Sexual Orientation and Gender Identity Data Collection at U.S. Health Centers: Impact of City-level Structural Stigma

Anthony N. Almazan, BA,[1,2] Dana King, ALM,[3] Chris Grasso, MPH,[3] Sean Cahill, PhD,[3] Micah Lattanner,[4] PhD, Mark L. Hatzenbuehler, PhD,[4] Alex S. Keuroghlian, MD, MPH[1,3,5]

[1]Harvard Medical School
[2]Harvard T.H. Chan School of Public Health
[3]The Fenway Institute
[4]Department of Psychology, Harvard University
[3]Department of Psychiatry, Massachusetts General Hospital

Background

- Collection of patient sexual orientation and gender identity (SOGI) data is essential for improving health care access, quality, and outcomes for sexual and gender minority (SGM) populations.
- Federally qualified health centers (FQHCs) provide comprehensive primary care for more than 28 million patients in medically underserved areas.
- Anti-SGM stigma has been hypothesized to be a key driver of limited SOGI data collection.
- Studies on the public health implications of stigma have increasingly focused on structural stigma, defined as societal conditions, cultural norms, and institutional policies that adversely affect stigmatized populations.

Objective

We conducted the first investigation of associations between structural stigma and patient demographic data collection. We used an existing structural stigma index to examine the relationship between completeness of SOGI data collection at FQHCs and structural stigma related to SOGI.

Methods

- The primary predictors were structural stigma scores. We obtained our structural stigma index from the Human Rights Campaign's 2018 Municipal Equality Index (HRC-MEI), which scores SGM inclusivity for 506 US cities, including the 50 state capitals, 200 most populated cities, 5 most populated cities in each state, cities that are home to each state's 2 largest public universities, 75 cities with the highest proportions of same-sex couples, and 98 additional cities selected for inclusion by HRC and affiliates.
- The HRC-MEI measures SGM inclusivity across 5 domains in US cities: nondiscrimination laws (SGM protections in employment and housing), municipality as employer (policies on SGM city employees), municipal services (inclusiveness of city services), law enforcement (SGM police task forces), and leadership on SGM equality (SGM-affirming public statements and legislation introduced by city leadership). When possible, the HRC-MEI provides separate scores for performance on each item as it relates to SO and GI.
- For each city, we generated 5 structural stigma scores (1 for each HRC-MEI domain) by calculating z scores for each city's performance relative to all cities in the index. We calculated separate domain scores for SO and GI. Higher scores represent greater SGM inclusiveness and thus less anti-SGM structural stigma.

Table: Associations Between City-level Structural Stigma Scores and the Percentage of Patients with Complete Sexual Orientation and Gender Identity Data Collection at Federally Qualified Health Centers (FQHCs)

	Quartile 1, % Range, No., or Mean (SD)	Quartile 2, % Range, No., or Mean (SD)	Quartile 3, % Range, No., or Mean (SD)	Quartile 4, % Range, No., or Mean (SD)	Multivariable Model for Higher Quartile of Data Completeness, AOR (95% CI)
Sexual orientation					
Range	0.0–37.1	37.2–69.5	69.5–92.6	92.6–100.0	
Sample size	112	120	111	104	
Structural stigma domain					
Nondiscrimination laws	0.4 (1.0)	0.6 (1.0)	0.7 (1.0)	0.8 (1.0)	1.6 (1.2, 2.1)[a]
Municipality as employer	0.6 (0.8)	0.6 (0.8)	0.5 (0.8)	0.6 (0.7)	0.9 (0.7, 1.2)
Municipal services	0.6 (0.9)	0.8 (0.9)	0.8 (0.9)	0.7 (0.9)	0.9 (0.7, 1.2)
Law enforcement	0.6 (0.9)	0.7 (0.9)	0.8 (0.7)	0.8 (0.8)	1.4 (1.0, 2.0)
Leadership on SGM equality	0.7 (0.9)	0.7 (0.8)	0.6 (0.9)	0.7 (0.9)	0.7 (0.5, 1.0)
Gender identity					
Range	0.0–55.3	55.4–90.8	90.9–99.8	99.9–100.0	
Sample size	113	117	104	113	
Structural stigma domain					
Nondiscrimination laws	0.4 (1.1)	0.3 (1.1)	0.7 (1.1)	0.8 (1.1)	1.7 (1.3, 2.2)[a]
Municipality as employer	0.7 (0.9)	0.6 (1.0)	0.8 (0.9)	0.7 (1.0)	0.7 (0.5, 1.0)
Municipal services	0.7 (1.0)	0.8 (1.0)	0.9 (1.0)	0.7 (1.0)	1.0 (0.7, 1.4)
Law enforcement	0.7 (0.8)	0.5 (1.0)	0.8 (0.7)	0.7 (0.8)	1.1 (0.8, 1.5)
Leadership on SGM equality	0.7 (0.9)	0.6 (0.9)	0.8 (0.8)	0.7 (0.9)	0.9 (0.6, 1.4)

Note. AOR = adjusted odds ratio; CI = confidence interval; SGM = sexual and gender minority. All models were adjusted for FQHC size and the percentage of patients at each FQHC who were younger than 18 years, identified as racial/ethnic minorities, were uninsured, and had incomes at or below the federal poverty level.

[a]Significant based on Bonferroni correction for 10 tests.

Methods (Continued)

- The primary outcome was SOGI data completeness, operationalized as the percentage of patients without missing SOGI data at each FQHC. Incomplete data included patients who either declined to answer SOGI questions or were not asked these questions. We obtained FQHC data from the Bureau of Primary Health Care's 2018 Uniform Data System (UDS), an annual data set on FQHC patient demographics and service utilization. The 2018 UDS included data from 1362 FQHCs.
- We restricted our analysis of the 2018 UDS data to the 447 FQHCs that could be matched by address to 1 of the cities represented in our structural stigma index. FQHCs in 49 states were represented. City-level structural stigma scores for Hawaii and the District of Columbia were not included in the HRC-MEI.
- Two multinomial generalized linear mixed models, 1 each for SO and GI data completeness, tested associations between structural stigma scores and percentages of patients with SO and GI, with cities as a random intercept. Each model included all 5 structural stigma domain scores and was adjusted for FQHC patient population size (<10 000, 10 000–19 999, 20 000–29 999, 30 000–49 999, $50 000), percentages of patients who were younger than 18 years, were racial/ethnic minorities, were uninsured, or had income at or below the federal poverty level (based on the US Department of Health and Human Services 2018 federal poverty guidelines). We performed Bonferroni correction for 10 tests, with a significance threshold of P of less than .005.

Results

- The median percentage of patients with complete GI data was 90.0% (interquartile range [IQR]544.9%) compared with 67.3% (IQR555.3%) for complete SO data.
- In the final multivariable models, nondiscrimination laws were significantly associated with SO and GI data completeness. The odds of an FQHC being in a higher quartile of data completeness increased with each 1-point increase in structural stigma z score for nondiscrimination laws. This was true for both SO nondiscrimination laws (adjusted odds ratio [AOR]51.6; 95% confidence interval [CI]51.2, 2.1) and GI nondiscrimination laws (AOR51.7; 95% CI51.3, 2.2).

Conclusion

- This is the first study to demonstrate an empirical relationship between structural stigma and patient data collection. FQHCs in cities with more protective SGM nondiscrimination laws reported more complete SOGI patient data than did FQHCs in cities with less protective nondiscrimination laws. These findings support the hypothesis that anti-SGM stigma is associated with limited SOGI data collection.
- Notably, the only structural stigma domain significantly associated with SOGI data collection was nondiscrimination laws. There were no statistically significant associations between SOGI data completeness and the 4 other structural stigma domains. These findings suggest that enforceable SGM-inclusive laws are more strongly associated with stigma alleviation and SOGI data collection than are the other structural stigma domains, which were largely composed of voluntary practices and symbolic representations of SGM inclusivity.
- These findings also underscore the importance of municipal SGM nondiscrimination laws and affirming social environments, which may mutually reinforce one another, foster robust SOGI data collection, and promote SGM health equity.

References

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