

Psychological Attempts to Change a Person's Gender Identity From Transgender to Cisgender: Estimated Prevalence Across US States, 2015

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Objectives. To examine exposure to psychological attempts to change a person's gender identity from transgender to cisgender (PACGI) among transgender people in the United States, lifetime and between the years 2010 and 2015, by US state.

Methods. We obtained data from the 2015 US Transgender Survey, a cross-sectional nonprobability sample of 27 716 transgender people in the United States, to estimate the percentage exposed to PACGI in each US state.

Results. Overall, 13.5% of the sample indicated lifetime exposure to PACGI, ranging across all US states from 9.4% (South Carolina) to 25.0% (Wyoming). The percentage of transgender adults in the United States reporting exposure to PACGI between 2010 and 2015 was 5% overall, and across all states ranged from 1.2% (Alaska) to 16.3% (South Dakota).

Conclusions. Despite major medical organizations identifying PACGI as ineffective and unethical, 13.5% of transgender people in the United States reported lifetime exposure to this practice. Findings suggest that this practice has continued in every US state as recently as the period 2010 to 2015. (*Am J Public Health.* 2019;109:1452–1454. doi: 10.2105/AJPH.2019.305237)

Transgender people have a sex assigned at birth that does not align with their gender identity. Approximately 1 million individuals in the United States identify as transgender.¹ These individuals suffer elevated risks of anxiety, depression, and suicide attempts compared with the US general population.^{2,3} These disparities are often conceptualized through a minority stress framework, in which mental health is adversely affected by societal nonacceptance and antitransgender legislation.⁴ Models of care in which transgender people are affirmed in their identities can result in favorable mental health outcomes.⁴

In contrast, some providers have initiated psychological attempts to change a person's gender identity from transgender to cisgender (PACGI).⁴ Professional organizations, including the American Academy of Child & Adolescent Psychiatry, have referred to therapeutic strategies that include PACGI as “conversion therapy,” a term that originally referred to attempts to change a person's

sexual orientation to heterosexual.⁵ More recently, the term “conversion therapy” has also been used to refer to the practice of attempting to change a person's gender identity to cisgender.⁵ Some states have passed broad conversion therapy bans that define the practice as any effort to change a person's gender identity or sexual orientation.⁶

Because rejection based on gender identity is a known risk factor for poor mental health, some experts have raised concern that PACGI may lead to adverse mental health outcomes.⁴ Lifetime exposure to PACGI is associated with a greater risk of serious psychological distress and suicide attempts.⁷ Major professional organizations, including the

American Medical Association,⁸ have labeled PACGI ineffective and unethical.

There has been considerable policy debate regarding whether PACGI should be legislatively banned. Although several states have outlawed such therapies,⁶ others have deferred enacting similar legislation.⁶ One argument used against state-level legislative bans has been the claim by state elected officials that PACGI do not occur in their states,⁶ rendering such legislation unnecessary. For example, in Maine, after a gender identity and sexual orientation conversion therapy ban was approved by the state House and Senate, the former governor vetoed the bill in 2018, citing “no evidence” that conversion therapy “is being used by anyone, including licensed professionals, in the state of Maine.”⁶ Using the 2015 US Transgender Survey, the largest existing survey of transgender adults, this study aimed to (1) examine the percentage of transgender adults in each US state who report exposure to PACGI and (2) use recent estimates of the number of transgender people in each state⁹ to estimate the number of transgender people exposed to PACGI in each US state.

METHODS

The 2015 US Transgender Survey (USTS) is a cross-sectional nonprobability sample of 27 715 transgender adults in the United States. The survey was conducted by the

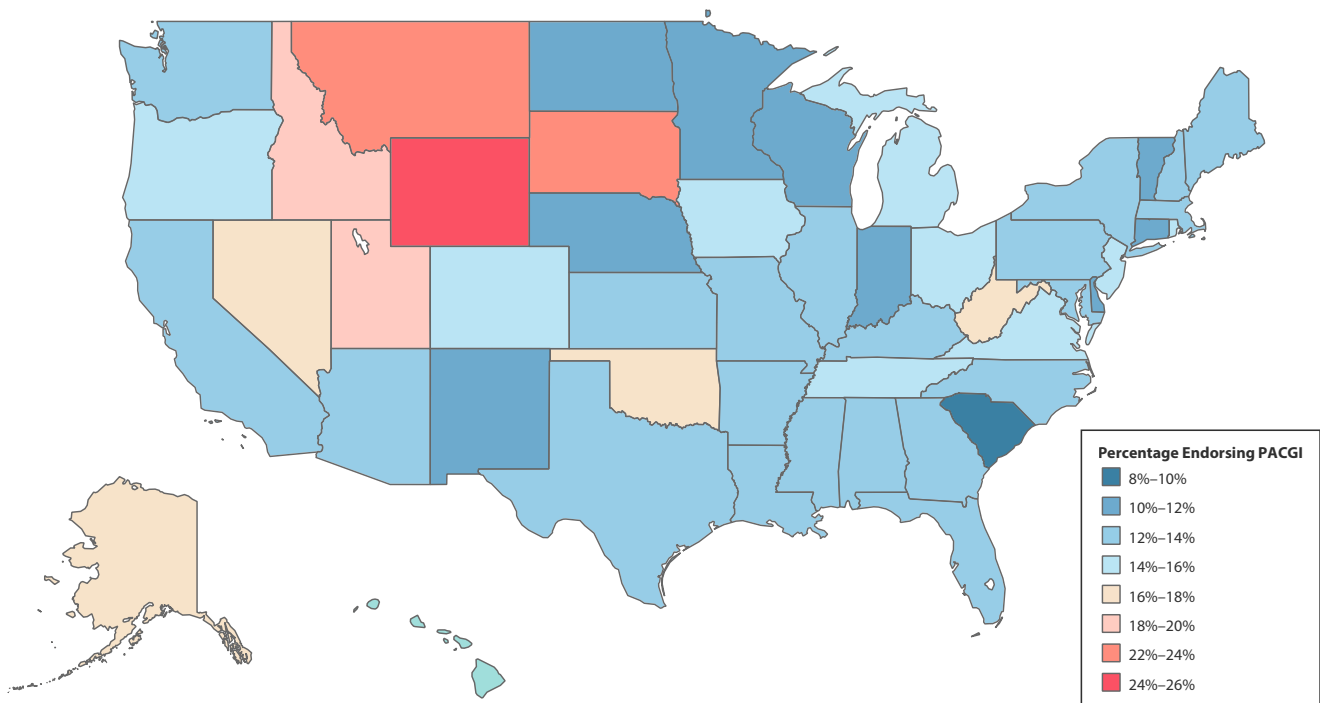
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Note. Heat map depicts the percentage of respondents from the 2015 US Transgender Survey reporting lifetime exposure to PACGI.

FIGURE 1—Estimated Proportion of Transgender People Exposed to Psychological Attempts to Change a Person's Gender Identity From Transgender to Cisgender (PACGI): United States, 2015

National Center for Transgender Equality (NCTE) between August 19 and September 21, 2015. Data were collected via an online survey distributed through community-based outreach in collaboration with over 400 organizations focused on lesbian, gay, bisexual, and transgender issues. The NCTE survey report further characterizes outreach methods and the respondent sample.¹⁰ The exposure of interest was an affirmative response to the binary survey question, “Did any professional (such as a psychologist, counselor, religious advisor) try to make you identify only with your sex assigned at birth (in other words, try to stop you being trans)?” We refer to this item herein as PACGI.

We examined both lifetime exposure to PACGI and exposure between 2010 and 2015, calculated on the basis of the respondent's self-reported age at time of survey response and self-reported first age of exposure to PACGI. We then multiplied the proportion exposed by estimates from The Williams Institute Study of the number of transgender individuals living in each US state⁹ to estimate the number exposed to

PACGI in each state. We selected the time frame from 2010 until the time of data collection in 2015 to capture the diagnostic change from “gender identity disorder” to “gender dysphoria” released by the American Psychiatric Association in 2010 and published in the *Diagnostic and Statistical Manual of Mental Disorders, 5th edition* in 2013.¹¹ Comparison of demographics between the USTS and probability samples of transgender adults in the United States¹² shows that the USTS sample is younger, with fewer racial minorities, fewer heterosexual participants, and higher educational attainment (Table A, available as a supplement to the online version of this article at <http://www.ajph.org>).

RESULTS

Of the 27 715 USTS respondents, 27 676 (99.9%) completed questions relevant to this study. The percentage of participants reporting lifetime exposure to PACGI was 13.5% overall ($n = 3749$), and the proportion across states ranged from 9.4% (South

Carolina) to 25.0% (Wyoming), as shown in Figure 1. The estimated total number of transgender people in the United States exposed to PACGI in their lifetimes was 188 089, and the total number across states is shown in online Table B.

The percentage of participants reporting exposure to PACGI between 2010 and 2015 was 5% nationally and ranged across states from 1.2% (Alaska) to 16.3% (South Dakota), as displayed in online Figure A. The estimated total number of transgender people in the United States exposed to PACGI between 2010 and 2015 was 73 459, and the total numbers in each state are presented in online Table B.

DISCUSSION

On the basis of results from this study, it appears that PACGI occurred in every US state and continued to occur in every state as recently as the period 2010 to 2015.

These results are alarming, as major professional organizations have concluded that

attempts to change gender identity are unethical and dangerous,^{5,8} and emerging data suggest that this exposure is associated with serious psychological distress and suicide attempts.⁷ Future research should examine PACGI among youths, as past studies have found stronger associations between adverse adult mental health outcomes and PACGI exposure during childhood than during adulthood.⁷

Strengths of this study include its unprecedented sample size and highly complete data set. Given that participants self-reported exposure to PACGI, however, there is potential for recall bias, particularly regarding the age at which PACGI were experienced. We also lack data regarding specific characteristics of respondents' experiences with PACGI (e.g., modalities used, frequency, duration, forcefulness). Study generalizability is limited because of the use of a non-probability sample. Some states had relatively fewer participants in the data set, making estimates from these states somewhat less reliable than those from states with greater participation. For clarity, in online Table B we present absolute numbers exposed to PACGI in each state; however, the proportion in each state more accurately reflects the state's environment, as absolute number exposed is affected by total state population. The estimates from this study must be interpreted with caution; nevertheless, they establish that PACGI have occurred in every US state as recently as the years 2010 to 2015. Overall, our results suggest that the number of transgender people in the United States exposed to PACGI is sizable. Given this exposure's association with adverse mental health outcomes,⁷ the frequency of practice warrants public health attention. **AJPH**

CONTRIBUTORS

J.L. Turban and A.S. Keuroghlian conceptualized and designed the study. J.L. Turban drafted the initial manuscript. D. King conducted all analyses and created heat maps. S.L. Reisner assisted in conceptualization and study design. All authors edited the final manuscript, contributed text, and approved the final manuscript.

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Note. The contents of this report are solely the responsibility of the authors and do not necessarily represent the official views of the NIH.

CONFLICTS OF INTEREST

J.L. Turban will receive royalties from an upcoming textbook on the treatment of transgender youths for Springer. The authors report no other relevant conflicts of interest.

HUMAN PARTICIPANT PROTECTION

The US Transgender Survey was approved by the institutional review board of the University of California, Los Angeles. The current project was reviewed by The Fenway Institute institutional review board and was considered exempt from further review.

REFERENCES

1. Meerwijk EL, Sevelius JM. Transgender population size in the United States: a meta-regression of population-based probability samples. *Am J Public Health*. 2017;107(2):e1–e8.
2. Herman JL, Wilson B, Becker T. Demographic and health characteristics of transgender adults in California: findings from the 2015–2016 California Health Interview Survey. *Policy Brief UCLA Cent Health Policy Res*. 2017;(8):1–10.
3. Johns MM, Lowry R, Andrzejewski J, et al. Transgender identity and experiences of violence victimization, substance use, suicide risk, and sexual risk behaviors among high school students—19 states and large urban school districts, 2017. *MMWR Morb Mortal Wkly Rep*. 2019;68(3):67–71.
4. Turban JL, Ehrensaft D. Research review: gender identity in youth: treatment paradigms and controversies. *J Child Psychol Psychiatry*. 2018;59(12):1228–1243.
5. American Academy of Child & Adolescent Psychiatry. Policy statement on conversion therapy. 2018. Available at: https://www.aacap.org/AACAP/Policy_Statements/2018/Conversion_Therapy.aspx. Accessed July 25, 2019.
6. Johnson C. In first, Maine governor vetoes “ex-gay” conversion therapy ban. *The Washington Blade*, 2018. Available at: <https://www.washingtonblade.com/2018/07/06/in-first-maine-governor-vetoes-ex-gay-conversion-therapy-ban>. Accessed July 25, 2019.
7. Turban JL, Beckwith N, Reisner S, Keuroghlian AS. 4.10 exposure to conversion therapy for gender identity is associated with poor adult mental health outcomes among transgender people in the US. *J Am Acad Child Adolesc Psychiatry*. 2018;57(10):S208.
8. American Medical Association. Health care needs of lesbian, gay, bisexual, transgender and queer populations H-160.991. 2017. Available at: <https://policysearch.ama-assn.org/policyfinder/detail/Health%20Care%20Needs%20of%20Lesbian,%20Gay,%20Bisexual%20and%20Transgender%20Populations%20?uri=%2FAMADoc%2FHOD.xml-0-805.xml>. Accessed July 25, 2019.
9. Flores ARHJ, Gates GJ, Brown TN. *How Many Adults Identify as Transgender in the United States?* Los Angeles, CA: Williams Institute; 2016.
10. James SE, Herman J. *The Report of the 2015 US Transgender Survey: Executive Summary*. Washington, DC: National Center for Transgender Equality; 2017.
11. Byne W, Karasic DH, Coleman E, et al. Gender dysphoria in adults: an overview and primer for psychiatrists. *Transgend Health*. 2018;3(1):57–70.
12. Meyer IH, Brown TN, Herman JL, Reisner SL, Bockting WO. Demographic characteristics and health status of transgender adults in select US regions: Behavioral Risk Factor Surveillance System, 2014. *Am J Public Health*. 2017;107(4):582–589.