Investigation into the Role of Outpatient Commitment Laws, Access to Care, and Native American Ethnicity to Suicide Rates in Adolescents By State

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Background

- Suicide was the second leading cause of death for 10- 24 year-olds in 2014.
- The 2015 Youth Risk and Behavior Study uncovered that within the past year 17.7% of high school students had seriously considered suicide, 14.6% had made a plan, and 8.6% had attempted at least once.
- Data from the CDC indicates that only 46% of people who die by suicide have a known mental health condition at the time of death.
- A prior investigation into the contribution of stringency or leniency of involuntary psychiatric admission statutes on suicide rates in adolescents revealed no significant correlation between the two.
- The previous study suggested several other potential confounding factors, including inclusivity of outpatient commitment laws, access to outpatient mental health care, and Native American population density.

Objectives

- To identify the contribution that inpatient and outpatient commitment statutes and access to outpatient care have on adolescent suicide rates in each state
- To identify the contribution that Native American ethnicity has upon adolescent suicide rates in each state

Methods

- Suicide statistics from each state were obtained from the CDC Web-based Inquiry Statistics Query and Reporting System Fatal Injury Report for the population of youth ages 10–24 years.

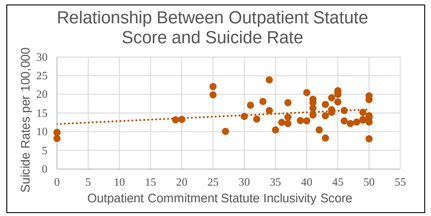
Methods (continued)

- Statutes for involuntary outpatient mental health commitment were scored for restrictive criteria on a 50-point scale based upon the presence/ absence of 9 criteria:

1.) Assisted Outpatient Treatment (AOT) explicitly authorized (5 points)
2.) Citizen access to court for AOT (5 points)
3.) Criteria sufficiently broad to provide actual access (10 points)
4.) Authorizes AOT directly from the community (5 points)
5.) Procedures are sufficiently detailed to guide practitioners (5 points)
6.) Procedures require the treatment plan to be shared with the court (5 points)
7.) Specifies procedures and consequences for nonadherence (5 points)
8.) Duration of initial order: 90 days- (2 points), >90 days- (5 points)
9.) Duration of continued order: 180 days- (2 points), >180 days- (5 points)

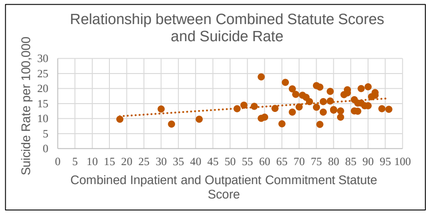
- Scores were compared to the suicide rates by state alone and in combination with the stringency of involuntary mental health admission statutes (also scored on a 50-point scale).
- Suicide rates per 100,000 youth per state were compared individually to the density of child and adolescent psychiatry (CAP) providers and to Native American populations per 100,000 people per state.
- Data was analyzed using a regression analysis for significance.

Results

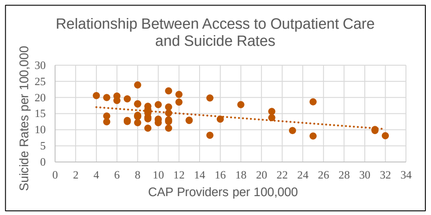


Outpatient commitment statute specificity accounted for only 6.7% of suicide when considered independently (p= 0.001). States with more inclusive and specific AOT statutes exhibit mildly lower suicide rates.

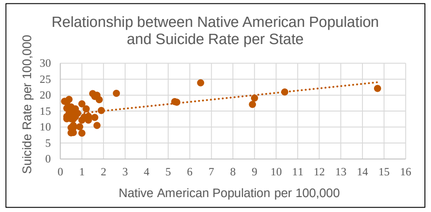
Results (continued)



When considered in concert, the inclusivity and specificity of outpatient commitment statutes and the stringency of inpatient admission statutes accounted for 11.8% of the variance in suicide rate per state (p<0.001). States with less restrictive involuntary commitment statutes and more inclusive and specific outpatient commitment statues are associated with lower suicide rates.



Access to an outpatient CAP provider was found to account for 19 % of the variation in suicide rate per state. Greater access to care is associated with decreased suicide rates (p<0.0001).



Native American population accounted for 30.7% of the variance in suicide rate per state (p= 0.003).

Conclusion

- The combined effect of legal statues for easy involuntary admission and inclusive outpatient commitment has only a marginally better protective effect against suicide. This raises a question as to the utility of our currently available crisis treatment modalities.
- One confounding variable is that only the highest acuity patients at the highest risk for suicide are engaged in emergency care services such as involuntary admission or outpatient commitment. These are also the patients with known psychiatric conditions, and 54% of people who complete suicide have no pre-existing psychiatric diagnoses.
- Limited impact of access to CAP providers could be due to the high number of undiagnosed patients at the time of completed suicide, to primary care providers treating patients in underserved areas, or to unique barriers that adolescents face in engaging with health care professionals.
- Unsurprisingly, the Native American population per state has a significant negative impact on the suicide rate. This duplicates data from previous studies and suggests that perhaps universal treatment strategies are less impactful than specifically targeting interventions to at-risk populations.
- This study primary investigated the impact of treatment interventions, and each independently provide only marginal protection against suicide. It may be more useful to target more resources toward identification of higher risk populations for selective or indicated interventions.

References

- Centers for Disease Control and Prevention, National Center for Injury and Prevention and Control, Web- based inquiry Statistics Query and Reporting System (WISQARS) [online], [cited February 2017]. Retrieved from www.cdc.gov/ncipc/wisqars
- Centers for Disease Control and Prevention. (2016). Youth risk behavior surveillance system (YRBSS). Retrieved from http://www.cdc.gov/healthyyouth/data/yrbs/index.htm
- Sullivan, E. M., Annest, J. L., Simon, T.R., et al. Suicide Trends Among Persons Aged 10- 24 Years- United States 1994- 2012. Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (MMWR) March 5, 2015; 64- 1-5.
- Shain, Benjamin N., Suicide and Suicide Attempts in Adolescents. Pediatrics 2007; 120; 669.
- Treatment Advocacy Center [online]. Retrieved from treatmentadvocacycenter.org