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Designing a Transgender Health Training for Correctional Health Care Providers: A Feasibility Study

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Abstract

Limited provider knowledge on transgender health contributes to stigmatizing interactions and access-to-care challenges for incarcerated transgender people. Drawing on interviews with recently incarcerated transgender individuals and correctional staff, we developed and piloted a transgender health training for correctional healthcare providers. Providers indicated that the training provided them with the requisite competencies to provide gender-affirming care to transgender patients. Participants also found the intervention to be highly acceptable and feasible and recommended that the training be provided to others. Additionally, results suggested that the training may be able to increase providers' transgender-related knowledge. Further testing of the intervention is warranted.

Keywords

correctional healthcare; transgender health; continuing medical education; healthcare providers; intervention development

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Transgender individuals experience widespread stigma for having a gender identity or expression that differs from their assigned birth sex. Due to pervasive stigma, many transgender people are excluded from the legitimate economy and turn to street economies, such as sex work to survive or substance use to cope with mistreatment, placing them at risk for arrest and incarceration (Garofalo, Deleon, Osmer, Doll, & Harper, 2006; Glezer, McNiel, & Binder, 2013; Grant et al., 2011; Nemoto, Bodeker, & Iwamoto, 2011; White Hughto, Reisner, & Pachankis, 2015). Transgender individuals are disproportionately incarcerated as estimates suggest that 16% of the transgender population have been to jail or prison (Grant et al., 2011), compared to 2.8% of the U.S. general population (Glaze & Kaeble, 2014).

Incarcerated transgender people, like all detainees, may need to access physical and mental health services to meet their general healthcare needs; some transgender inmates also require medical care to medically affirm their gender (i.e., hormones or surgery) (Coleman et al., 2012). However, research finds that incarcerated transgender people face verbal harassment by correctional healthcare providers (Clark, White Hughto, & Pachankis, 2017; White Hughto et al., in press), as well as the denial of general and transgender-specific care

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including hormones (Brown & McDuffie, 2009; Emmer, Lowe, & Marshall, 2011; James et al., 2016; Lydon, Carrington, Low, Miller, & Yazdy, 2015; Reisner, Bailey, & Sevelius, 2014). Denial of necessary healthcare has been linked to depression, self-injury, and death by suicide among incarcerated transgender people (Brown, 2014; Brown & McDuffie, 2009; Glezer et al., 2013; Tarzwell, 2006).

Research conducted in correctional and non-correctional settings finds that transgender patients experience widespread mistreatment by healthcare providers (Clark et al., 2017; Lydon et al., 2015; Poteat, German, & Kerrigan, 2013; White Hughto et al., in press). In some cases, provider discrimination may be grounded in stigma (Clark et al., 2017; Lurie, 2005; Poteat et al., 2013; White Hughto et al., in press), while in other cases, mistreatment, such as referring to a patient by the wrong name or pronoun, may be due to structural factors such as lack of institutional training on how to meet transgender patients' needs or policies that restrict care provision (Brown, 2014; Clark et al., 2017; White Hughto et al., in press). Further, qualitative research finds that insufficient provider training can create discomfort for incarcerated transgender patients and lead to healthcare access barriers via healthcare refusal or avoidance (White Hughto et al., in press).

Trainings to increase providers' ability to provide gender-affirming care have been successful in increasing providers' awareness and understanding of transgender patients (Hanssmann, Morrison, & Russian, 2008; Thomas & Safer, 2015). To our knowledge, only one gender-affirming training has been evaluated in a correctional setting. The study involved the delivery of a lesbian, gay, bisexual, and transgender (LGBT) training to healthcare staff working in New York City jails (Jaffer et al., 2016). A policy addressing the provision of medical care to transgender patients (e.g., hormone therapy) was also implemented, which together with the training, lead to significant reductions in transgender patient healthcare complaints. The New York study represents an important effort to ensure that correctional providers receive necessary training in LGBT patient care and related policies; however, transgender-specific trainings that are adapted to the correctional context and focus on the population's unique general and medical gender affirmation needs are needed to improve correctional healthcare providers' ability to care for incarcerated transgender patients.

The present study aimed to develop and test a group-based transgender health training for correctional healthcare providers. We utilized a multi-stage approach to intervention development that consisted of formative qualitative work to understand experiences of transgender people in corrections and the training needs of correctional healthcare providers; and the design, delivery, and evaluation of a transgender health curriculum. Here, we provide an overview of the intervention development process, evaluation of the intervention, and post-intervention feasibility and acceptability.

Method

We utilized a staged approach (Rounsaville & Carroll, 2001) to adapt and evaluate a transgender health intervention for correctional healthcare providers. The approach included 7 stages: (1) qualitative interviews with formerly incarcerated transgender individuals to

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examine their experiences accessing healthcare in correctional settings, including structural barriers and interpersonal barriers to care (White Hughto et al., in press); (2) key informant interviews with correctional administrators to assess training needs and perceived feasibility of delivering a transgender health intervention to correctional providers; (3) intervention development and Phase I feasibility testing to assess initial acceptability of the intervention content and feasibility of delivery post-intervention; (4) qualitative interviews with correctional healthcare providers to assess multi-level barriers and facilitators to caring for transgender patients (Clark et al., 2017); (5) adaptation and Phase II pilot testing of the intervention to assess robust measures of intervention feasibility, acceptability, and preliminary effectiveness using a mixed-methods, pre-post, longitudinal design (White Hughto et al., 2017); (6) Phase III efficacy testing of intervention via a randomized controlled trial; and (7) translation of the intervention into practice. Here, we review the first 3 stages, with a specific focus on stage 3. Stages 1 (White Hughto et al., in press), 4 (Clark et al., 2017), and 5 (White Hughto et al., 2017) have been reported elsewhere and stages 6 and 7 are underway.

Formative Research

Qualitative interviews with formerly incarcerated transgender women—In 2014 we conducted 20 semi-structured interviews with formerly incarcerated transgender women. The study, described in-depth elsewhere (White Hughto et al., in press), found that correctional healthcare providers frequently misgendered transgender women by using male names and pronouns. Study participants also reported that some correctional providers did not recognize the medical necessity of prescribing hormones and in some cases participants had to educate their providers in order to receive appropriate medical care. Participants also noted that training was urgently needed to increase correctional providers' ability to provide gender-affirming care.

Key informant interviews with correctional administrators and providers—Between September and December 2015, we conducted key informant interviews with 12 correctional healthcare administrators from state and federal facilities, 10 of whom also identified as correctional healthcare providers. Interviews sought to assess the need for and feasibility of conducting transgender health trainings for correctional providers. Key informants highlighted the lack of existing training efforts covering transgender health issues. Informants also welcomed the opportunity to train their staff in transgender health competencies to ensure that transgender patients receive appropriate care. Key informants saw the value of developing and piloting the intervention at the state-level to assess initial feasibility and acceptability with the potential to make the intervention available to federal healthcare providers.

Phase I Feasibility Study

Intervention development—Using data from our formative research and training materials developed for non-correctional healthcare providers by leading LGBT health organizations (Center of Excellence for Transgender Health, 2011; Makadon, Mayer, Potter, & Goldhammer, 2008; Reisner et al., 2015), we designed a transgender health training curriculum for correctional providers. The first author created the initial draft of the

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intervention, which targeted a range of transgender cultural competencies (e.g., terminology, stigma as a risk factor for incarceration, stigma's health impact, and transgender people's experience in corrections). To ensure the curriculum was relevant to all providers (e.g., doctors, nurses, psychologists, social workers), the curriculum focused on basic clinical competencies, not specific to provider type (e.g., best practices for gender-affirming clinical encounters, basics of taking a medical history). The second author added cultural competence content to further contextualize structural and interpersonal stigma as a risk factor for incarceration. The intervention was then iteratively refined through consultations with four experts, including a formerly incarcerated transgender woman/community activist, a researcher with experience working in correctional environments, a physician with expertise in transgender health, and a correctional mental health provider/administrator.

The intervention consisted of four training modules with specific learning objectives. Module 1 covered definitions and terminology (e.g., difference between sex, gender, sexual orientation) in order to enable providers to define sexual and gender-related terms and processes. Module 2 aimed to help providers understand the social factors that place transgender people at risk for incarceration by covering examples of transgender stigma as a barrier to care. Module 2 also included an account of incarceration experiences from a formerly incarcerated transgender community activist to help providers understand the aspects of incarceration that are most challenging for transgender individuals. Module 3 included an interactive role-play component that aimed to help providers communicate with transgender people using language that respects and acknowledges their gender identities through gender-affirming interactions. Module 4 aimed to help providers understand their role in ensuring patient access to gender-affirming care through discussion on how stigmatizing and supportive interactions between patients and providers can serve as barriers and facilitators to care, respectively. Module 4 also aimed to educate providers on the basics of taking a medical history with transgender patients by reviewing the essential components (e.g., assess existing anatomy) and key considerations (e.g., trauma histories) for transgender patients.

Intervention delivery—Between December 2015 and January 2016, 22 healthcare providers from a New England correctional facility participated in a single-session, group-based training intervention on transgender health. In order to reach all providers, the intervention was piloted on two occasions (training 1: $N = 15$; training 2: $N = 7$). A correctional administrator informed eligible staff of the training, secured a training location at the facility, and scheduled the trainings. The intervention was designed to be delivered in 1 hour (15 minutes per module) and led by facilitators with expertise in transgender health and corrections. Participants were eligible if they were: 18 years or older; fluent in English; and identified as a correctional healthcare provider (e.g., medical doctor, nurse, physician's assistant, psychologist, psychiatrist, social worker, mental health counselor). Providers received educational credits for their participation.

Intervention evaluation—Detailed notes were taken throughout the intervention development process to assess the feasibility of study implementation. To assess intervention acceptability and its potential to improve providers' transgender-related knowledge,

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participants completed an 11-item survey via pen and paper immediately after the training. Participants were asked to indicate (from 1 = *strongly disagree* to 4 = *strongly agree*) how much they agreed that the training was successful in improving five transgender-related competencies (see questions 1–5 in Table 1). Participants were also asked to evaluate their level of transgender-related knowledge before and after the training (from 1 = *zero knowledge* to 5 = *expert-level of knowledge*). Additionally, participants were asked to indicate how likely they would be to apply the training information to their work (from 1 = *not very likely* to 5 = *very likely*). Finally, participants were asked two-open ended questions assessing how they might apply the training content to their work and whether they would recommend the training to others. Participants were informed that their feedback would be used to evaluate the intervention and they were free to decline survey participation or stop the survey at any time. To ensure participant anonymity, no personal identifiers were collected and verbal consent was obtained in lieu of signed written consent. This study received an exemption from the Institutional Review Board of Yale University.

Data Analysis

Post-intervention evaluations were assessed in SPSS. Descriptive statistics were obtained for all variables. T-tests explored differences between participants perceived transgender-related knowledge, before and after the intervention. Using thematic analysis (Braun & Clarke, 2006), open-ended questions were first organized according the research questions and then further categorized according to themes that emerged from analysis.

Results

This Phase I feasibility study was successful in recruiting 22 correctional providers (68% mental health, 18% physical health providers) to participate in a transgender health training. The correctional administrators with whom we worked recognized the need for training and coordinated the scheduling of the training, booked the training site, and helped to secure the approval to conduct the training in the correctional facility. Recruitment by correctional administrators was effective given their ability to convey the value of the training and ensure that staff had the necessary time off to participate in the training.

Intervention feasibility was evaluated via a brief, pen and paper survey following the intervention. The brevity of the survey and in-person data collection likely contributed to the completeness of the data as no participants had missing survey responses. However, this in-person data collection approach limited our ability to collect more comprehensive demographic information about participants. Additionally, participants had limited time to participate in the intervention and complete the evaluation, thus we were restricted in our ability to include more robust measures of intervention feasibility and acceptability in the post-intervention survey.

The intervention was designed to be delivered by two facilitators in order to achieve an optimal facilitator-to-participant ratio (6–8 participants per facilitator) (Stewart, Usher, & Allenby, 2010). The two lead facilitators had expertise in transgender health and corrections, prior experience training medical staff, and identified as cisgender. Following recommendations from two key informants, a transgender community activist who had a

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history of incarceration was added as a co-facilitator. The co-facilitator elected to lead Module 2 on transgender people in corrections and contextualized various components of the training by sharing personal stories about her incarceration experiences. While each facilitator offered their own unique contribution, the use of three facilitators created an imbalanced facilitator-to-participant ratio and took 1.5 to 2 hours to deliver the intervention rather than target time frame of 1 hour.

Post-test evaluation of the intervention revealed that the training objectives of each educational module were met (see Table 1). Significant increases were also found in providers' transgender health knowledge post-intervention ($p < 0.0001$). Participants also found the intervention to be highly acceptable as 100% indicated they would integrate the knowledge into their work and recommend the training to others. Several providers cited their intent to integrate gender-affirming language into their work, such as the use of patients' preferred pronouns and name. Many providers also found the case studies and opportunities for discussion to be highly useful and recommended that any future iteration of the intervention include ample time for both. A number of providers also noted that exposure to the stories of the formerly incarcerated transgender co-facilitator was particularly helpful in understanding the difficulties of being transgender in prison. While providers indicated that intervention did not require any revisions, a few providers noted that more clinical case studies on hormone provision, surgical considerations, and mental health therapies would be useful.

Discussion

Drawing on formative research with formerly incarcerated transgender individuals and correctional providers and administrators, we developed a novel, group-based intervention grounded in the lived experience of incarcerated transgender people and responsive to the unique healthcare delivery environment of correctional settings. Post-test evaluations demonstrated high intervention feasibility and acceptability and suggest that the training may be able to increase the transgender-related knowledge of participating providers.

These data provide preliminary evidence of the successful development and delivery of intervention targeting transgender health competencies among correctional healthcare providers. For nearly all study outcomes, providers indicated that the training provided them with the requisite cultural competencies to provide care to transgender patients and basic competencies for affirming clinical interactions. Participants also found the intervention content and format to be highly acceptable, and all participants indicated they would recommend the training to others. While not the goal of the feasibility and acceptability study, significant increases were also found in providers' transgender-related knowledge post-intervention. Future testing of the intervention using more robust measures of transgender cultural and clinical competence and a pre-post longitudinal design is underway in order to further evaluate the effectiveness of the intervention.

Our formative research revealed that providers lack training on how to appropriately meet the needs of transgender patients (Clark et al., 2017; White Hughto et al., in press). This pilot study simultaneously trained both mental health and primary care providers, thus the

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focus of the training was on cultural competence and the basics of gender-affirming clinical interactions (e.g., taking a medical history), rather than covering the range of clinical competencies for both mental health (e.g., therapeutic strategies) and primary care (e.g., hormone dosing) providers. Pilot testing of the intervention demonstrated that the amount of cultural content was appropriate and needed; however, provider feedback revealed that additional content on transgender clinical competencies (e.g., hormone provision, post-surgical care, mental health interventions) was needed. Future iterations of the intervention will aim to expand the clinical competence component, and if feasible, stratify training sessions by provider type to ensure that correctional healthcare providers' transgender-related clinical training needs are met.

Evaluation of intervention feasibility outcomes highlight additional methods to be retained and improved upon in future testing of the intervention. The use of correctional administrators to recruit participants, secure a training location, and schedule the training was useful to obtain staff buy-in and embed the training into participants' workday. While administrators did not report any recruitment challenges, it is possible that administrators at other sites may be less willing or able to facilitate recruitment, including sending multiple recruitment emails and managing scheduling conflicts. To ensure that the target sample size is reached for future phases of the intervention, we will aim to collaborate with administrators on recruitment efforts and secure the email addresses of eligible participants in order to track response rates and assess reasons for non-participation.

With regard to intervention delivery, the facilitators' unique background and expertise in transgender health and corrections was found to be acceptable. The use of data on the health effects of incarceration and barriers to care for transgender people, along with a storytelling component of incarceration experiences enriched the training and provided participants with exposure to the lived realities of incarcerated transgender people. To ensure that participating providers are exposed to the challenges transgender face while incarcerated, even in contexts where a formerly incarcerated transgender person is unable to co-facilitate, we will include case studies of incarcerated transgender individuals drawn from our formative research with this population (Clark et al., 2017; White Hughto et al., in press). Additionally, future efficacy testing of the intervention will utilize 1–2 facilitators to ensure adherence to the target curriculum timeframe.

This study used a brief, in-person survey to evaluate intervention feasibility and acceptability. While the survey was useful in collecting outcome data post-intervention, future testing of the intervention will require a pre-post, longitudinal design and more robust measures of intervention feasibility, acceptability, and effectiveness, which could be challenging to collect in-person given potential privacy concerns and limited staff time. Future testing of the intervention should aim to collect evaluation data online. An online survey would enable participants to complete the survey at their convenience and allow for the collection of detailed demographic and outcome data. Further, while missing data was not an issue in this feasibility study, longer surveys pose a greater risk for missing data (Galesic & Bosnjak, 2009; Sarraf & Tukibayeva, 2014). Online data collection tools have capabilities that can minimize non-response bias (Albaum, Roster, Wiley, Rossiter, & Smith, 2010) and thus will be incorporated into future testing phases.

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Other study limitations should be considered when interpreting these findings. The study was conducted with a small sample of correctional healthcare providers from a single correctional facility in New England, which may limit the generalizability of findings. Additionally, all measures were self-reported and may suffer from socially desirability bias. Finally, 11 single-item outcome measures were developed for this study. Validated measures that are designed to assess cultural and clinical competence can reduce the possibility of measurement error and will be developed and incorporated into future testing of the intervention.

In conclusion, there is a dearth of evidence on efforts to improve correctional healthcare providers' ability to provide gender-affirming care to transgender patients. This study provides preliminary evidence for the feasibility and acceptability of a group-based intervention targeting transgender health competencies for correctional healthcare providers. Findings highlight the need for future refinement and testing of the intervention in a larger sample, using a pre-post, longitudinal design.

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Biographies

Jaclyn M. White Hughto, PhD, MPH is a social epidemiologist with expertise in qualitative and quantitative research methods and analysis. Her research aims to [1] document the structural-, interpersonal-, and individual-level factors that contribute to health inequities for sexual and gender minorities and other marginalized populations; and [2] develop and test community-based interventions to improve the health of at-risk communities. Dr. White Hughto has co-authored more than 40 publications and presented her work at more than 40 national and international conferences. She holds a PhD in Chronic Disease Epidemiology from the Yale School of Public Health, an MPH in Behavioral Sciences and Health Education from the Rollins School of Public Health at Emory University, and a BA in Psychology from Boston University.

Kirsty A. Clark, MPH is a PhD student in Epidemiology at the UCLA Fielding School of Public Health. She has a background in social and behavioral science research, spanning the fields of psychology, public health, and epidemiology. She is interested in employing novel quantitative and qualitative methods, measurement, and analysis to inform health interventions for sexual and gender minority populations. She currently works as a research consultant for Friends Research Institute in Los Angeles, CA on projects focused on researching mental health, physical health and substance use among high-risk transgender communities.

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References

Albaum G, Roster CA, Wiley J, Rossiter J, Smith SM. 2010; Designing web surveys in marketing research: Does use of forced answering affect completion rates? Journal of Marketing Theory and Practice. 18(3):285–294.

Braun V, Clarke V. 2006; Using thematic analysis in psychology. Qualitative Research in Psychology. 3(2):77–101.

Brown GR. 2014; Qualitative analysis of transgender inmates' correspondence implications for departments of correction. Journal of Correctional Health Care. 20(4):334–342. [PubMed: 25038142]

Brown GR, McDuffie E. 2009; Health care policies addressing transgender inmates in prison systems in the United States. Journal of Correctional Health Care. 15(4):280–291. [PubMed: 19635927]

Center of Excellence for Transgender Health. Primary Care Protocol for Transgender Patient Care. 2011. Retrieved from http://transhealth.ucsf.edu/protocols

Clark KA, White Hughto JM, Pachankis JE. "What's the right thing to do?": Correctional healthcare providers' knowledge, attitudes, and experiences caring for transgender inmates. Social Science and Medicine. 2017; 193:80–89. [PubMed: 29028559]

Coleman E, Bockting W, Botzer M, Cohen-Kettenis P, DeCuypere G, Feldman J, Meyer WJ. 2012; Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. International Journal of Transgenderism. 13(4):165–232.

Emmer, P, Lowe, A, Marshall, R. This is a prison, glitter is not allowed: Experiences of trans and gender variant people in Pennsylvania's prison systems. Philadelphia, PA: 2011. Retrieved fromhttp://socialproblems.voices.wooster.edu/files/2011/08/heartsonawire.pdf

Galesic M, Bosnjak M. 2009; Effects of questionnaire length on participation and indicators of response quality in a web survey. Public Opinion Quarterly. 73(2):349–360.

Garofalo R, Deleon J, Osmer E, Doll M, Harper GW. 2006; Overlooked, misunderstood and at-risk: Exploring the lives and HIV risk of ethnic minority male-to-female transgender youth. Journal of Adolescent Health. 38(3):230–236. [PubMed: 16488820]

Glaze, L, Kaeble, D. Correctional populations in the United States, 2013. Washington, DC: 2014. Retrieved fromhttp://www.bjs.gov/index.cfm?ty=pbdetail&iid=5177

Glezer A, McNiel DE, Binder RL. 2013; Transgendered and incarcerated: A review of the literature, current policies and laws, and ethics. Journal of the American Academy of Psychiatry Law. 41(4): 551–559.

Grant, JM, Mottet, LA, Tanis, J, Harrison, J, Herman, JL, Keisling, M. Injustice at every turn: A report of the National Transgender Discrimination Survey. Washington, DC: 2011. Retrieved fromhttp://www.thetaskforce.org/downloads/reports/reports/ntds_full.pdf

Hanssmann C, Morrison D, Russian E. 2008; Talking, gawking, or getting it done: Provider trainings to increase cultural and clinical competence for transgender and gender-nonconforming patients and clients. Sexuality Research & Social Policy. 5(1):5–23.

Jaffer M, Ayad J, Tungol JG, MacDonald R, Dickey N, Venters H. 2016; Improving transgender healthcare in the New York City correctional system. LGBT health. 3(2):116–121. [PubMed: 26745813]

James, SE, Herman, JL, Rankin, S, Keisling, M, Mottet, L, Anafi, M. The report of the 2015 US Transgender Survey. Washington, DC: 2016. Retrieved fromhttp://www.ustranssurvey.org/report/

Lurie S. 2005; Identifying training needs of health-care providers related to treatment and care of transgendered patients: A qualitative needs assessment conducted in New England. International Journal of Transgenderism. 8(2–3):93–112.

Lydon, J, Carrington, K, Low, H, Miller, R, Yazdy, M. Coming out of concrete closets: A report on Black and Pink's LGBTQ prisoner' survey. Boston, MA: 2015. Retrieved fromhttp://www.blackandpink.org/wp-content/upLoads/Coming-Out-of-Concrete-Closets.-Black-and-Pink.-October-21–2015.pdf

Makadon, HJ, Mayer, KH, Potter, J, Goldhammer, H, editors. The Fenway guide to lesbian, gay, bisexual, and transgender health. Philadelphia, PA: ACP Press; 2008.

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Nemoto T, Bodeker B, Iwamoto M. 2011; Social support, exposure to violence and transphobia, and correlates of depression among male-to-female transgender women with a history of sex work. American Journal of Public Health. 101(10):1980–1988. [PubMed: 21493940]

Poteat T, German D, Kerrigan D. 2013; Managing uncertainty: A grounded theory of stigma in transgender health care encounters. Social Science and Medicine. 84:22–29. [PubMed: 23517700]

Reisner SL, Bailey Z, Sevelius J. 2014; Racial/ethnic disparities in history of incarceration, experiences of victimization, and associated health indicators among transgender women in the US. Women and Health. 54(8):750–767. [PubMed: 25190135]

Reisner SL, Bradford J, Hopwood R, Gonzalez A, Makadon H, Todisco D, Zaslow S. 2015; Comprehensive transgender healthcare: The gender affirming clinical and public health model of Fenway Health. Journal of Urban Health. 92(3):584–592. [PubMed: 25779756]

Rounsaville BJ, Carroll KM. 2001; A stage model of behavioral therapies research: Getting started and moving on from stage 1. Clinical Psychology: Science and Practice. 8:133–142.

Sarraf S, Tukibayeva M. 2014; Survey page length and progress indicators: What are their relationships to item nonresponse? New Directions for Institutional Research. 2014(161):83–97.

Stewart, L, Usher, A, Allenby, K. A review of optimal group size and modularisation or continuous entry format for program delivery. Correctional Service of Canada; 2010. Retrieved fromhttp://www.csc-scc.gc.ca/research/005008–0215–01-eng.shtml

Tarzwell S. 2006; Gender liens are marked with razor wire: Addressing state prison policies and practices for the management of transgender prisoners. Columbia Human Rights Law Review. 38:167–219.

Thomas DD, Safer JD. 2015; A simple intervention raised resident-physician willingness to assist transgender patients seeking hormone therapy. Endocrine Practice. 21(10):1134–1142. [PubMed: 26151424]

White Hughto JM, Clark KA, Altice FL, Reisner SL, Kershaw TS, Pachankis JE. Creating, reinforcing, and resisting the gender binary: A qualitative study of transgender women's healthcare experiences in sex-segregated jails and prisons. International Journal of Prisoner Health.

White Hughto JM, Clark KA, Altice FL, Reisner SL, Kershaw TS, Pachankis JE. Improving correctional healthcare providers' ability to care for transgender patients: Development and evaluation of a theory-driven cultural and clinical competence intervention. Social Science and Medicine. 2017

White Hughto JM, Reisner SL, Pachankis JE. 2015; Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. Social Science and Medicine. 147:222–231. [PubMed: 26599625]

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Table 1

Descriptive findings of intervention feasibility and acceptability ($N = 22$).

1. Define Terms Related to Transgender Identity and Health: Range 3–4		
Mean - *SD*	3.64	0.49
Agree: *n* - %	22	100.0
Disagree: *n* - %	0	0.0
2. Identify Some of The Social Factors that Place Transgender People at Risk for Incarceration: Range 3–4		
Mean - *SD*	3.64	0.49
Agree: *n* - %	22	100.0
Disagree: *n* - %	0	0.0
3. Explain the Specific Aspects of Incarceration that are Most Challenging for Transgender Individuals: Range 2–4		
Mean - *SD*	3.55	0.60
Agree: *n* - %	21	95.5
Disagree: *n* - %	1	4.5
4. Communicate with Transgender People Using Language that Respects and Acknowledges Their Gender Identities Range (3–4)		
Mean - *SD*	3.59	0.50
Agree: *n* - %	22	100.0
Disagree: *n* - %	0	0.0
5. Explain Strategies to Effectively Take a Medical History: Range 2–4		
Mean - *SD*	3.19	0.51
Agree: *n* - %	21	95.5
Disagree: *n* - %	1	4.5
6. Apply the Information from this Training to Your Work/Your Organization: Range 3–4		
Mean - *SD*	3.50	0.69
Likely: *n* - %	22	100.0
Unlikely: *n* - %	0	0.0
7. Recommend Training to Others		
Yes: *n* - %	22	100.0
No: *n* - %	0	0.0
8. Pre-Training Knowledge: Range 1–4		
Mean (*SD*)	2.29	0.78
9. Post-Training Knowledge: Range 2–4		
Mean (*SD*)	3.60	0.50
Knowledge Differences		
T-Test – *degrees of freedom*	9.20***	21
Cohen's *d*	2.00	

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$p < 0.001$

Note. For items 1 through 5, the mean and standard deviation (*SD*) are reported for the 4-point scale; when reporting the frequency, the scale was dichotomized to *Agree* vs. *Disagree* for parsimony. For item 6, the mean and *SD* are reported for the 4-point scale; when reporting frequency, the scale was dichotomized to *Likely* vs. *Unlikely* for parsimony. For items 8 and 9, the scale ranged from 1 = *No knowledge* to 5 = *Expert Knowledge*.

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