

The Impact of Health Literacy on Sexually Transmitted Infections Among University of California Students

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Background

- Compared to other developing countries the U.S. holds one of the highest rates of STIs¹
- STIs (chlamydia, gonorrhea, syphilis) can lead to HIV, infertility, cervical cancer, and other chronic health issues²
- Legislation AB 329 states that CA schools must provide comprehensive Sex Education to students³

Objectives

- (1) To determine UC undergraduate students' level of health literacy on STIs
- (2) To explore what resources are being used by students to learn about STIs
- (3) To investigate the efficacy of Student Health Services (SHS) at the UC campuses

Methodology

The cross-sectional survey targeted students (N=144) across the UC campuses, which included: UC Berkeley, UC Davis, UC Irvine, UC Los Angeles, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, and UC Santa Cruz. A Qualtrics survey was distributed throughout the nine UC campuses on campus-specific Reddit threads, social media, and Discord from April to May 2023. An ANOVA analysis and Descriptive analysis were conducted.

- Exposure 1: Sex Education during middle school and high school
- Exposure 2: Availability and awareness of college campus resources
- Outcome 1: Level of knowledge for safe sex and STIs
- Outcome 2: Opinions and stigmas around STIs

STI Knowledge Quiz

Participants were given an STI quiz to measure health literacy levels. There were 10 questions with 13 possible points. The scale was distributed as follows:

- 0-4 (0-30%) *little to no knowledge*
- 5-8: (38%-62%) *moderate to average knowledge*
- 9-13: (69%-100%) *high knowledge to very knowledgeable*

Limitations

- Reddit threads restrict who can post on the thread
- No direct contact with other UC campuses
- Ability to skip questions led to 71 inadmissible survey responses

Conclusions

- Based on quiz results, UC undergrad students have an average score of 10.4 (80%), signifying **high knowledge or a very knowledgeable level of health literacy on STIs**. 4th-year undergrad students had the highest average score of 10.7 (82%). 5th year and unknown year had the lowest score with an average score of 9 (69%) and 5 (38%) respectively
- 107 students shared that they received most of their knowledge from the Internet
 - Average score of 10.86 (84%) on the quiz.
 - 77 students shared that they received most of their knowledge from SexEd in middle and high school
 - Average score of 10.89 (84%)
- Students shared that they believe **SHS demonstrates moderate efficacy**
 - 47.9% of students responded that SHS sometimes meets the needs of students. Only 16.8% of students utilize SHS services.

Results

Number of Participants at Each UC Campus

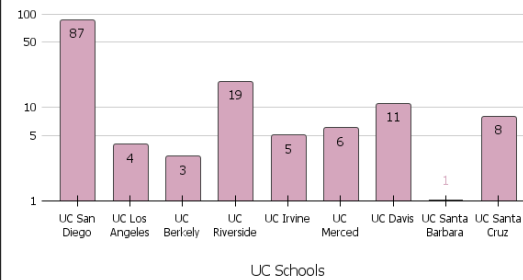


Figure 1: The number of participants for each of the nine UC campuses.

Average STI Quiz Score vs. Source Type

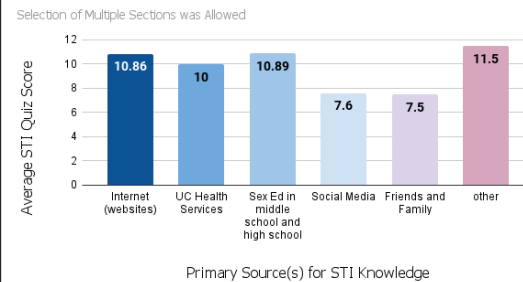


Figure 2: Average score on the STI quiz compared to the type of resources they utilize.

Average Quiz Score vs. Year

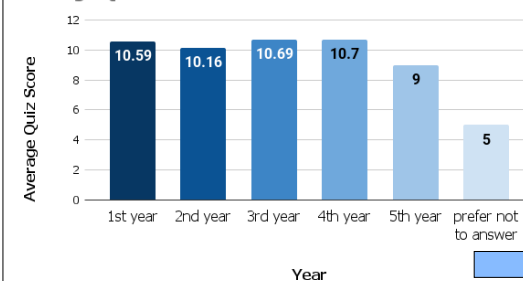


Figure 3: Average score on the STI quiz compared to their academic school year.

Policy Implications

- Emphasizing the importance of SHS and promoting health literacy on STIs and SexEd can aid in preventing and reducing STI rates
- Reconstruction of SexEd
 - Concentrate the education of STIs on older high school students and college undergraduates
 - Mandate a consistent curriculum for all public institutions
 - Focus on the education of STIs
- Increase promotion of SHS
 - By providing students with more information and assistance through campus-wide presentations held throughout the school year
 - Appointments can be arranged as necessary
 - Conducted during week 0 for incoming college Freshmen

Fstat = 22.16 > 2.29

(critical F (5,138) value of p=0.05)

- **NULL Hypothesis** There is no difference among the quiz scores means among the six year groups.
- **ALTERNATE Hypothesis** There is at least one difference between the different Year groups' means.
- **RESULTS:** Rejects null hypothesis; concludes that there is an overall difference in mean test scores for the six Year groups.