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Sexual violence and attempted suicide among California's high school students

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Acknowledgements

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Presenter Disclosure

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Objectives

- Describe the prevalence of sexual violence, substance use and suicide attempts among high school students in California
- Assess the association between sexual violence and suicide attempt among high school students in California
- Discuss the role of the California Healthy Youth Act and Positive Youth Development in preventing and addressing sexual violence

Background and Definition

- Trauma exposure is associated with short- and long-term mental health impacts
- Sexual violence is, unfortunately, a common form for trauma among US women
 - 43.6% of adult women in US experienced some form of contact sexual violence in their lifetime¹
 - 4.7% of this occurred in the 12 months preceding the survey
 - 9.7% of high school students in US reported sexual violence in the last 12 months²
- What is sexual violence?
 - Being forced by anyone to do sexual things such as kissing, touching, or being physically forced to have sexual intercourse, one or more times during the 12 months before the survey, Youth Risk Behavior Survey (YRBS)
- Suicide rate is rising among young people and was the leading cause of death among youth aged 10-24 in California in 2017³

Data Sources:

¹Centers for Disease Control and Prevention, National Intimate Partner and Sexual Violence Survey, 2015

²National Youth Risk Behavior Survey, 2017

³CA vital statistics, death records



Methods

➤ Data Source: California Youth Risk Behavior Survey, 2017

- Survey questions: During the past 12 months:
 - How many times did anyone force you to do sexual things that you did not want to do? (Sexual violence, SV)
 - How many times did you actually attempt suicide? (Suicide attempt, SA)

➤ Chi-square and multivariable logistic regression

- χ^2 , chi-square determines the significant relationship between 2 given variables
- Logistic regression, explains the relationship between SA (outcome) and SV along with other covariates

Sexual violence and suicide attempt: YRBS, 2017



* Sexual violence questions on ever experienced and in the last 12 months are different and independent from each other.

Ever experienced: Have you ever been physically forced to have sexual intercourse when you did not want to?

In the last 12 months: During the past 12 months, how many times did anyone force you to do sexual things that you did not want to do?

(Count such things as kissing, touching, or being physically forced to have sexual intercourse)

Sexual violence and suicide attempt: YRBS, 2017

- Female students are more likely to experience sexual violence than are male students [$X^2(1, n=1591)=24.4, p<0.0001$]
- A higher percentage of Hispanic students reported suicide attempt than other race/ethnic group peers [$X^2(2, n=1489)=11.7, p<0.003$]

* Due to small sample size, Asian, Black and multiple race are grouped into All other

Demographics n=1778	Sexual violence	Attempted suicide
Gender	Percent	Percent
Male	6.2	8.2
Female	13.6	10.4
Age		
Aged 15 or younger	8.8	10.2
Aged 16-18	10.5	8.6
Race/ethnicity*		
Hispanic	9.6	11.2
White	11.0	6.3
All other	9.8	7.4

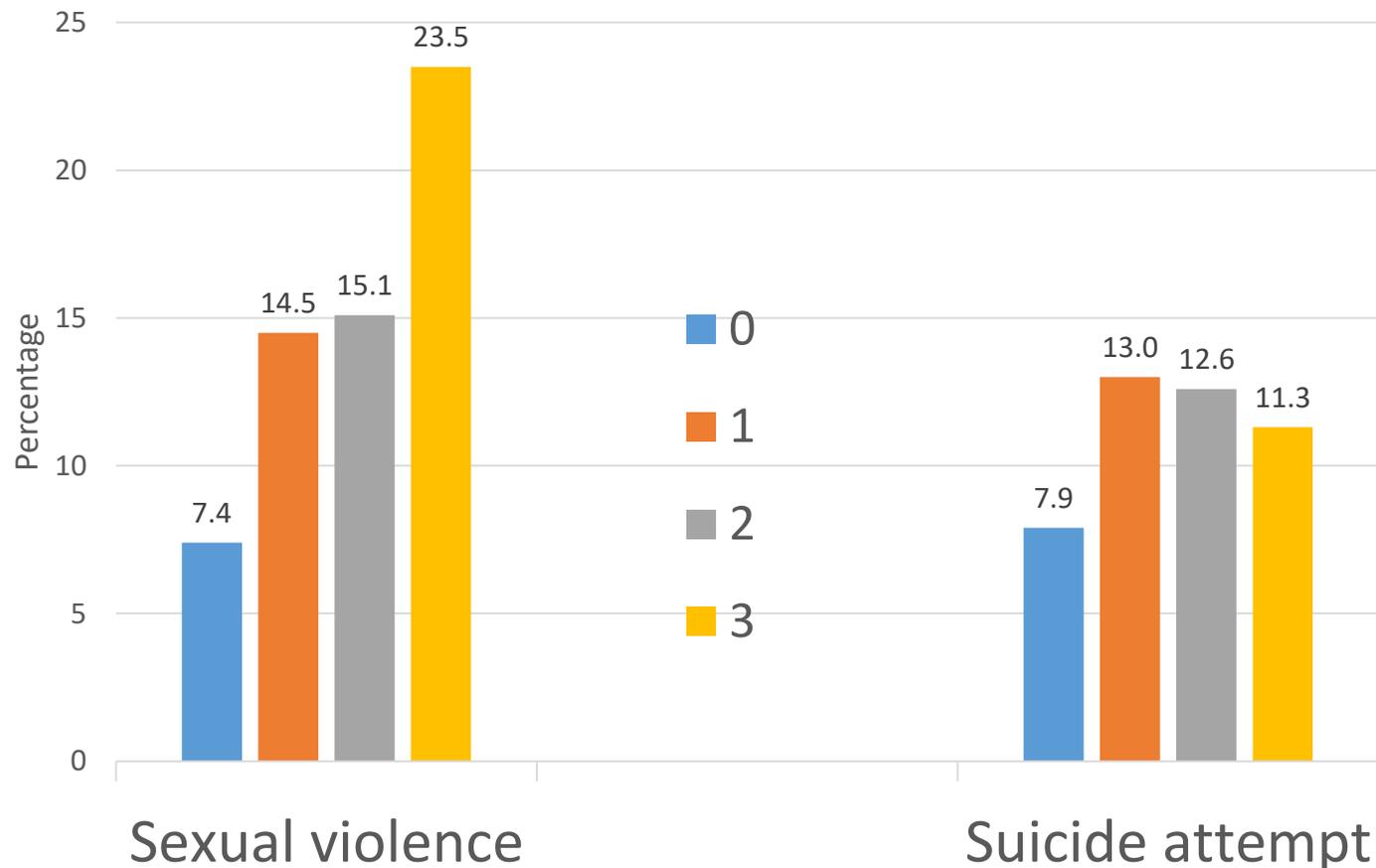
Sexual violence and suicide attempt by substance use behavior, YRBS 2017

Substance use behavior:

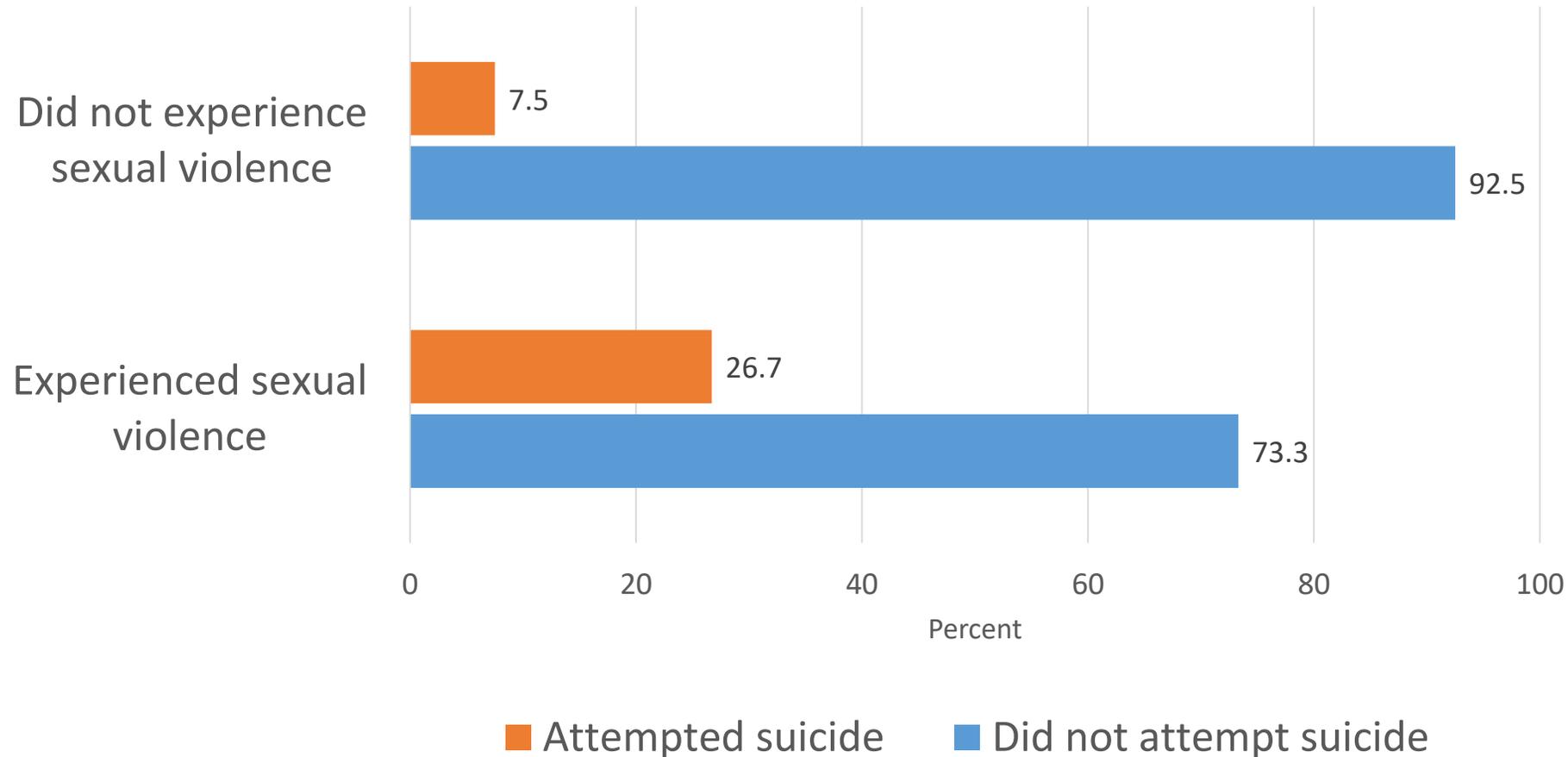
- Vaping
- Binge drinking
- Use of marijuana

Composite score values of:

- 0 –not using any of the 3 substances
- 1 –use of any one substance
- 2 –use of any two substances
- 3 –use of all three substances



Suicide attempt and sexual violence victimization



Multivariable logistic regression estimates for suicide attempt

- Adjusting for student's age, sex, race/ethnicity, school performance, substance use and suicide ideation, odds ratio results:

The odds of students attempting suicide were 2.8 times higher for students who are SV victims than are not SV victims (Odds Ratio: 2.8; Confidence Interval=1.6, 4.7; $p < 0.001$)

Discussion

- CDPH recognizes the association of sexual violence and increased risk for suicide
 - The CDPH Violence Prevention Initiative elevates the issue of violence as a departmental priority, integrates and aligns efforts across multiple CDPH programs and local health department strategies
 - Adolescent health programs use Positive Youth Development Framework that holds all youth have strengths and focuses on building protective factors and resilience to promote healthy development and wellbeing**
- The State of California is committed to reducing sexual violence
 - California Healthy Youth Act* – The 2016 law teaches the value of committed relationships based on mutual respect, and are free from violence, coercion and intimidation
 - New Office of the Surgeon General is focused on clinical screening for childhood trauma, including sexual violence to prevent secondary health impacts and promote healing (Standardized training for clinicians and Medicaid reimbursement for ACEs screening)

* California Healthy Youth Act (CA Education Code Sections 51930-51939) Frequently Asked Questions California Sexual Health Education Roundtable

https://www.aclunc.org/docs/frequently_asked_questions-california_healthy_youth_act-ca_sexual_health_education_roundtable.pdf

** Youth.gov <https://youth.gov/youth-topics/positive-youth-development>



Strengths and Limitations

- YRBS is a rigorous and standardized survey
 - Logical pattern of responses within groups of questions has occurred since the first surveys were conducted (national)
 - California has received weighted statewide data since 2015
- Respondents are in public school, excluded are:
 - Youth in private schools
 - Youth who have dropped out of school
 - Youth who are in juvenile detention facilities or in foster care
- Data are cross-sectional and temporality is unknown

Conclusion

- Overall, sexual violence is a strong predictor of suicide attempt among youth
 - Similar odds ratio results for students who were SV victims in the last 12 months and SV in their lifetime
- Hispanic youths, while reporting less SV, also report higher rates of suicide attempts and this merits further inquiry.
- Primary prevention to stop violence before it happens is critical but secondary prevention to foster disclosure with close follow up for any health or mental health impacts is also critical.
- Youth suicide prevention efforts should consider violence prevention as a primary prevention strategy.

Q & A

Question and Answer

THANK YOU!