

Differences in knowledge and behavioral practices in the prevention of sexually transmitted diseases: a comparison of rural and metropolitan college students





Background

- Adolescents represent one-quarter of those who are infected, with two-thirds of STD cases occurring in individuals under the age of 25
 - *Clin Ped Emerg Med* 4:21–36
- Even when adolescents demonstrate more knowledge about condoms and STD prevention, they do not report safer sex behavior compared with their less knowledgeable peers
 - *Strier LA - Adolesc Med Clin - 01-JUN-2004; 15(2): 215-34*
- The US Centers for Disease Control and Prevention (CDC) estimates that "50% to 75% of sexually active men and women acquire HPV at some point in their lives."
 - *Genius SJ - Am J Obstet Gynecol - 01-OCT-2004; 191(4): 1103-12*



Hypotheses

- 1) College students raised in rural communities will have less accurate knowledge of STD's than their metropolitan counterparts.
- 2) College students raised in rural communities will be more likely to self-report not using safe sex practices than their metropolitan counterparts.



Methods

- Anonymous survey was administered to college students at Western Illinois University in introductory level health courses, that had not as yet discussed STD's
- A total of 176 surveys were obtained
- Data entered and analyzed using SPSS 12.0
- Findings to be summarized and discussed with student health council at WIU
- IRB approval was sought and granted by both the University of Illinois College of Medicine at Rockford and Western Illinois University



Results Rural/Metropolitan Differences

Demographic

	RURAL	METRO- POLITAN	P
FEMALE	52.6%	56.0%	NS
19 YEARS AND YOUNGER	38.2%	44.0%	NS
20 YEARS AND OLDER	61.8%	56.0%	NS
HOUSEHOLD INCOME >= \$35,000	67.1%	83.0%	.014
CAUCASIAN	94.7%	73.0%	.000
HAVE HEALTH INSURANCE	96.1%	94.0%	NS



Rural/Metropolitan Differences

	RURAL	METROPOLITAN	P
Sexual Behavior			
SEXUALLY ACTIVE	77.4%	84.0%	.061
HAVE EVER HAD STD	5.3%	5.0%	NS
4 OR MORE SEXUAL PARTNERS	40.8%	34.0%	NS
CONDOM USED DURING LAST SEXUAL ENCOUNTER	41.5%	63.7%	NS



	RURAL	METROPOLITAN	P
STD Knowledge			
Human Papilloma Virus (HPV) is a sexually transmitted disease	73.9%	69.0%	NS
HPV can occur without symptoms	68.4%	57.0%	NS
HPV is a common infection	52.6%	41.0%	NS
HPV can cause:	61.8%	59.0%	NS
Genital herpes is a sexually transmitted infection	93.4%	95.0%	NS
Genital herpes infection is caused by a virus	78.9%	57.0%	NS
Genital herpes is a common infection	65.8%	71.0%	NS
The type of the virus causing cold sores can cause genital herpes	47.4%	58.0%	NS
Genital herpes infection:	86.8%	87.0%	NS
Most of the people infected with genital herpes are aware that they had been infected	31.6%	34.0%	NS
Patients with genital herpes infection can still produce the virus even when they have no genital symptoms	94.4%	93.0%	NS
Patients with genital herpes infection can still infect their partners even when they have no genital symptoms	90.8%	90.0%	NS
Chlamydia can be spread during sexual intercourse when not using a condom	95.4%	91.0%	NS
A partner has to attend for an examination if a Chlamydia infection is diagnosed	11.8%	5.0%	NS
Partners can be asymptomatic carriers of a Chlamydia infection	78.9%	70.0%	NS
Chlamydia infection:	64.3%	59.0%	NS
Gonorrhea infection:	57.9%	59.0%	NS
Human Immunodeficiency Virus (HIV) infection:	76.3%	66.0%	NS

STD KNOWLEDGE QUESTION

CORRECT ANSWER

% CORRECT IN TOTAL SAMPLE

Human Papilloma Virus (HPV) is a sexually transmitted disease.

True

67.6%

HPV can occur without symptoms.

True

61.9%

HPV is a common infection.

True

46.0%

HPV can cause:

Both Cervical Cancer & Genital Warts

60.2%

Genital herpes is a sexually transmitted infection.

True

94.3%

Genital herpes infection is caused by a virus.

True

76.1%

Genital herpes is a common infection.

True

58.8%

The type of the virus causing cold sores can cause genital herpes.

True

51.4%

Genital herpes infection:

Can be treated but not cured

86.9%

Most of the people infected with genital herpes are aware that they had been infected.

True

35.0%

Patients with genital herpes infection can still produce the virus even when they have no genital symptoms.

True

93.2%

Patients with genital herpes infection can still infect their partners even when they have no genital symptoms.

True

90.3%

Chlamydia can be spread during sexual intercourse when not using a condom.

True

92.0%

A partner has to attend for an examination if a Chlamydia infection is diagnosed.

Incorrect

10.2%

Partners can be asymptomatic carriers of a Chlamydia infection.

True

73.9%

Chlamydia infection:

Can be treated and cured

60.8%

Gonorrhoea infection:

Can be treated and cured

58.5%

Human Immunodeficiency Virus (HIV) infection:

Can be treated but not cured

70.5%



Discussion

- No significant differences in knowledge or behaviors demonstrated between rural and metropolitan students
- Alarming deficits in knowledge were found among the sample as a whole
- One of the biggest areas of misconception among students is knowledge of HPV and its health effects
- Students unaware of STD testing practices