Risky Behavior: Perceived Risk of Infectious Disease in Youth Entering Alcohol/Drug Treatment

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Background

- YES house (Youth Entering Sobriety) is an inpatient drug/alcohol rehab facility for adolescents
- Residential treatment and licensed alternative school
- Serves youth from all of Oregon as well as SW Washington
- Patients complete a health risk assessment form on entering the facility
- YES house contacted the department of Public Health in 2011 and asked for help analyzing the health risk data

Participants

- N=1,402 patients entering YES house between 1999 and 2011 completed risk assessment forms
- Age range: 9-19 years of age
- Mean age: 16.4 years of age
- 36% female
- 96% born in the US
- 37.1% told or thought they have alcohol problem
- 33.9% currently use stimulants

Methods

- Variables
  - Age, sex, and place of birth
  - Acute physical health
  - Chronic disease (patient and parent)
  - Sexual behaviors
  - Drug and alcohol use
  - Other risk factors (e.g., travel overseas)
  - Perceived risk for Hep C & HIV
- Data cleaned and analyzed using SPSS Version 21.0.1
- Descriptive statistics calculated for all variables
- Ordinal logistic regression used to assess degree to which youth’s self-reported behaviors affected their perceived risk of HIV and hepatitis C

Results—frequencies

- 22.3% have ever been homeless
- 55.1% have ever been in jail
- 40.0% have a recent tattoo or piercing
- 1.6% have a job with potential body fluid contact
- 9.2% have ever injected drugs
- 3.6% have ever shared needles
- 38.5% have either had sex with more than 1 person in the last 6 months or have not used condoms
- 3.7% have had sex with a high-risk partner
- 26.1% report ever being tested for HIV (63% of these within 6 mos)
- 20.4% report ever being tested for hepatitis C

Results—regression

- 4 predictor indices: circumstantial, drugs, sex, other
- Perceived risk of HIV: 63.3% ‘no risk’, 20.0% ‘low risk’, 16.7% higher risk
- For each additional point on the sex risk index, participants were 1.8 times more likely to perceive themselves to be in a higher risk category (95% CI: 1.3 - 2.3)
- Drug risk index: 0.29 times more likely (5% less likely – 0.76 times more likely)
- Other covariables not important predictors of perceived HIV risk
- Perceived risk of hepatitis C: 65.2% ‘no risk’, 17.6% ‘low risk’, 17.2% higher risk
- Sex risk index: 1.4 times more likely (1.0 – 1.8)
- Drug risk index: 0.33 times more likely (2% less likely – 0.82 times more likely)
- Other risk index: 0.24 times more likely (0.01 – 0.5)

Conclusions

- Less populated counties (the Eastern 1/3 of the state) did not have youth who were patients at YES house during the study period (1999-2011)
- This could be a function of fewer youth at risk OR addicted youth from these counties could be seeking services in Idaho or another neighboring state
- Both circumstantial and behavioral risk factors for body fluid-borne infectious diseases are highly prevalent in this population
- Nearly two-thirds of youth perceive that they are at no risk of contracting HIV or hepatitis C
- An additional one-fifth of youth perceive that their overall absolute risk of contracting HIV is low
- This may be the correct perception, as absolute risk of sero-conversion is in fact low even after sexual contact with a known HIV-positive individual
- Youth also tend to correctly classify their personal relative risk as higher if they have more risk factors

Reference

U.S. Department of Commerce, United States Census Bureau, April 22, 2013
http://quickfacts.census.gov/qfd/index.html

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