoms.

More than half of the subjects (54.8%) got tested for sexually transmitted diseases, and (6.5%) diagnosed with it.

Our data also shows that (17.7%) of the subjects report having unprotected sex on a usual basis, and (61.3%) have had unprotected sex at least once in their life.

Trading money for sex (prostitution) is very uncommon among the subjects, with only (6.5%) reported previous experience with prostitution.

Gender variation shows:-

- Similar high prevalence of history of sexual activity among both genders.
- Similar percentages (36.8% for males and 25% for females) of multiple sexual partners among both genders.
- ✤ Significantly higher incidence of sexually transmitted diseases symptoms among females (33.3%) v.s (5.3%) among males.
- Females showed higher rates of STD checkups with rates of (66.7%) v.s (47.4%) for males.
- Diagnosis for STDs shows similar rates among both genders, with reported chlamydia, trichomoniasis, and human papilloma virus as the causative organisms.
- Although rate of routine unprotected sex is low and similar among both genders. (18.4% for males and 16.7% for females), data shows that more than half of both genders reported previous unprotected sex with higher incidence among females (66.7%) vs (57.9%) for males.
- Data shows low prevalence of trading money for sex "Prostitution" among males (10.5%) and absence of such conduct among females (0.00%).

Conclusion:-

We conclude that although prevalence of sexual activity is significant, data shows healthy sexual behavior among subjects, and very good results in comparison with research done on other colleges and universities.

We recommend increasing awareness of regular STDs checkup among both males and females especially ones experiencing symptoms.

We recommend providing or spreading awareness about HPV vaccinations to students, to protect from the organism. We also recommend spreading awareness among males on the dangers of trading sex for money "prostitution".

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