

HIV/AIDS Knowledge Among Students Attending a Kentucky University

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Topic

Research Question

How knowledgeable are residential college students at a Kentucky regional campus regarding Human Immunodeficiency Virus and behaviors to prevent its transmission?

Hypothesis

Residential college students at a Kentucky regional campus will have a low level of knowledge regarding Human Immunodeficiency Virus and behaviors needed to prevent its transmission.

BACKGROUND & SIGNIFICANCE

- Approximately 38.4 million people globally were living with HIV in 2021 (UNAIDS, 2022)
- Approximately 1.2 million individuals currently have HIV in the U.S. (HIV.gov, 2022)
- Approximately 22% of HIV infection cases in 2014 belonged to those aged 13 to 24 (Lin et al., 2017)
- 6,082 HIV diagnoses for those aged 13-24 in 2020 in KY (CDC, 2020)
- Approximately 28% of college students reported having ever been tested for HIV in the U.S. (Lin et al., 2017)
- College students are regularly having unprotected sex and multiple sex partners (Lin et al., 2017)
- College students generally do not perceive themselves as a highrisk group for HIV nor do they take the necessary precautions (Lin et al., 2017)

METHODS

- HIV/AIDS Education Survey is an electronic 28 questionnaire created and taken through the Qualtrics software company
- HIV/AIDS Education Survey was pilot tested on 10 graduate students at Eastern Kentucky University
- Research and the HIV/AIDS Education Survey received Institutional Review Board approval
- Graduate researcher worked with the Eastern Kentucky University
 Director of Residence Life Department to send out the HIV/AIDS
 Education Survey to all residential college students
- Approximately 3,650 residential college students in 11 residence halls at Eastern Kentucky University's Richmond Campus received the HIV/AIDS Education Survey
- Data was analyzed using Microsoft Excel and Jamovi

HIV/AIDS Education Survey

Created based upon information from various scholarly articles but crafted by the graduate researcher and committee members.

- 1. Demographics (5 questions)
 - Age
 - Gender
 - Sexual orientation
- 2. HIV/AIDS Education (8 questions)
 - Were HIV/AIDS related topics discussed at home/school
 - Stigma surrounding HIV/AIDS
 - Rank your knowledge of HIV/AIDS
- 3. HIV/AIDS Knowledge (16 questions)
 - Viruses' origins, transmission, prevention, testing, and treatment

Results Knowledge of HIV / AIDS 60 50 40 20 10 [0, 10] (10, 20] (20, 30] (30, 40] (40, 50] (50, 60] (60, 70] (70, 80] (80, 90] (90, 100] Below 70% ® 70% or above

Figure 1. Participant scores from the HIV/AIDS Education Survey

Results

Table 1. Scores from those with high school health education (Group 1) vs. those without (Group 2)

	Group	N	Mean	Median	SD	SE	Р
ΑE	1	152	69.5	68.8	13.7	1.11	0.57
	2	13	70.2	75.0	13.5	3.75	0.57

Table 2. Scores from those presented with HIV/AIDS prevention information (Group 1) vs. those who were not (Group 2)

	Group	N	Mean	Median	SD	SE	Р
ΑE	1	109	70.8	68.8	12.7	1.22	0.056
	2	56	67.2	68.8	15.2	2.03	

Discussion/Conclusion

Figure 1 – Knowledge of HIV/AIDS

- Scores were calculated for each participant out of 16 questions total from the HIV/AIDS Knowledge section
- 70% or above = passing amount of HIV/AIDS knowledge
 - 73 participants
- Below 70% = low amount of HIV/AIDS knowledge
 - 92 participants
- Mean = 69.55; Median = 68.75

Table 1 – High School Health Education Course

- Group 1 = 152 participants; Mean = 69.5
- Group 2 = 13 participants; Mean = 70.2
- Means were not significantly different (p=0.570)

Table 2 – HIV/AIDS Prevention Information

- Group 1 = 109 participants; Mean = 70.8
- Group 2 = 56 participants; Mean = 67.2
- Mean for Group 1 was slightly but not significantly higher (p=0.056)

Conclusion

Attending a high school health education course seemed to have no effect on an increase in a participant's score. However, being presented on HIV/AIDS prevention information in high school resulted in higher knowledge scores, but these were not significantly better.

REFERENCES

- 1. HIV.gov. *U.S. Statistics*. (2022, October 27). Retrieved November 6, 2022, from https://www.hiv.gov/hiv-basics/overview/data-and-trends/statistics
- Centers for Disease Control and Prevention. AtlasPlus charts. (2020).
 Retrieved December 2, 2022, from https://gis.cdc.gov/grasp/nchhstpatlas/charts.html
- 3. Lin, C. A., Roy, D., Dam, L., & Coman, E. N. (2017). College students and HIV testing: Cognitive, emotional self-efficacy, motivational and communication factors. *J Commun HealthC*, 10(4), 250-259. https://link.springer.com/article/10.1007/s10461-020-02859-5#citeas
- 4. UNAIDS (United Nation Programme on HIV and AIDS). *Global HIV & AIDS* statistics Fact sheet (2022). Retrieved November 18, 2022, from https://www.unaids.org/en/resources/fact-sheet

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