

Beliefs and Knowledge of Barrier Methods to STI Prevention and its Impacts on its Use Among College Students

Kristine Dimaculangan, Nayeli Gonzalez, Salma Parra Pulgarin, Julia Robles
B.S. in Public Health, University of California, San Diego



Background

- In 2021, half of the 28 million reported sexually transmitted infections (STIs) in the U.S occurred among young adults ages 15-24, which consist of traditional aged college students, making them at risk for acquiring STIs.¹
- STI risk among this demographic may be due to lack of knowledge or access to health care, as well as behavioral factors such as multiple sexual partners, substance use, and inconsistent condom use which can be explained through cultural taboos, religious beliefs, and personal beliefs.²
- Condoms provide significant protection against STIs, this shows that with an increase of condom use comes with a decline in STI rates.³

Objectives

- To analyze the knowledge and beliefs about condom use and behaviors among college students and to investigate how beliefs impact the use or non-use of condoms

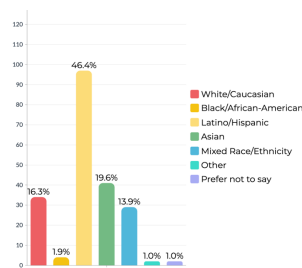
Methodology

- An anonymous, cross-sectional, mixed method Google Forms survey was conducted among college students in Southern California between the ages of 18-24. (N=209)
- Survey was distributed to students through social media posts on Instagram and Reddit from April 24, 2023, to May 12, 2023.
- The survey asked participants questions regarding basic demographics and the assessment of safe sex practices, STI knowledge, and condom behaviors.
- Qualitative and quantitative analysis was done through Excel and identifying common themes of written response data using Dedoose.
- Descriptive statistics were explored to assess between the exposure (use of barrier methods such as condoms during sexual encounters) and the outcome (acquiring an STI due to lack of condom use).

Results

Demographics

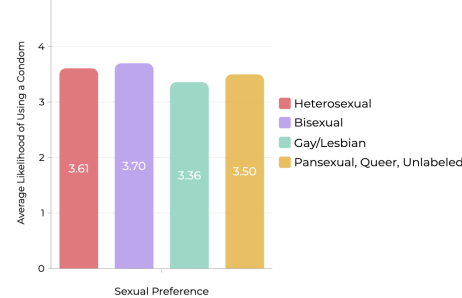
Race/Ethnicity



Sexual Preferences

71.8% Heterosexual
17.7% Bisexual
4.8% Gay/Lesbian
2.9% Pansexual
0.5% Queer
1.4% Prefer Not to say

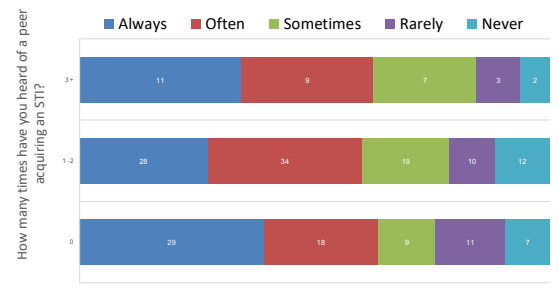
Sexual Preference vs Average Likelihood of Using a Condom



Pearsons Correlation Test for the above variables.

- There was a moderate negative correlation between the two variables, $r = -0.006$, $n = 209$, the relationship was significant ($p = .467$).
- Sexual Preferences of participants were correlated with the likelihood of using a condom.

Number of times Heard a Peer Acquired STI vs Likelihood of Using a Condom



Condom Beliefs

Most likely the reason college students practice safe sex

- STI Prevention (16%)
- Pregnancy Prevention (84%)

When asked how condoms affect sexual experiences:

- 95** Mentions of condoms affecting sensation during sex
56 in which explicitly expressed feelings of discomfort
- 74** Mentions of condoms making sex feel safe and secure
Expressing feelings of safety and security within their partners and protection from STIs and unwanted pregnancies
- 35** Mentions of condoms taking no affect or difference during sex
Many expressed that condoms do not change feelings of intimacy
- 12** Mentions of condoms being inconvenient during sex
Ranging from explanations of not being prepared to condoms ruining the moment

Gender vs Likelihood of Using a Condom

How likely are you to use a condom?	Female	Male
Never	13	8
Rarely	12	11
Sometimes	21	12
Often	32	28
Always	42	22

Conclusions

- Reasons for condom use and overall safe sex practices lie within pregnancy prevention over STI prevention.
- Effects on sensation during sex was a common theme as to college students' preferences to condom use- or lack thereof.

Policy Implications

- Creating better access and comfort within higher education institutions for all students regarding sexual healthcare services:
 - Providing free condoms and STI testing
 - Advocating awareness and holding sexual education workshops/programs (such as FoSE and SIECUS from Planned Parenthood) and courses
- UCSD Student Health Services provides access to condoms as well as access to testing. STI testing is free of cost to students with the university insurance, UCSHIP. However, for those without this insurance STI tests can cost anywhere from \$55-200.
- As demonstrated by survey results, students are less likely to wear a condom to prevent STIs.
- Instead of only pushing efforts towards condom use, efforts should also be placed on increasing STI testing. To increase STI testing, Student Health Services should offer free testing to all students regardless of access to insurance.

Acknowledgements

Thank you to Dr. Argentina Servin, Dr. Haley Ciborowski and Laura Scheckler for your support as well as to all the students who participated in our study.

References
1. Centers for Disease Control and Prevention. (2021, January 25). *STI incidence, prevalence, cost estimates*. Centers for Disease Control and Prevention. Retrieved February 1, 2023, from <https://www.cdc.gov/nchhstp/newsroom/2021/2018-STI-incidence-prevalence-estimates.html>
2. Shapiro, Gilia K., et al. (2017). *Correlates of Tinder Use and Risky Sexual Behaviors in Young Adults*. <https://www.liebertpub.com/doi/10.1089/cyber.2017.0279>
3. Holmes, K.K., Levine, R., & Weaver, M. (2004). *Effectiveness of condoms in preventing sexually transmitted infections*. The Free Library. (n.d.). Retrieved February 1, 2023, from [https://www.thefreelibrary.com/Holmes%2C+K.K.%2C+Levine%2C+R.%2C+Weaver%2C+M.-%20\(2004\)-Effectiveness+of...%01217623939](https://www.thefreelibrary.com/Holmes%2C+K.K.%2C+Levine%2C+R.%2C+Weaver%2C+M.-%20(2004)-Effectiveness+of...%01217623939)