



NATIONAL LGBT HEALTH
EDUCATION CENTER

A PROGRAM OF THE FENWAY INSTITUTE



NATIONAL CENTER FOR
INNOVATION IN HIV CARE



Structural Stigma and the Health of Lesbian, Gay, and Bisexual Populations

.....

Mark L. Hatzenbuehler, PhD

Associate Professor of Sociomedical Sciences

Co-Director, Center for the Study of Social Inequalities and Health

Columbia University Mailman School of Public Health

Continuing Medical Education Disclosure

- Program Faculty: Mark L. Hatzenbuehler, PhD
- Current Position: Associate Professor, Sociomedical Sciences, Co-Director, Center for the Study of Social Inequalities and Health, Columbia University
- Disclosure: No relevant financial relationships. Presentation does not include discussion of off-label products.

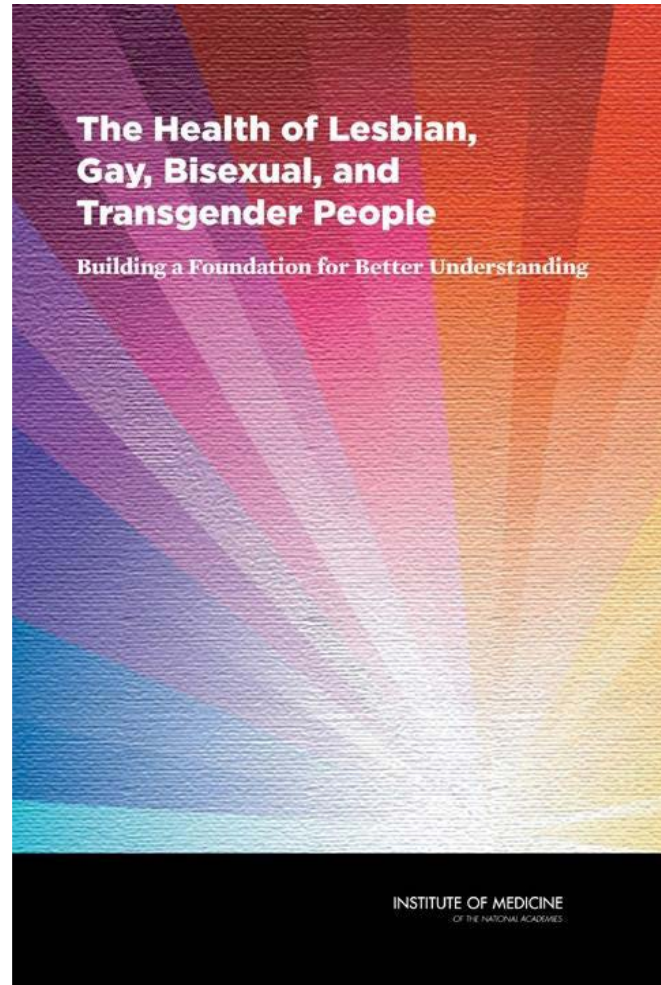
It is the policy of The National LGBT Health Education Center, Fenway Health that all CME planning committee/faculty/authors/editors/staff disclose relationships with commercial entities upon nomination/invitation of participation. Disclosure documents are reviewed for potential conflicts of interest and, if identified, they are resolved prior to confirmation of participation. Only participants who have no conflict of interest or who agree to an identified resolution process prior to their participation were involved in this CME activity.

Learning Objectives

By the end of this session, learners will be able to:

1. Define structural stigma and distinguish it from other forms of stigma
2. Describe the role of structural stigma as a determinant of LGB health and health disparities.
3. Discuss ways to integrate research on individual and structural forms of stigma into clinical settings to improve the health outcomes and access to care for LGB patients.

Sexual Orientation Health Disparities



**The Health of Lesbian,
Gay, Bisexual, and
Transgender People**

Building a Foundation for Better Understanding

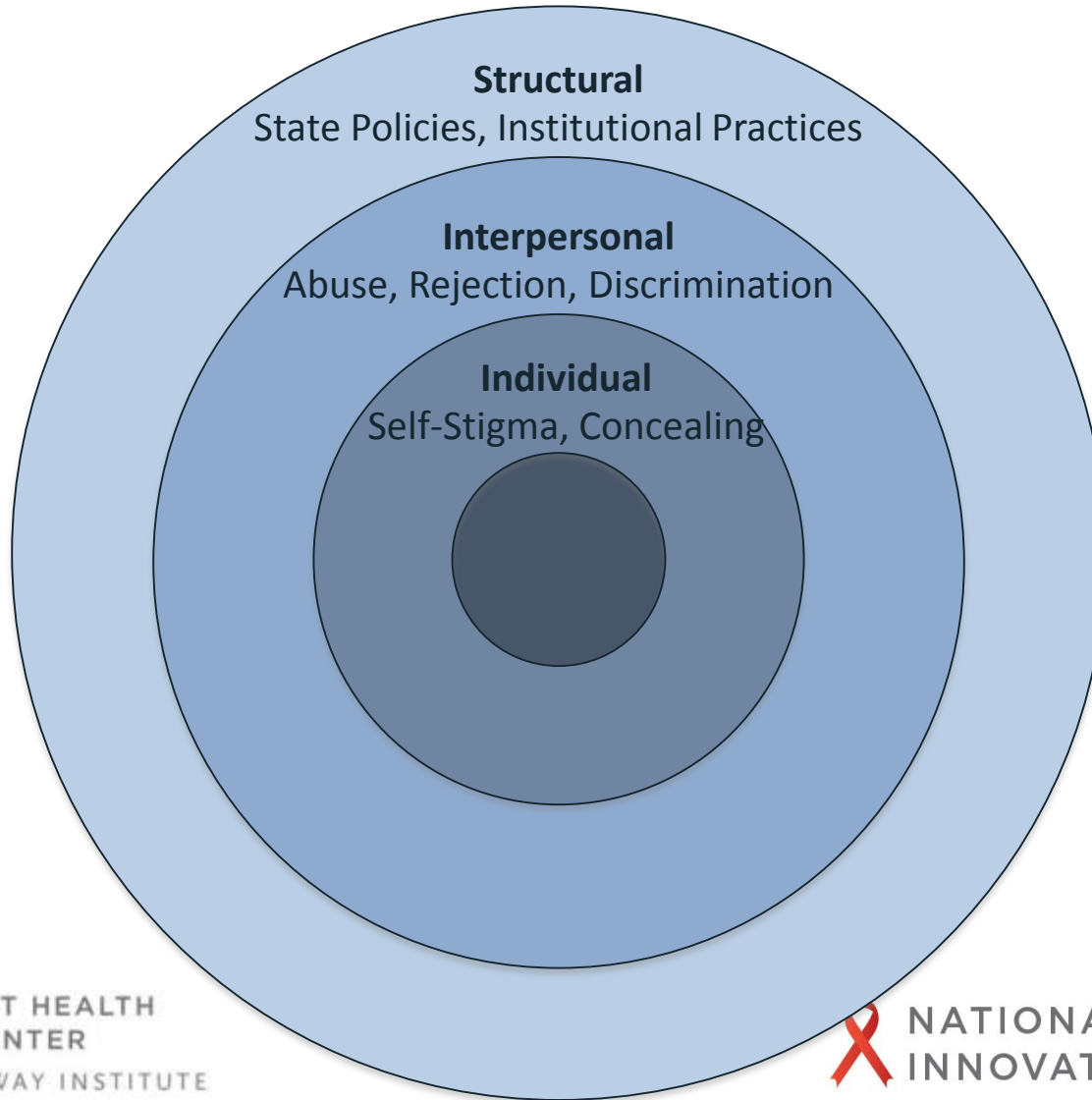
INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

What is Stigma?

(Link & Phelan, 2001, “Conceptualizing Stigma”)

- Stigma involves the co-occurrence of several overlapping components, including:
 - Distinguishing and labeling group differences
 - Associating differences with negative attributes (i.e., stereotyping)
 - Separating “us” from “them”
 - Status loss and discrimination
 - In a context of power

Stigma: A Multi-Level Construct



“Societal-level conditions, cultural norms, and institutional policies and practices that constrain the opportunities, resources, and wellbeing of the stigmatized” (Hatzenbuehler & Link, 2014, p. 1).

“The under-representation of [structural stigma] is a dramatic shortcoming in the literature on stigma, as the processes involved are likely major contributors to unequal outcomes” (Link et al., 2004, p. 515).

Multi-measure, multi-method approach to studying structural stigma and LGB health

- Measures of structural stigma:
 - Social policies (e.g., same-sex marriage laws)
 - Social attitudes
 - Social behaviors (e.g., LGBT assault hate crimes)
- Methods:
 - Observational designs (cross-sectional, longitudinal)
 - Quasi-experimental designs
 - Laboratory designs

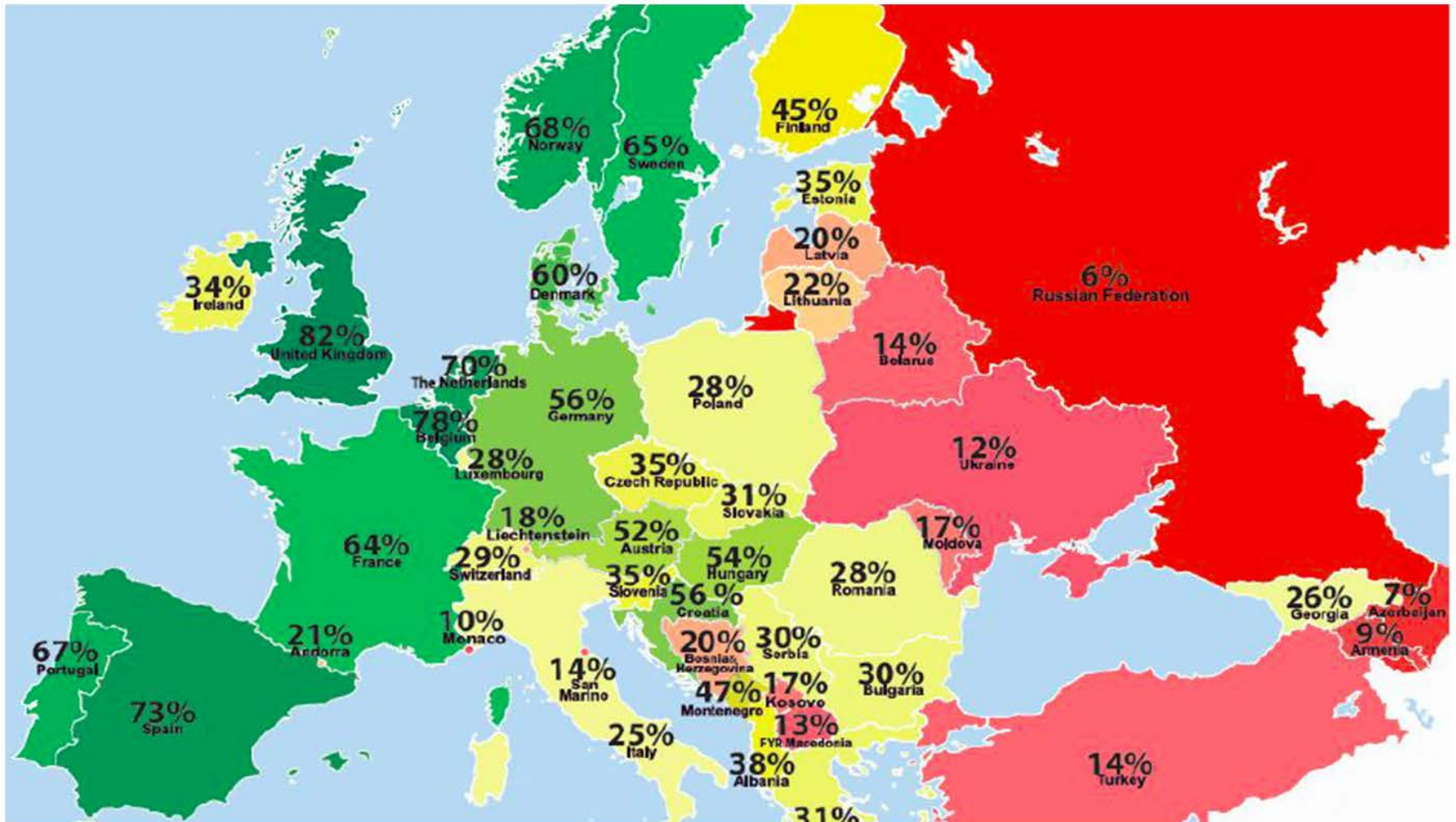
Approach #1: Cross-Sectional, Country-Level

Are Health Problems Elevated among LGB Populations in High-Structural Stigma Countries?

Hidden from health: structural stigma, sexual orientation concealment, and HIV across 38 countries in the European MSM Internet Survey

AIDS 2015, **29**:1239–1246

Country-Level Structural Stigma



European Men Who Have Sex with Men Internet Survey (EMIS)

- Linked ecologic data on structural stigma at the country level (N=38 European countries) to individual-level HIV risk outcomes among MSM living in these countries (n=174,209 MSM)
- Concealment: “Thinking about all the people who know you (including family, friends and work or study colleagues), what proportion know that you are attracted to men?”
 - Response options: all or almost all; more than half; less than half; few; none
 - Participants reporting “few” or “none” were classified as high concealment

Structural Stigma Associated with HIV Risk Outcomes via Concealment

Outcomes	AOR (95% CI)	AOR (95% CI), controlling for concealment
Inadequate HIV prevention reach	1.43 (1.27-1.62) ^{***}	
Incorrect HIV transmission knowledge	1.16 (1.08-1.26) ^{***}	
No HIV test result (12 mo.)	1.14 (1.05-1.24) ^{**}	
No STI screen (12 mo.)	1.21 (1.07-1.36) ^{**}	
Condoms never/seldom used	1.30 (1.10-1.54) ^{**}	
No sex/MSM discussion when tested	1.52 (1.29-1.80) ^{***}	

Covariates: Age, relationship status, employment status, education, settlement size, HIV status, Gini index.

** $p \leq .01$, *** $p \leq .001$, + significant mediation via distribution-of-the-product method

Approach #1b: Cross-Sectional Are Health Problems Elevated among LGB Populations in High- Structural Stigma States?

State-Level Policies and Psychiatric Morbidity In Lesbian, Gay, and Bisexual Populations

| Mark L. Hatzenbuehler, MS, MPhil, Katherine M. Keyes, MPH, and Deborah S. Hasin, PhD

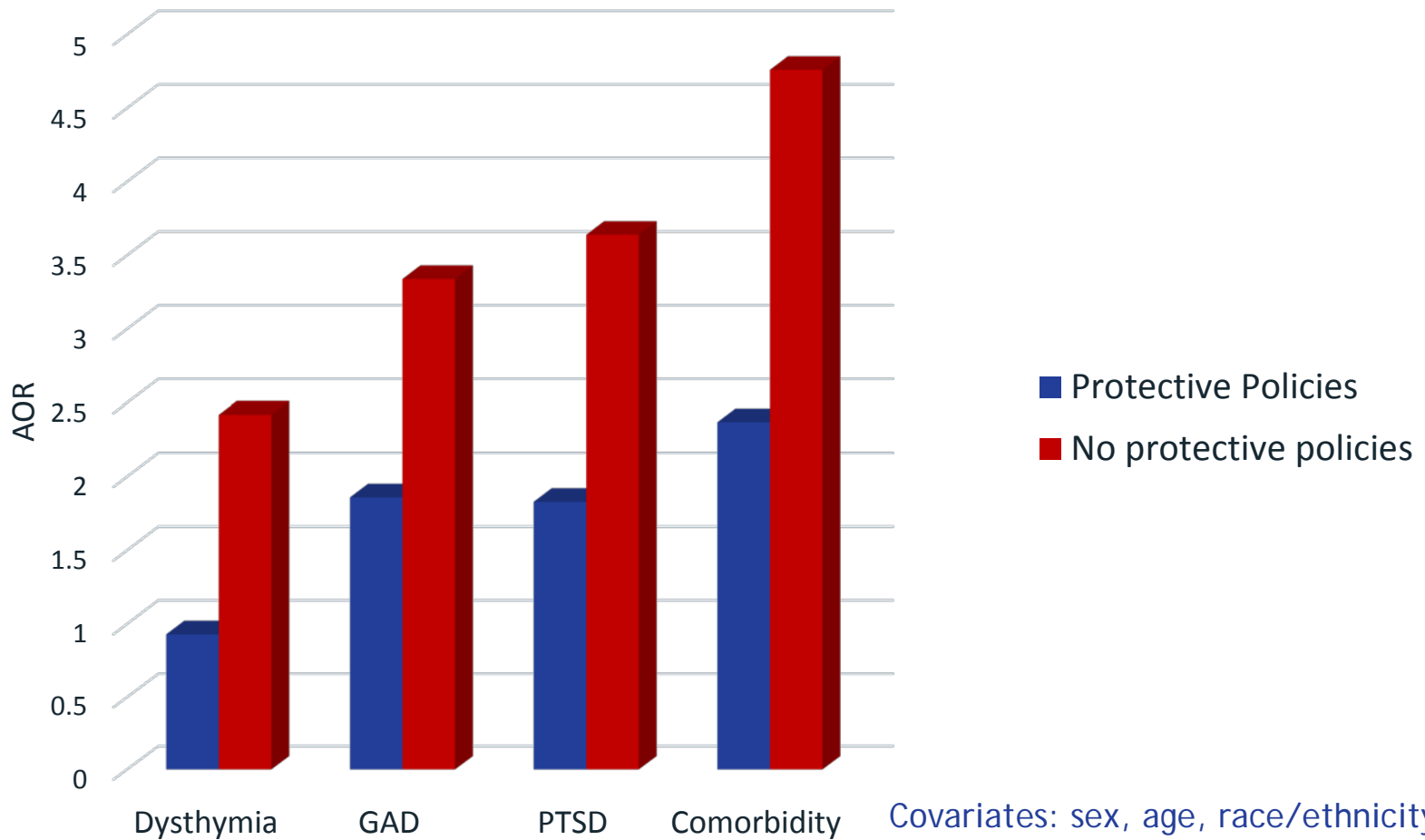
December 2009, Vol 99, No. 12 | American Journal of Public Health

National Epidemiologic Survey on Alcohol and Related Conditions (NESARC)



- Wave 2 (N=34,653)
- Household and group residents
- Face-to-face interviews
- Response rate: 81%
- Oversampling of Blacks, Hispanics, young adults (18-24 yrs)
- DSM-IV diagnoses
- Sexual orientation (1.67% LGB-identified [1.86% men, 1.52% women])

Sexual orientation disparity in psychiatric morbidity is higher in states with structural stigma



Approach #2: Longitudinal

Does Structural Stigma Prospectively Predict Health Problems among LGB Populations?



Contents lists available at SciVerse ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed



Structural stigma and all-cause mortality in sexual minority populations

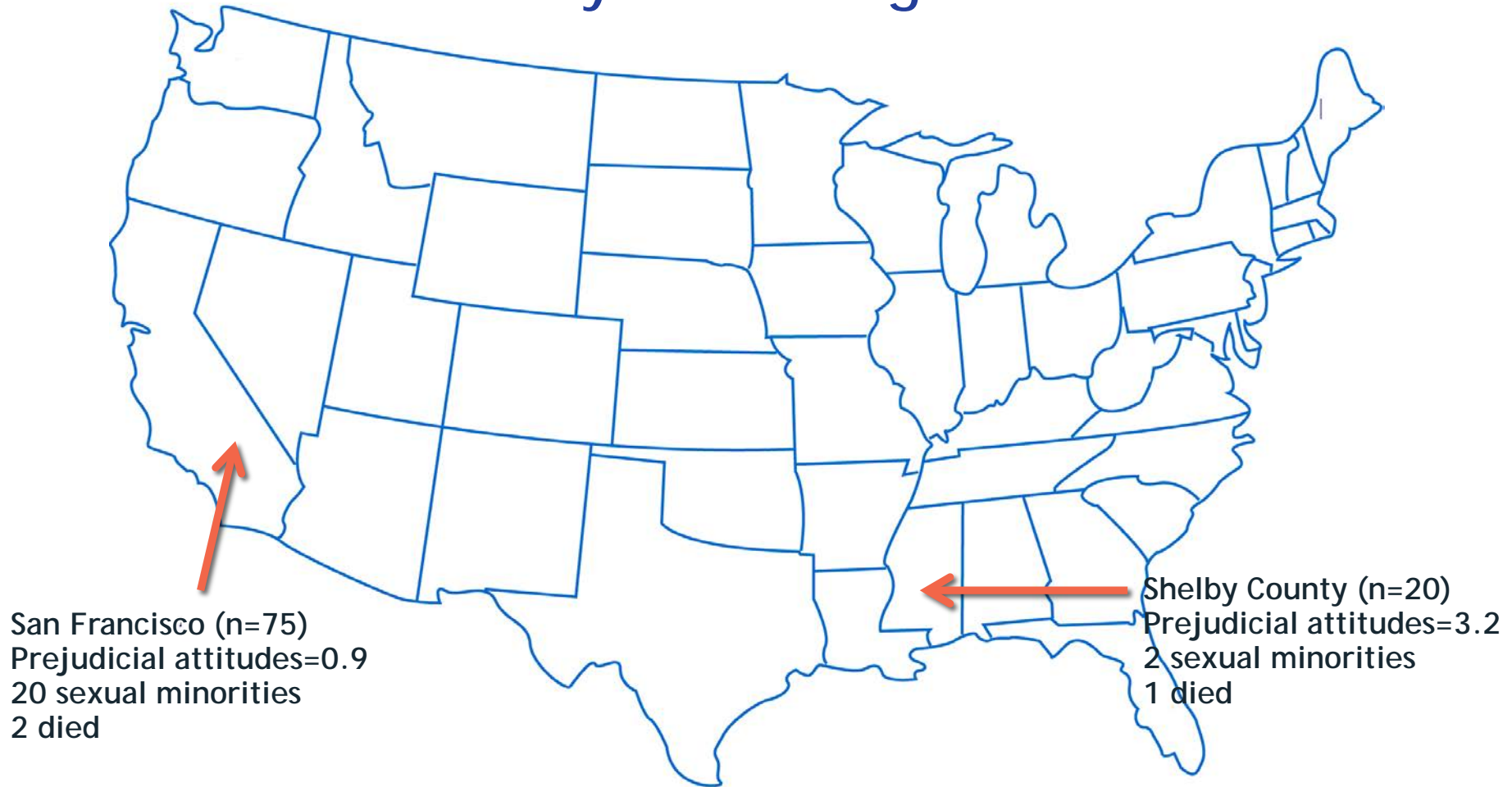
Mark L. Hatzenbuehler^{a,*}, Anna Bellatorre^b, Yeonjin Lee^c, Brian K. Finch^d, Peter Muennig^e, Kevin Fiscella^f

Data Sources:

General Social Survey/National Death Index

- General Social Survey (GSS)
 - Primary source of social indicator data for social sciences since 1972
 - Repeated cross-sectional surveys (N=53,043 from 1972-2008)
 - Representative sample of the US non-institutionalized population
 - Measure of sexual behavior (N=914 sexual minorities; 4.5%)
- National Death Index (NDI)
 - Participants from 18 waves of GSS are linked prospectively to mortality data by cause of death, obtained from National Death Index
 - Linkage approach well-validated (e.g., NHANES, NHIS)

General Social Survey/National Death Index: Community-Level (N=170 PSUs) Prejudicial Attitudes as a Predictor of Mortality Risk among Sexual Minorities



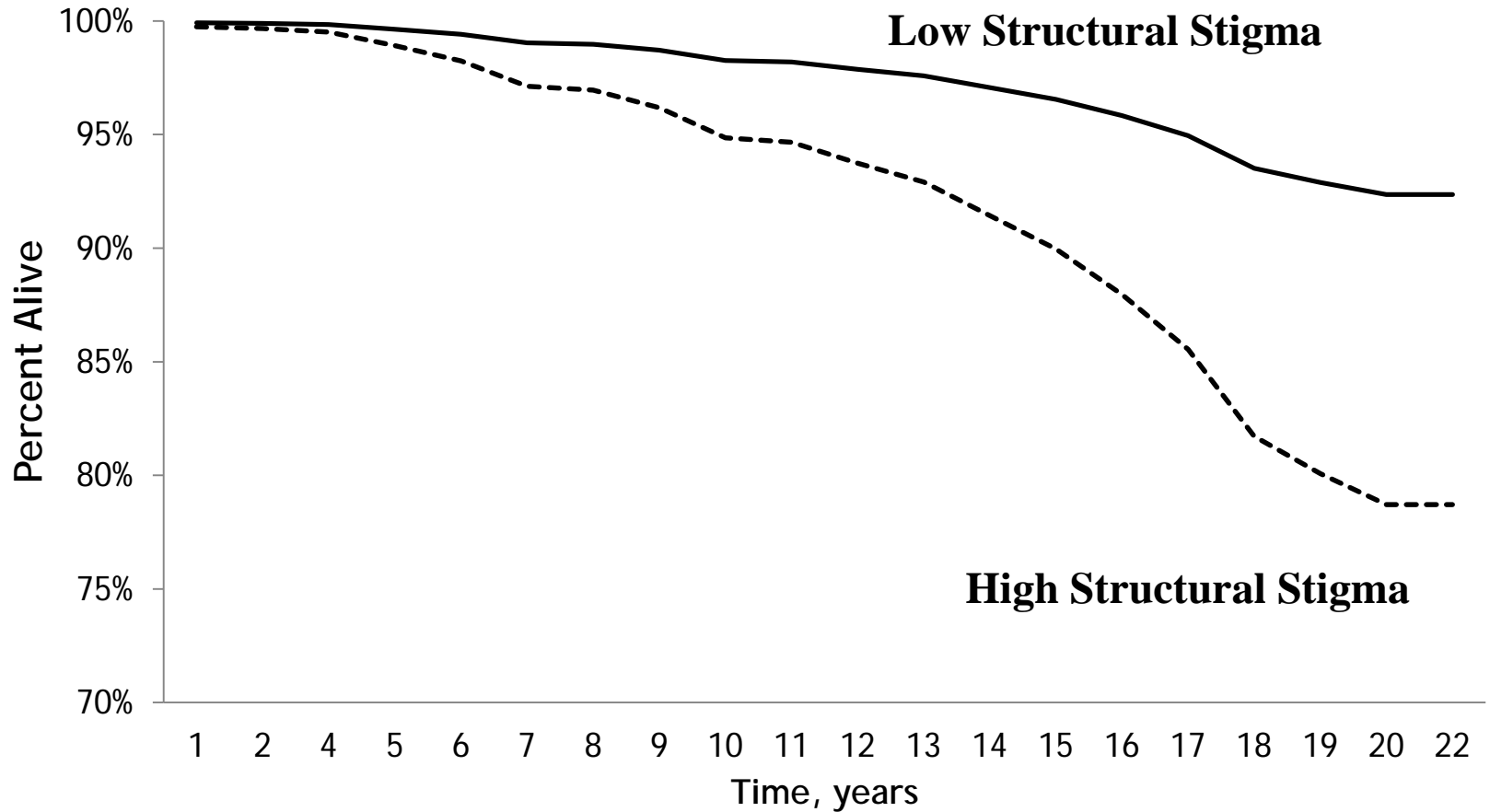
Structural Stigma Predicts Increased Mortality Risk Adjusting for Individual and Community-Level Risk Factors

Parameters	Hazard Ratio	95% Confidence Interval
Structural Stigma	3.03	(1.50, 6.13)**
Sex (Female)	0.59	(0.39, 0.88)**
Race/Ethnicity (Black)	2.87	(1.76, 4.67)***
Age at Interview	1.05	(1.04, 1.06)***
Years of Education	0.99	(0.93, 1.05)
Household Income	1.04	(0.86, 1.86)
Self-Rated Health (Poor/Fair)	1.04	(0.61, 1.19)
Community-Level Income	1.70	(0.56, 5.17)
Community-Level Education	0.86	(0.61, 1.19)

Life expectancy difference = 12 yrs. (range: 4-20)

** $p < 0.01$, *** $p < 0.001$

Survival Time by Community-Level Structural Stigma



Additional Results

- Descriptive analyses of specific causes of death by ICD-9 code:
 - Results were not due to HIV-related causes (only 5 deaths)
 - Suicide, homicide/violence, and cardiovascular diseases were substantially elevated among sexual minorities in high-structural stigma communities
 - Sexual minorities in high-stigma communities died by suicide at age 37.5 vs. 55.7 among those in low-stigma communities (18-year difference)
- Testing alternative explanations
 - Geographic mobility since age 16 is not associated with:
 - Self-rated health: $r=0.02$, $p=.16$
 - Mortality risk: $HR=1.17$ (95% CI: 0.76, 1.78)
 - Results are robust to selection effects regarding mobility

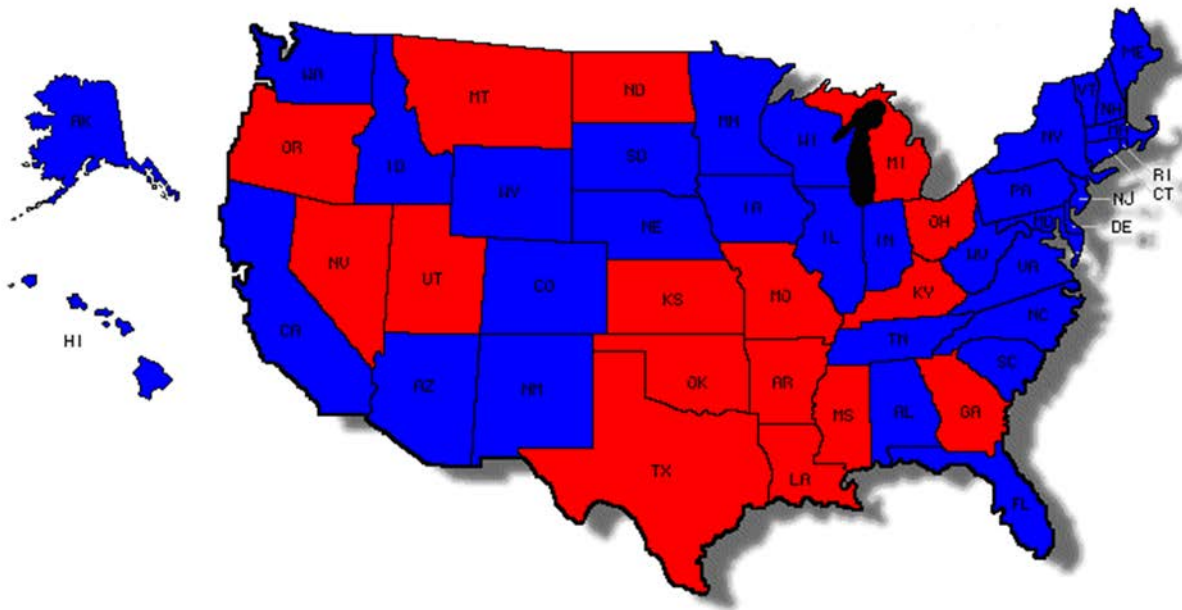
Approach #3a: Quasi-Experimental Do Health Problems among LGB Populations Increase Following Increases in Structural Stigma?

The Impact of Institutional Discrimination on Psychiatric Disorders in Lesbian, Gay, and Bisexual Populations: A Prospective Study

| Mark L. Hatzenbuehler, MS, MPhil, Katie A. McLaughlin, PhD, Katherine M. Keyes, MPH, and Deborah S. Hasin, PhD

American Journal of Public Health | March 2010, Vol 100, No. 3

Constitutional Amendments Banning Same-Sex Marriage (2004)

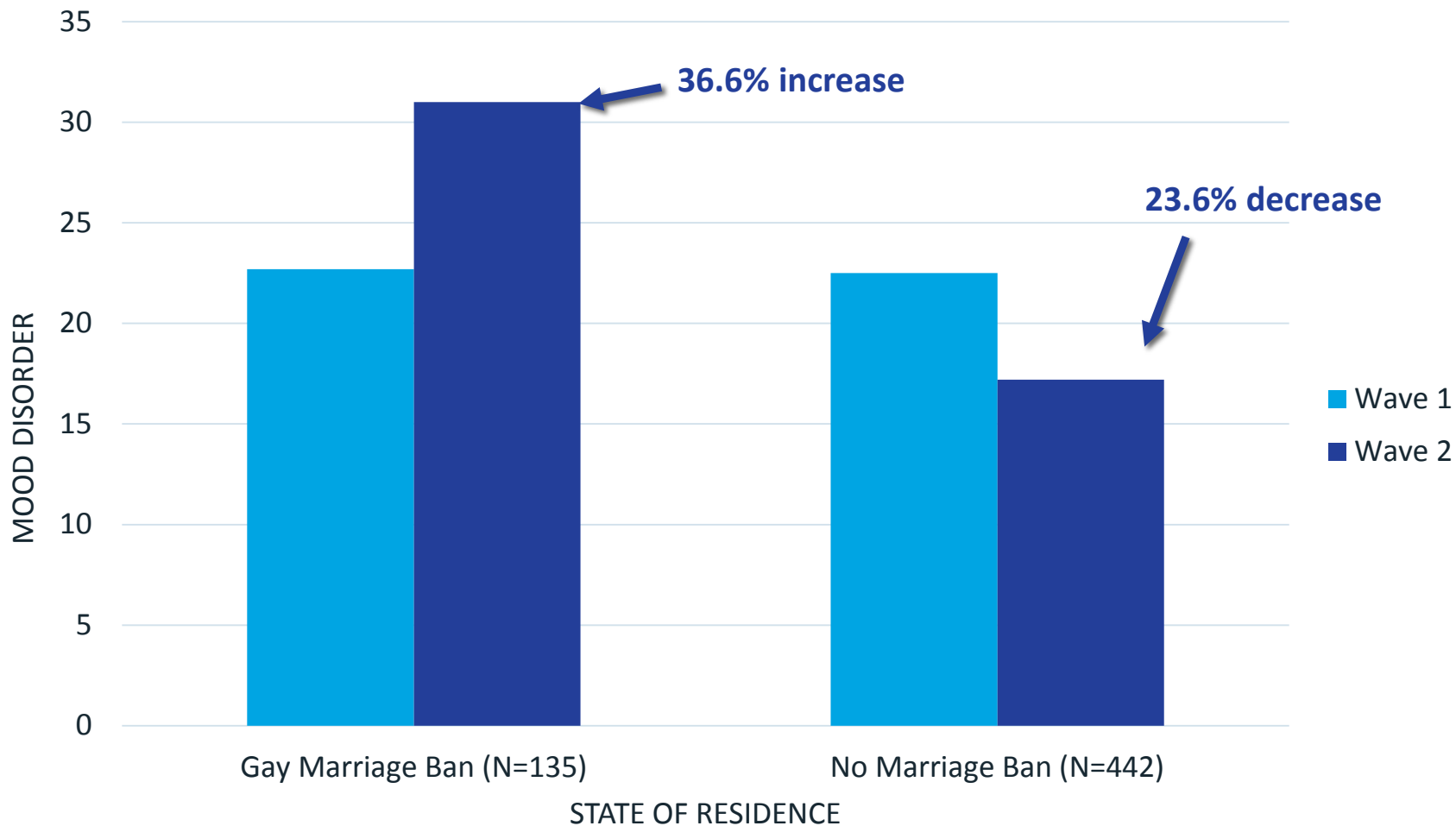


Red = States passing constitutional amendments

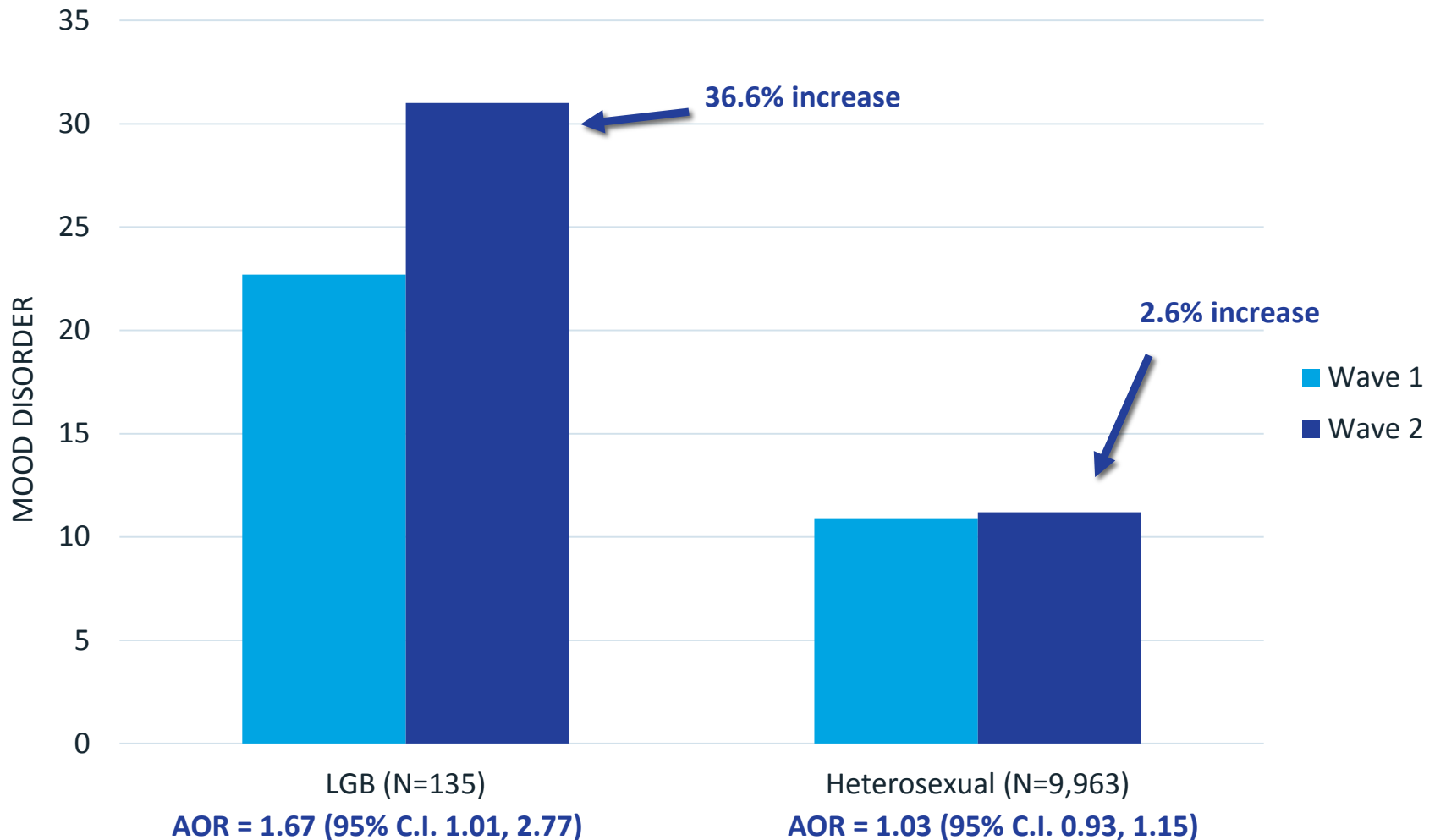
Blue = States not passing constitutional amendments

NESARC (2001-2005)

LGB Adults Living in States that Banned Same-Sex Marriage Experienced Increase in Mood Disorders



Effect of Marriage Bans Specific to LGB Adults



Covariates: sex, age, race/ethnicity, SES, marital status



NATIONAL CENTER FOR
INNOVATION IN HIV CARE



NATIONAL LGBT HEALTH
EDUCATION CENTER

A PROGRAM OF THE FENWAY INSTITUTE

Approach #3b: Quasi-Experimental Do Health Problems among LGB Adults Decrease Following Reductions in Structural Stigma?

Effect of Same-Sex Marriage Laws on Health Care Use and Expenditures in Sexual Minority Men: A Quasi-Natural Experiment

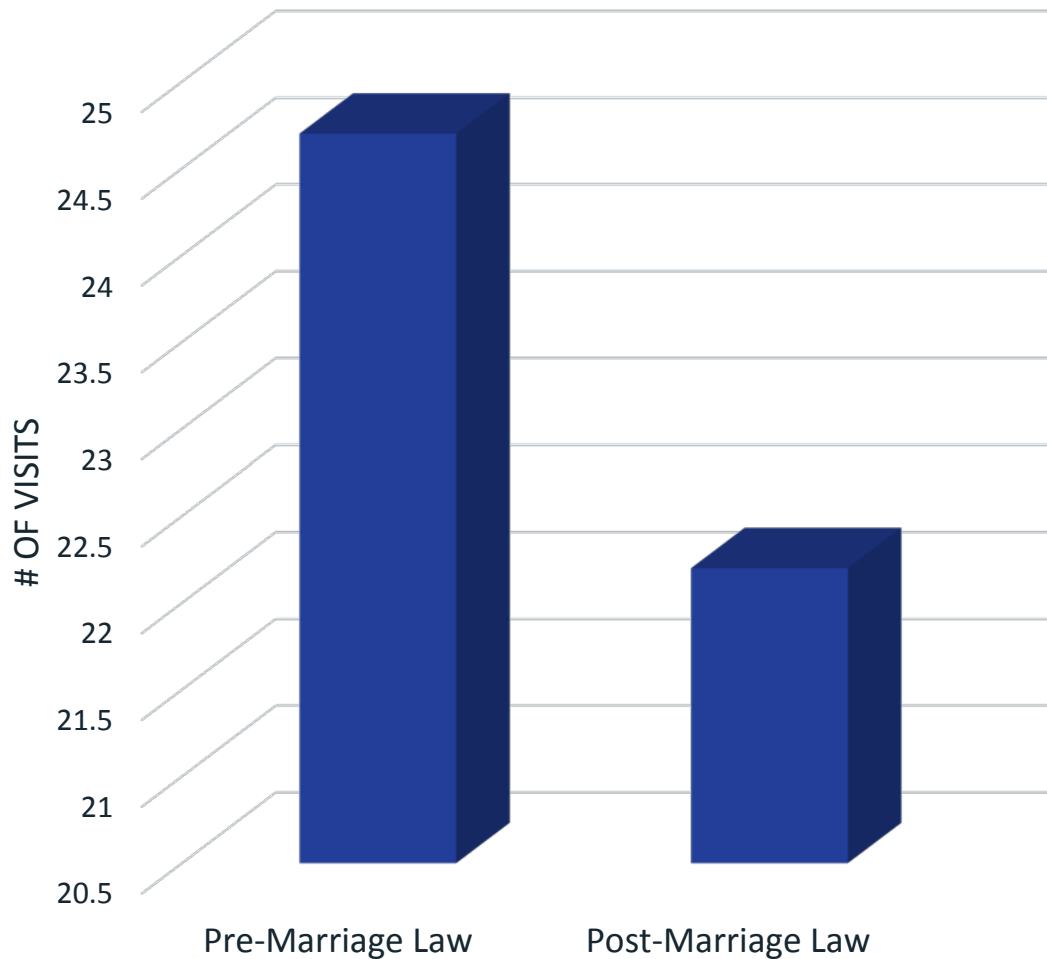
Mark L. Hatzenbuehler, PhD, Conall O'Cleirigh, PhD, Chris Grasso, MPH, Kenneth Mayer, MD, Steven Safren, PhD, and Judith Bradford, PhD

February 2012, Vol 102, No. 2 | American Journal of Public Health

Methods

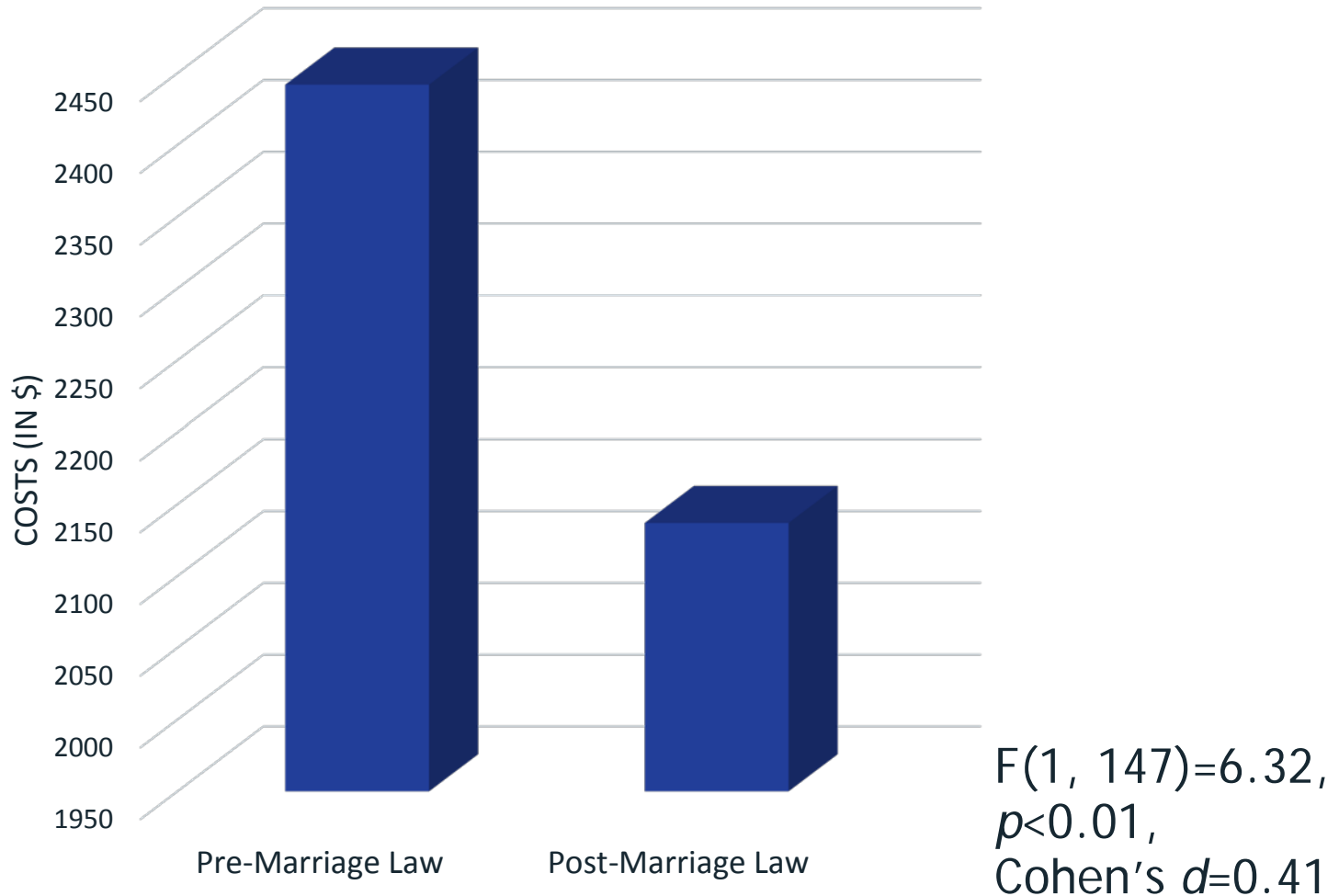
- In 2003, Massachusetts became the first state to legalize same-sex marriage (Goodridge vs. Department of Public Health)
- Community-based health clinic (N=1,211 gay and bisexual men)
- Extracted health information in outpatient billing records from 2002-2004
- Examined changes in medical and mental health care utilization and expenditures in the 12 months before and after same-sex marriage legalized

Reduction in Mental Health Care Utilization in the 12 Months Following Same-Sex Marriage



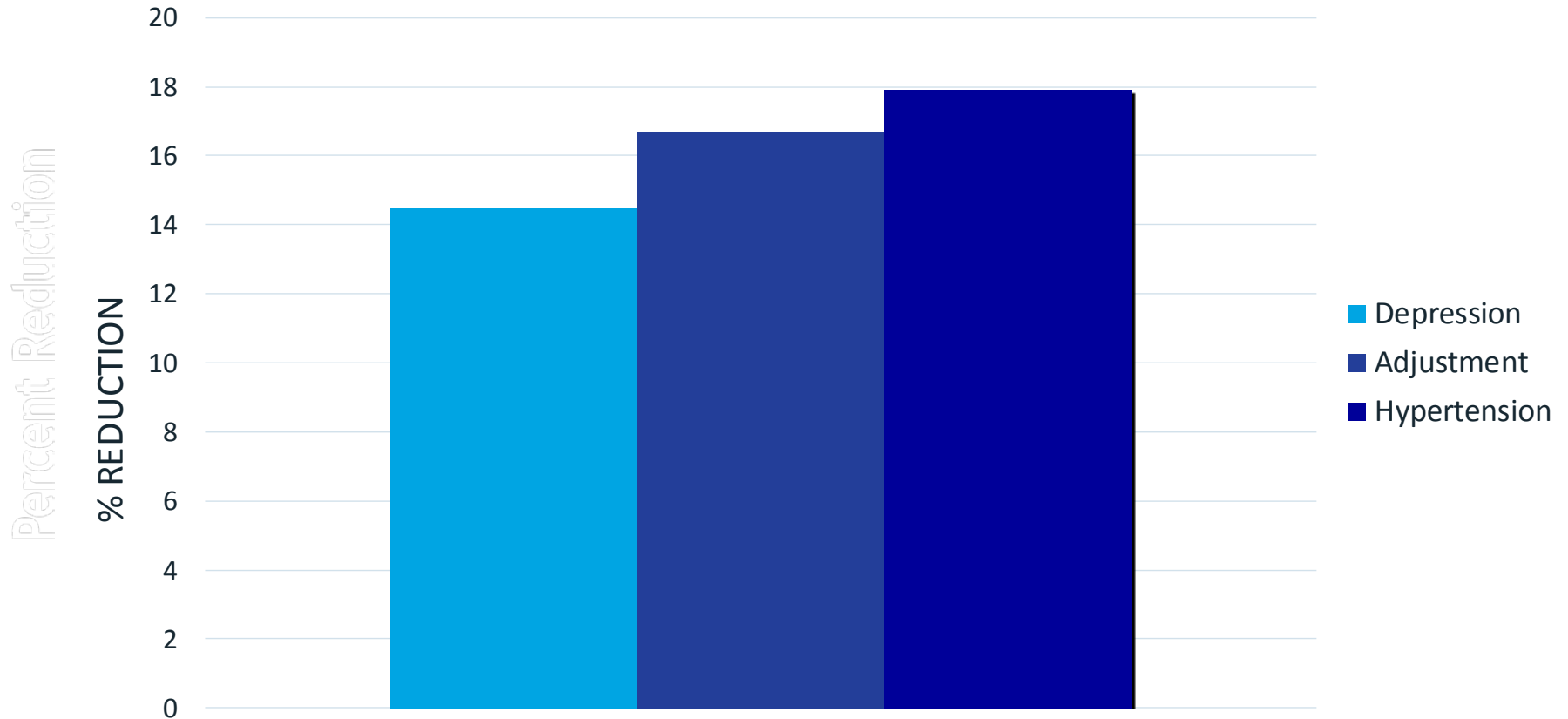
$F(1, 147)=4.60,$
 $p=0.03,$
Cohen's $d=0.35$

Reduction in Mental Health Care Costs in the 12 Months Following Same-Sex Marriage



Reduction in Health Problems in 12 Months Following Same-Sex Marriage

(by International Classification of Diseases-9 codes)



Addressing Alternative Explanations: Health Care in Massachusetts (2002-2004)

- Instituted comprehensive health care reform law
 - But this occurred in 2006, well outside the study period
- Trends in health care costs among Massachusetts residents increased during study period (CMS, 2007)
 - But we find evidence for decreased expenditures
- Cuts to MassHealth insurance program (disabilities, poverty) in 2004
 - But only 3% of our sample had MassHealth; removing them doesn't change direction or magnitude of the results

Approach #4: Laboratory paradigms to test mechanisms

Does Structural Stigma Alter HPA Axis Functioning?

Structural Stigma and Hypothalamic–Pituitary–Adrenocortical Axis Reactivity in Lesbian, Gay, and Bisexual Young Adults

Mark L. Hatzenbuehler, Ph.D. • Katie A. McLaughlin, Ph.D.

ann. behav. med. (2014) 47:39–47

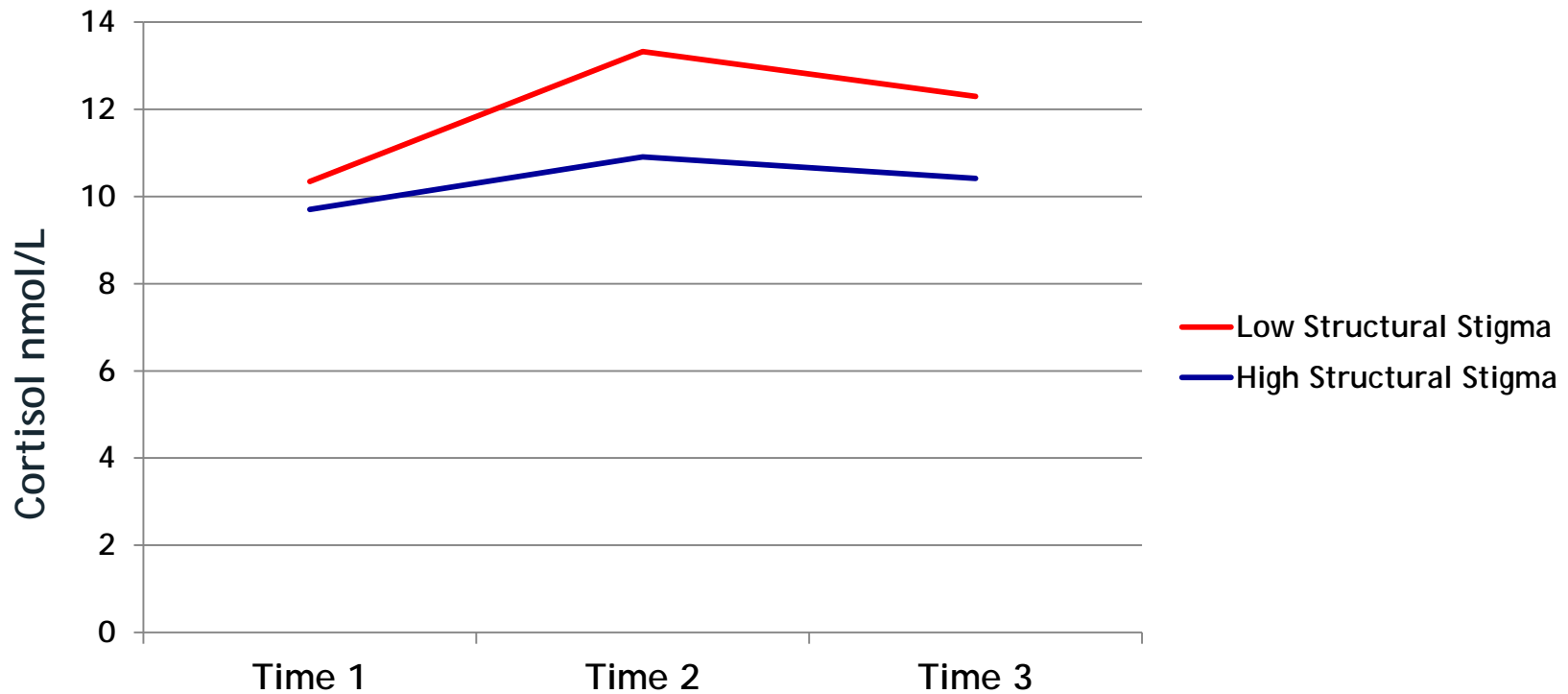
Participants

- 74 LGB young adults from 24 states
- Age: M=23.68, SD=4.12
- 54% female
- 57% lesbian/gay
- 60% non-White
- Told purpose of study was to “understand connections between daily experiences, your bodily activity, and health”

Methods

- Procedure:
 - Trier Social Stress Test (Kirschbaum et al., 1993)
 - 5-minute speech (identity-relevant topic) in front of 2 evaluators (confederates), followed by 5-minute math task
 - Collect neuroendocrine samples (cortisol) before, during, and after speech and math tasks

Structural stigma associated with blunted cortisol reactivity to Trier Social Stress Test



Cortisol Area Under Curve (AUC) for low structural stigma: adjusted $M=124.68$

Cortisol AUC for high structural stigma: adjusted $M=62.68$

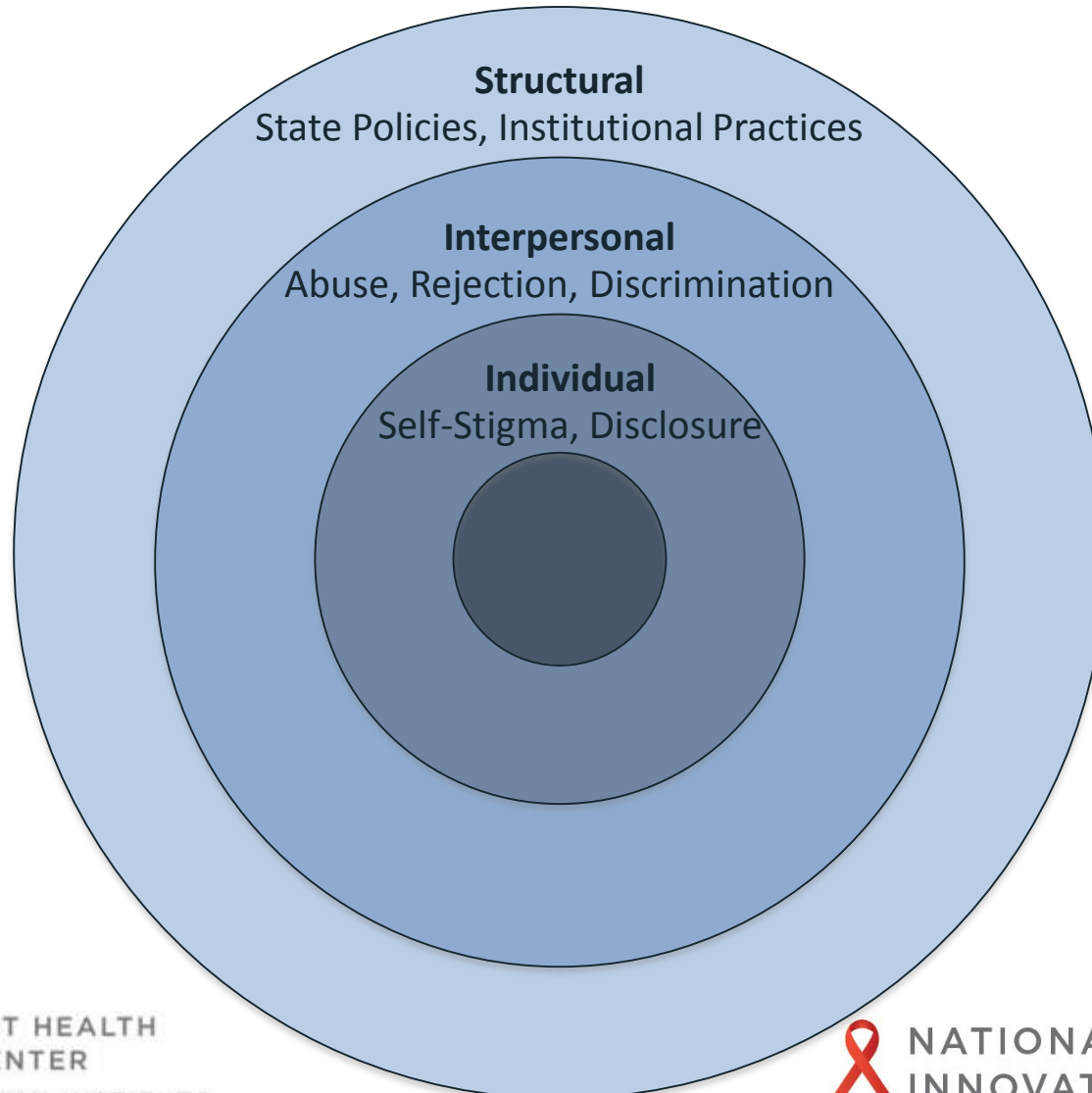
Structural stigma associated with HPA axis reactivity independent of perceived stigma

Parameters	F-statistic	P-value
Structural Stigma	4.45	0.039
Sex	7.83	0.007
Age	2.01	0.161
Waking Time	4.46	0.039
Smoking	0.96	0.331
Exercise	1.12	0.294
Race	0.66	0.418
Caffeine Use	0.02	0.882
Individual-Level Stigma	3.39	0.071

Interpretations

- Blunted cortisol response also observed in:
 - Youths exposed to extreme life stressors (e.g., childhood maltreatment; Carpenter et al., 2007)
 - Individuals with PTSD and other forms of severe trauma (e.g., Yehuda et al., 2000)
 - Females who were randomly assigned to an ostracism condition (Zwolinski, 2012)
- The stress of growing up in high-stigma environments may exert biological effects that are similar to other chronic life stressors

Conclusion: Structural Stigma as a Risk Indicator for Poor Health



Future Directions for Structural Stigma and LGB Health Research

- Evaluate relationships between different forms of stigma across different levels of analysis
 - Mediation: Structural → Individual → Health

Hidden from health: structural stigma, sexual orientation concealment, and HIV across 38 countries in the European MSM Internet Survey

John E. Pachankis^a, Mark L. Hatzenbuehler^b, Ford Hickson^c,
Peter Weatherburn^c, Rigmor C. Berg^d, Ulrich Marcus^e
and Axel J. Schmidt^{c,f}

Recommendations

- Develop greater awareness of stigma as an etiologic factor that contributes to the health of LGB populations, which is necessary for provision of appropriate care
- Develop multi-component interventions that address stigma at each level
 - Individual level: Cognitive-Behavioral Therapy to reduce negative mental health consequences of stigma (e.g., Pachankis et al., 2015)
 - Interpersonal level: reduce stigma in interpersonal interactions (e.g., mental health counselors; Rutter et al., 2008)
 - Structural level: Addressing the broad social context (e.g., laws, social norms) in which LGB individuals are embedded (Hatzenbuehler, 2014)

Acknowledgments

Funders

- National Institute on Drug Abuse (K01 DA032558)
- National Institute of Mental Health (F31 MH834012)
- American Public Health Association (Walter J. Lear Award, Kenneth Lutterman Award)
- American Psychological Association (Maylon-Smith Dissertation Award)
- Williams Institute at UCLA School of Law (small research grant)
- Robert Wood Johnson Foundation
- Center for Population Research In LGBT Health

Collaborators

- Bruce Link, Jo Phelan, Katherine Keyes, Deborah Hasin (Columbia)
- Kate McLaughlin (University of Washington)
- Jack Dovidio, Susan Nolen-Hoeksema (Yale)
- Steve Safren, Ken Mayer, Judy Bradford, Conall O’Cleirigh (Fenway)