

INTRODUCTION

- Early prevention efforts for SUD have focused on urban populations, leaving rural communities with scarce resources.¹ At the time of the study, 64 of 66 SD counties were designated rural (97%).²
- Public stigma of SUD impedes access and utilization of treatment and support services for SUDs and is associated with greater public support of punitive policies.^{3,4}
- The brain disease model of SUD relies on advances in neurobiology to understand SUD as a chronic relapsing disorder of the brain. This model is shown to be less stigmatizing.^{5,6}
- In a novel study in 2021, Lanzillotta-Rangeley et al. showed that respondents who believed that SUD was a disease (48.5%) were more likely to support evidence-based treatment practices, show less stigma, and support harm reduction services.⁷

OBJECTIVES

The aim of this study was to:

- Conduct a survey in South Dakota using an adapted version of the survey developed by Lanzillotta-Rangeley et al.
- Compare data from the 2021 study conducted in rural Ohio with results in South Dakota

RESULTS

- Those residing in South Dakota were significantly more likely to agree that addiction is an illness like diabetes and heart disease (84.8%), compared to those from Ohio (48.5%).⁷
- South Dakota respondents had a significantly higher rate of non-stigmatizing responses across nine of the 19 survey questions, and trended toward significantly more likely on Q14, compared to Ohio respondents.
- Overall, respondents from South Dakota had a higher rate of non-stigmatizing responses compared to Ohio across all four categories.

Figure 1. SD vs. OH Statistically significant responses

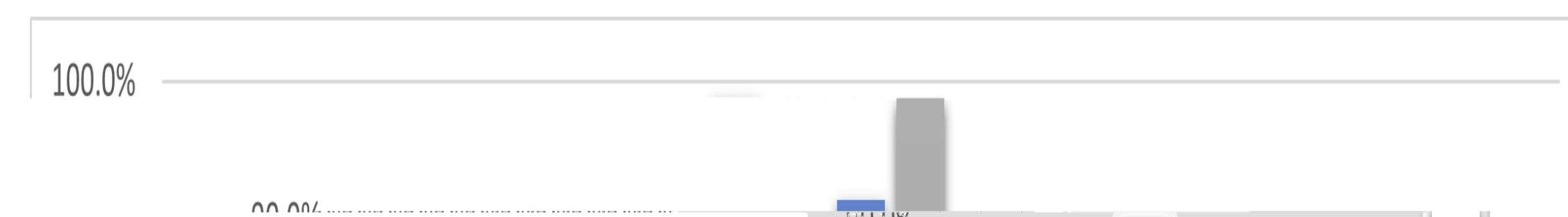


Table 1: Results of Cross-Tabulation of Key Indicators, Ohio (2019) and South Dakota (2022)

Survey Questions	Indicated Response	Location		p-value
		South Dakota	Ohio ¹⁰	
* Indicates statistically significant results				
Knowledge: Disease Related				
Q1) Addiction is an illness like diabetes and heart disease.	Agree	84.8%	48.5%	<0.001*
Q2) Anyone can become addicted to pain medications.	Agree	94.6%	90.1%	0.385
Q3) If a person is addicted to drugs, they can stop using if they really want to.	Disagree	56.3%	38.4%	0.059
Knowledge: Evidence -based Treatment Related				
Q4) Abstinence based therapy is the only successful form of treatment for substance use disorders.	Disagree	90.0%	65.7%	0.009*
Q5) Individuals who receive rehab or treatment will just use or overdose again.	Disagree	89.7%	75.7%	0.096
Public Stigma Questions				
Q6) I would willingly live in the same neighborhood as an individual with a substance use disorder.	Agree	78.6%	47.0%	0.002*
Q7) Substance use disorders only affect individuals with low incomes.	Disagree	91.4%	98.8%	0.035*
Q8) I can easily spot an individual in my community with a substance use disorder.	Disagree	81.8%	73.3%	0.300
Q9) I would be embarrassed to tell people that someone close to me has a				

IMPLICATIONS

- Higher belief in the brain disease model aligned with reduction in other stigmatizing beliefs and increased support for evidence-based practices and harm reduction services.
- The correlation between belief in the brain disease model of SUD and reduced public stigma aligns with findings from other studies.⁷⁻⁹
- Factors that may have contributed to differences in responses include place and the time difference between studies.
- Overall, public health and anti-stigma work should focus on increasing the understanding of the brain disease model for SUD as it leads to associated supportive beliefs and reduced stigma.
- Results will be used to implement an anti-stigma campaign in five target SD counties.

REFERENCES

1. Monnat S, Rigg K. The Opioid Crisis in Rural and Small Town America [Internet]. Carsey School of Public Health: University of New Hampshire; 2018 [cited 2022 Aug 30]. Report No.: 343. Available from: <https://scholars.unh.edu/carsey/343>
2. Health Resources and Services Administration: Maternal & Child Health. III.B. Overview of the State - South Dakota - 2021 [Internet]. U.S. Department of Health and Human Services; Available from: <https://mchb.tvisdata.hrsa.gov/Narratives/Overview/9bff16ac-d4aa-4bff-a6d8-6739f77b5426#:~:text=SD%20is%20home%20to%20diverse,mile>
3. Burgess A, Bauer E, Gallagher S, Karstens B, Lavoie L, Ahrens K, et al. Experiences of stigma among individuals in recovery from opioid use disorder in a rural setting: A qualitative analysis. J Subst Abuse Treat. 2021 Nov 1;130:108488.