

HIV and the Transmasculine Community – Can Statistical Significance Be Harmful?

by
Stephen Harger

A THESIS

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(Honors Scholar)

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Epidemiological research on HIV/AIDS seeks to determine at-risk populations not reached by current care. In the forty years since the AIDS epidemic began, transgender people were only recently deemed “at-risk” by the CDC and more action was taken to study them. Most current research centers on transgender women, with transgender men either excluded from studies or relegated to further research. A significant contributor to this problem is the desire in research, healthcare, and policy for statistically significant data. Statistical significance helps determine likelihood of chance in data but doesn’t convey how a community is affected. Given studies done on transgender men and HIV generally use small convenience samples, the data is consistently not significant. Furthermore, this data often makes assumptions about trans men bodies and sexualities, leading conclusions from their data to be inaccurate. This thesis argues that dependency on quantitative, statistically significant data in HIV research creates a cyclical, harmful pattern yielding unhelpful data by undergoing an intersectional critique of current research regarding transgender HIV healthcare. This project also suggests manners in which research/care can move towards analyzing narratives of affected gay, bi or queer identified transgender men including trans men of color.

Key Words: HIV, AIDS, transgender, FTM, transman, transgender men, qualitative research

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I understand that my project will become part of the permanent collection of Oregon State University, Honors College. My signature below authorizes release of my project to any reader upon request.

Stephen Harger, Author

Chapter 1 — Introduction:

The overlap between HIV/AIDS research and transgender men needs to be studied and this gap in public health research and its subsequent use in healthcare needs to be addressed and interventions need to be made. The year 2021 marks the 40th year since the first cases were documented and yet we have not reached a goal of eradication of the disease or the lessening of stigma surrounding the disease. The history of this period of history has been systematically suppressed and ignored and no reparations or support has been offered for the millions that died due to government inaction. Despite multiple campaigns by multiple organizations to raise awareness most of the information spread about the disease is full of misinformation and harsh stereotypes. HIV/AIDS, despite its reputation of being the “gay man’s disease,” has affected communities of nearly all backgrounds, from lesbians to heterosexuals, from children to the elderly, and importantly people of all genders including transgender men and women and gender non-conforming individuals. Within the already minimal information spread about the AIDS epidemic certain affected groups have faced considerable silencing about their experiences, including trans men. Trans men already can feel some separation from the mainstream LGBTQ+ movement due to their gender identity and with the additional stigma of a positive HIV diagnosis, the additive discrimination faced in healthcare settings can be suffocating. The overwhelming combination can have serious effects on healthcare outcomes (including whether trans men reach out for medical care) and can lead to life-and-death situations. It is cruel that even with the 30+ years of research on HIV/AIDS care, prevention, and treatment that for some communities AIDS is still a death sentence even though is completely treatable. Not reaching out to communities in pain, discriminating against them, or furthering stereotypes and stigmas can have lethal effects. This review aims to identify the information that has been gathered, the

patterns that are seen in conclusions and how they've changed over time, and what the impact of these studies is on other fields. It is hypothesized based on the patterns we see in previous literature that the desire for "statistically significant data" in research about the trans masculine community impacts the care, stigma, and engagement in HIV research and subsequent prevention/treatment programs.

Sex and gender are commonly used throughout common and academic speech as synonyms for each other with set definitions. These terms are more complex than one set definition and their definitions have changed over time as we learn more about the human body and psychology. What has remained constant about the concept of "sex" throughout its changes is that there is a biological basis, including information about hormones and genital structures. While Western (Euro-colonizer influenced) science has operated on the basis that only two sexes existed, there has been more study and education about intersex people that have led to this view to be dismissed. Intersex is medically defined as a "congenital anomaly of the reproductive and sexual system" where the external genitalia and endocrine and/or reproductive system differs from most other people (Intersex Initiative, 2008, para. 1). There is no one condition or body that is defined as "intersex" and instead the identity is based on the individual's medicalization and not their biology. Overall, the study of intersex people led to a redefining of what "biological sex" is defined as. The more complex term of gender is based off a person's individual identity and how they believe they fit into the societal construct of gender. The concepts of sex and gender, while they can be the same, can just as often differ in a multitude of ways. Finding out your identity and subsequently how you want to express your identity is often a long and hard journey for many, with discrimination and ignorance surrounding one's decisions. It isn't always straightforward and can change over time after periods of introspection and self-reflection.

Identifying with the gender identity that was given and taught to you at birth is termed as cisgender whereas having a gender identity that doesn't coincide with the one given to you is defined as being transgender. The transgender community is a diverse one, with many different subcategories and identities, including people that do not conform to the gender binary of male and female that our Euro-colonizer society is based on. The term transgender is often associated, however, with those that identify with "the opposite gender," often transgender women as they have slightly more representation than their transgender male counterparts. As most of the HIV research that has been done involving the transgender community has focused on trans women (understandably so), I sought to search for and consolidate what little is known about the trans male community. Even the loose definition attributed to the community for use in academia is varied, but generally is defined as having a gender identity that falls on the masculine spectrum that is different from the gender assigned to you at birth. Some sources use this definition to include those that fall on the nonbinary part of the spectrum but have a gender expression of male while others mean it only to be those that identify as a transgender male. Many still fall through the cracks with these definitions from those that identify as male, with no transgender qualifier and others that have gender identity descriptions that are far removed from the terms used in academia. There is no blueprint or concrete definition of transmasculinity just as there isn't one for masculinity and therefore, we cannot assume that there is one set definition/experience lived by people who identify as transgender men. Regardless of the exact textbook definition of what it means to be a transgender male, academia has come to state that gender is both a social construct and a spectrum and that binary is highly inaccurate for both gender and sex. What is more recent is the dissemination or "discovery" of this research from the previous century in non-academic fields. Despite this admission by various fields of academia

like psychology and biology there is still much contention and misinformation in public discourse as to the definitions of gender and sex.

Though fields like public health and biology have modified their definition of gender and continues to work towards gender-neutral and accepting language this spread is slow and generally still confined to college courses. It is slowly being incorporated to research and health care fields, but understandings of minority health concerns are still subpar compared to the care that these groups need. Throughout various healthcare settings (i.e., primary care settings, emergency rooms, clinics, etc.) a binary construct of sex and gender is used to determine the care that is believed that they should or shouldn't receive. While some of this may be based on the bias of researchers and providers, it was largely attributed to insufficient education about these groups (Divan et al., 2016, p. 80; Clements-Nolle et al., 2001, p. 82; Bockting, Robinson, & Rosser, 1998, p. 517; Rich et al., 2017, p. 8). Nevertheless, definitions in both medicine and research have basis in the binaries that have not seen the inclusive nature of the updated understanding/definition of gender. In terms of public health research and healthcare this has led to potential misclassifications of groups of minorities and even faulty conclusions about non-generalizable data. Some definitions, to be more gender neutral started defining categories in terms of sexual partners using phrases like "men who have sex with men (MSM)". Even this phrasing makes considerable assumptions about the genders of the individuals and is still exclusionary. Kaplan et al. find that the critiques of this phrase makes three considerable erroneous assumptions, "(1) the assumption that 'men' is not an identity; (2) that we know the bodies we are talking about – that is, the bodies of 'men,' the 'male body' is something homogenous, stable, and easily identifiable; and (3) that we know the sexual practices in which these bodies are engaged – that is, the phrase 'men who have sex with men' is enough to

describe a sexual behavior” (2016, p. 2). These assumptions are especially troublesome for those that fall under the transgender umbrella, as the experience for each person in the transgender community is considerably different from one another. Some choose to undergo hormone replacement therapies or surgeries to affirm their gender while others do not find this necessary, and others still may choose different aspects of these to obtain a body that more closely resembles their gender identity. This also impacts sexual encounters and practices alongside the personal preference of the individual. The instance on continuing to use such terms causes issues in making conclusions about the risk profiles, prevention plans, and further treatment for those that may be at considerable risk and can perpetuate harmful and exclusionary notions of gender and sexuality. In other words, people continue to fall through the gaps, and this doesn’t give hope for further progress with these communities that are not reached by current HIV/AIDS care programs.

The current goals for major research and treatment of HIV/AIDS globally are consistently discussed by major health organizations (e.g., UNAIDS, WHO, and the CDC) and individual country governments (including the U.S.). Smaller organizations like the Elton John AIDS Foundation, the Mercury Phoenix Trust and Broadway Cares/Equity Fights for AIDS bring the conversation to the public in understandable means and add the support of public figures to rally for more testing and destigmatization. As of writing, in early 2021, the newest goal for 2021 to 2025 is being discussed. The current working goal for HIV/AIDS is to end HIV/AIDS as a public health concern by 2030, meaning the end of the epidemic 30+ years from its beginning (UNAIDS, n.d, para. 3). To accomplish this, many of the prominent HIV/AIDS organizations (including UNAIDS, AIDS United, and the International AIDS Society to name a few) and public health offices (CDC, WHO, FDA, etc.) have disseminated to the more local

organizations a goal known as 90-90-90 (some organizations operate on a 95-95-95 mission but the meaning behind the mission is the same). This ambitious plan sets out a clear mission that 90% of people living with HIV will know their status; 90% of all people diagnosed with HIV will have sustained access to HIV/AIDS treatment and care, namely antiretroviral drugs; and 90% of people on antiretroviral therapy (ART) will achieve viral suppression (UNAIDS, n.d., para. 5). The latter goal is marked by a scientifically tested and sound belief of “undetectable = untransmittable,” colloquially known as U=U, that means that people with HIV that maintain an undetectable viral load (tested by the amount of HIV in the individual’s blood) by taking antiretroviral medication consistently, cannot transmit the virus to another person (U.S Department of Health and Human Services, 2019, para. 1). In other words, if the viral load cannot be detected via blood testing, then the virus cannot be passed to a partner sexually or otherwise. As of 2021 these goals have not been reached yet, but progress has been made. The World Health Organization states that 38 million people are currently living with HIV as of 2019. At the end of 2019, 81% of people with HIV knew their status, 67% of people were receiving ART and 59% of those receiving therapy had reached viral suppression (World Health Organization, 2020, point 5). By June 2020 there was a 2.4% increase in achieving ART services, marking some progress (World Health Organization, 2020, point 6). Despite being close in some regards to said goals, the interruptions in care have led to serious consequences, with 690,000 deaths from HIV/AIDS related causes and 1.7 million new infections in 2019 (World Health Organization, 2020, point 10). Unfortunately, the data collected does not have specific breakdowns for gender identity and therefore the global and national breakdown of the percentage of deaths and/or infections attributed to transgender people, or specifically transgender men, cannot be determined via this data.

For transgender men, the literature is considerably limited largely due to the collection methods or descriptive manners of current research. Regardless of this, conclusions on the risk factors of transgender men vary significantly, with some studies stating that there is little to no risk in this community and other studies suggesting that there is an elevated risk compared to other populations (Mayer et al., 2016, p. S208). Some papers even go so far as to purport that trans men and trans women have similar rates of infection and diagnosis, but trans women receive more attention due to the higher density present in convenience samples used for research (Stephens, Bernstein & Philip, 2011, p. 683). A considerable amount of the information that is taken about the transgender community is taken from trans women as some research has shown that transgender women make up more of the transgender population, meaning that there are more of them to be able to come up with more generalizable conclusions¹ (Melendez et al., 2006, p. 23; Jadwin-Cakmak et al., 2019, p. 2; Chen et al., 2011, p. 660; and Sharma et al., 2019, p. 54; Scheim et al., 2020, p. 2). While there is considerable overlap in the living experiences of people in these communities, and possibly similar risk levels, it is important to remember that each group has behaviors that are associated to their specific identity which may place them at higher risk for infection. By basing all the information about risk on the experiences of trans women there are considerable avenues of infection and subsequently care and treatment experienced by trans men that are not able to be captured by this method.

While we know that there are differences in the exact risk profiles of transgender men when it comes to HIV, there are shared experiences between the two groups that set them aside from the general profile of cisgender people. We do still know that the “traditional risk profile”

¹ Quite a few of papers that were analyzed in this literature review featured these conclusions and little else, including: Wiewel et al., 2016, p. 497; Herbst et al., 2008, p. 1; Sharma et al., 2019, p. 47; Pitasi et al., 2017, p. 883; Becasen et al., 2019, p. e6; Clark et al., 2016, p. 2775; Bockting, Robinson & Rosser, 1998, p. 506; Reisner et al., 2017, p. 3313 and Wansom et al., 2016, p. 87.

for at-risk groups still applies to transgender people. These risks include: engaging in sex work (Herbst et al., 2008, p. 2; Stephenson et al., 2017, p. 425; Feldman, Romine & Bockting, 2014, p. 2; Clements-Nolle et al., 2001, p. 70; Bauer et al., 2012, p. 2); lack of consistent condom usage (Kenagy and Hsieh, 2005 p. 195; Herbst et al., 2008, p. 2; Pitasi et al., 2019, p. 112; Stephenson et al., 2017, p. 433; Feldman, Romine & Bockting, 2014, p. 3; Clements-Nolle et al., 2001, pp. 70, 76); high numbers of sexual partners (Kenagy and Hsieh, 2005, p. 195; Herbst et al., 2008 p. 2; Pitasi et al., 2019, p. 112); illegal drug use (Operario and Nemoto, 2010, p. 2; Herbst et al., 2008, p. 2; Neumann et al., 2017, p. 208; Clements-Nolle et al., 2001, pp. 70, 78), having been incarcerated and being stuck in a perpetual cycle of poverty and illicit means of making money (Scheim et al., 2016, p. 6), and sleeping with other at risk populations including gay men (Sevelius, 2009, p. 399; Chen et al., 2011, p.660; Lemons et al., 2018, p. 128; Pitasi et al., 2019, p. 112; Feldman, Romine & Bockting., 2014, pp. 8-9; Clements-Nolle et al., 2001, p. 70; Dadasovich et al., 2016, p. 1; Scheim et al., 2017, pp. e89-e90; Reisner et al., 2010, p. 502) and trans women (Chen et al., 2011, p. 660; Dadasovich et al., 2016, p. 1). There are more risks that the literature revealed that specifically apply to transgender communities, which are not covered in focusing on people with cisgender identities. These more niche risks can include: injection black market hormones (Herbst et al., 2008, p. 2; Neumann et al., 2017, p. 208), comorbidities with mental health issues and self-esteem issues that lead to unsafe sexual practices (Reisner et al., 2014, pp. 3, 5-6; Operario and Nemoto, 2010, p. 2; Newfield et al., 2006, p. 1448; Dadasovich et al., 2016, p. 2), avoiding care and treatment services due to discrimination (Sevelius, 2009, p. 407; Chen et al., 2011, p. 661; Yehia et al., 2013, p. 774; Scheim et al., 2016, p. e94; Stephenson et al., 2017, p. 435; Clements-Nolle et al., 2001, pp. 70, 80; Bauer et al., 2014, p. 713), lack of information provided to the community (Reisner et al., 2014, p. 6; Yehia et

al., 2013, p. 774), lack of concern or low prioritization of HIV risk (Operario and Nemoto, 2010, p. 3; Stephenson et al., 2017, p. 434; Clements-Nolle et al., 2001, p. 79), combination of other risk factors with low income largely due to discrimination (Lemons et al., 2018, p. 130; Clements-Nolle et al., 2001, p. 70; Bauer et al., 2012, pp. 5, 9) and overall transphobia leading to abuse (Jadwin-Cakmak et al., 2019, pp. 2-3; Poteat et al., 2019, p. 395). Overall, it was found by many of the studies that the average recipient of diagnosis was young, financially unstable, and often had comorbidities that increased their risk.

Each subgroup and subculture within an at-risk group is likely to have its own specific risk factors that are unique to that particular group. It is also crucial to understand that intersectionality is pivotal to creating the risk profile of an individual. Being transgender places you in a specific risk group, but even so being a trans man gives you a different reality than being trans feminine. There is intense pressures and risk profiles that are additional to the ones being listed in this review for those that are trans men of color or trans men of varying sexualities, for example, and these cannot be ignored when having conversations as a healthcare provider or a researcher with individuals of intersecting identities. Regardless of the rising urgency of treating and reaching out to these groups, little concise information is present. Transgender men especially suffer from a lack of concise or varied information whether it is on HIV issues or general health. Furthermore, amongst the limited transgender specific services that exist, many do not tailor to the needs of young trans people or transgender men (Wolf et al., 2016, p. 85). From the little information that has been gathered, however, researchers have found a few extra risk factors for the transmasculine community that have no lived experience in other groups studied (for instance, gay cisgender men, cisgender women, and transgender women). These transmasculine specific factors include: A shift in sexual desire/orientation after starting

testosterone with some individuals citing increased libido and for others a new interest in men (Sevelius, 2009, pp. 399, 402; Stephenson et al., 2017, p. 433; Feldman, Romine & Bockting, 2014, p. 11; Clements-Nolle et al., 2001, pp. 76-77; Dadasovich et al., 2016, pp. 5, 7; Scheim et al., 2017, pp. e90, e94; Reisner et al., 2010, p. 507); bodily changes after starting testosterone including vaginal dryness that can lead to easier vaginal tearing (Neumann et al., 2017, p. 208; Dadasovich et al., 2016, pp. 5, 8); and unsafe sexual decisions/not setting sexual boundaries due to desiring gender affirmation from sexual partners or not being able to achieve orgasm as effectively (Rowniak et al., 2017, p. 306; Sevelius, 2009, pp. 403-404; Reisner et al., 2019, pp. 332, 341-342; Stephenson et al., 2017, pp. 433-434; Feldman, Romine & Bockting., 2014, pp. 11-13; Dadasovich et al., 2016, p. 8; Scheim et al., 2017, pp. e90, e94; Reisner et al., 2010, pp. 506-507). Testosterone specifically was found to have other unexpected effects on transgender men including mood swings, troubles with emotional processing as the transition occurred, and a new-found sense of emotional detachment that allowed some participants to be able to filter out negative emotions or situations that would interfere with achieving their desires and wants (Dadasovich et al., 2016, pp. 7-8). It is important to note that gender affirmation is often a key goal for those that have a transgender identity. For trans men, especially those that have stated having a new interest in cisgender gay men, there has also been mentioned a struggle that comes to fitting in to the gender and masculinity norms of gay men. Some trans men have stated that the fear of being rejected for not fitting into the traditional image or body shape of a cisgender man has led negotiations about condom usage during sexual encounters to be less of a concern (Reisner et al., 2019, pp. 341-342). There has been confusion if these risk and experiences change with the age of the trans individual or how long the individual has been transitioned and “passes” but it is believed that these at the very least lead to increased challenges in negotiating

safe sex with their partners and interacting with healthcare professionals (Harper et al., 2019, pp. 33, 37, 40; Sharma et al., 2019, p. 53). Age, however, has not been factored into many of these risks in the research but is likely that age also adds unique outcomes associated with other arising medical issues (Reisner et al., 2017, p. 3320; Harper et al., 2019, pp. 33, 40; Brennan et al., 2012, p. 1755). Each of these challenges unique to the transgender male perspective speaks to the intricacies of the subcultures within the LGBTQ+ community and show that there are often unseen boundaries set between them.

An important note to make within the analysis of risk factors and what we know about transgender men is that most of the collected information samples from predominantly metropolitan, white areas even if people of color are mentioned in the study. What little information that is present in these studies is not enough to make generalization about the experiences of transgender people of color, regardless of their specific identity. This suggests that quantitative research's desire for statistical significance affects way more groups than just trans men and is likely a contributing factor to why these groups are not reached by current HIV/AIDS programs. It also could point to the idea that having multiple minority identities that overlap places you at added risk of falling through the cracks of the current systems. Intersectionality with other identities is crucial to understanding how someone interacts with organizations and systems, with race being a primary concern. Race is often a determiner in the level and quality of care that a patient receives, with people of color reporting higher discrimination and being less likely to be believed about their own experiences (Herbst et al., 2008, p. 12; Rowniak et al., 2017, pp. 306, 310-311; Poteat et al., 2019, 393; Chen et al., 2011, 662; Poteat et al., 2016, p. S216). There are individual risk factors for each race and ethnicity that could lead to differing risk profiles, but unfortunately, very little of the current research on

trans men focuses directly on people of color, regardless of gender and/or sexual identity and statistics about race/ethnicity are stated in terms of defining their sample demographics. This is considerably odd as people of color have been the victim of considerable abuse/mistreatment/experimentation throughout the history of the medicine and are still one of the highest affected groups regarding HIV (Herbst et al., 2008, p. 1; Clark et al., 2016, p. 2275; Rowniak et al., 2017, p. 306). This places them in a position similar to transgender men in the sense that their specific needs and fears are not being addressed, largely due to being ignored by current methods of research and care. Going forward, in both improving care and treatment, this population needs to have focused, inclusive, and participant-led research that is aimed at providing sensitive and effective care for HIV, like what we are slowly seeing occur with the transgender male community.

I chose to specifically focus on transgender men given my closeness with this community. I identify as a transgender pansexual man after having struggled with understanding what I wanted my gender identity and sexuality to mean for me. I face considerable discrimination as a pre-transition trans man and often must hide portions of my identity in any interactions I have with medical providers. My intersecting identities add additional stressors that, while finding culturally competent physicians would be ideal, it is not feasible. My interest in studying HIV/AIDS and how it effects trans men connects to a lifelong passion of mine to spread more awareness about the disease and tell the stories of many that have been purposefully silenced. I understand that as a community trans men are often overlooked or studied in tandem with trans women when it comes to healthcare and wanted to compile what was known about trans men's sexual health and HIV risk and find spots where information was lacking. What is currently known is recursive and needs to be more critically analyzed with an intersectional

approach. In doing this research I aimed to find the main concerns and barriers that led to the patterns in research that were present in an aim to call for action to remedy them. Overall, I am attempting a broader critique of the existing literature about HIV/AIDS and trans men and the current methods/methodologies of research that enable trans men to be consistently overlooked. In doing so I aim to maintain a frame of intersectionality that considers further barriers in research and healthcare that add to the oppression of trans men, including race and class. It is impossible to separate all an individual's identities from how it affects the healthcare that they receive and therefore it will be a crucial consideration throughout my research. Overall, the purpose of my research is to create a comprehensive source of information about trans men in regard to the HIV/AIDS continuum of care rather than having researchers search for individual tidbits found throughout larger conversations about the risk of the transgender community. It is evident at this point in the epidemic that the research that is currently being done is not reaching communities that are at risk but there is surprisingly little critique or question as to why this may be. My research also serves a secondary purpose as a call for action for researchers in the multiple disciplines involved in HIV/AIDS research in minority communities including public health, epidemiology, psychology, sociology, and gender and sexuality studies among others for improved interdisciplinary work to be able to effectively help improve this community's interactions along the HIV/AIDS care continuum. Ultimately, I wish for there to be active change on multiple levels of the health care system for trans men, both for treatment/care of HIV but overall, as well. Given that policies and legislation and eventually changes to healthcare practices stems from research being done and its results, to bring about this change we must start by changing how the research is done.

Current epidemiological research being done in understanding the relationship between HIV and trans men is generally done via archival data from databases or medical records or through voluntary study sessions that are generally based on convenience samples (Chen et al., 2011, p. 659; Shover et al., 2018, pp. S277-S278). Each method has its advantages and disadvantages but overall, they rely on assumptions and beliefs about a community and don't always include trans men in the process of completing the research, meaning that trans men are more often included only as patients or case studies rather than being actively engaged in research on their own community. Using medical records to determine transgender status can be misleading as transgender bodies can be at various stages of transition if the individual decides in the first place to use medical gender affirmation treatments. This process often has the opposite effect of helping the transgender male community as it perpetuates a medical view of a person's identity and can downplay societal factors that lead to the formation of a gender identity. Individual voluntary studies have their downsides as well as the information gathered from this method, while is helpful in learning about the actual lived experiences of the community, are often not generalizable to the wider transmasculine community. Studies done in this matter tend to utilize American, metropolitan resources including HIV treatment clinics and LGBTQ+ friendly entertainment venues (Lemons et al., 2018, p. e15; Schema et al., 2016, p. 1; Feldman, Romine & Bockting, 2014, p. 3; Stephenson et al., 2017, p. 431). The research participants are small convenience samples that are comfortable disclosing their status and generally live in the areas in which these studies take place (Melendez et al., 2006 pp. 24, 27; Schema et al., 2016, p. 1; Bauer et al., 2014, p. 717; Vaitses-Fontanari et al., 2019, p. 289; Stephenson et al., 2017, p. 424; Poteat et al., 2019, p. 393). Few studies have been done in other contexts, including how non-American transgender men are affected or how one's proximity to current HIV

treatment/care facilities affects their care and discrimination; in other words, what do we see in metropolitan versus rural settings (Poteat et al., 2019, p. 393; Reisner & Murchison, 2016, pp. 13-14; Vaitses-Fontanari et al., 2019, pp. 282-289; Poteat et al., 2016, pp. S212-S213; Bauer et al., 2012, pp. 2, 9; Scheim et al., 2020, pp. 6-9). Given the different cultures and realities present (based on things like race, class, and access) in these areas, there is likely going to be a shift from the data that has already been collected that hasn't fully been discussed. All in all, the current research methods of analyzing medical charts and databases for patterns tends to separate individual identity terms from legal information and tends to lead the individual to be a data point rather than a potential client/participant in programs that use their data.

For their data to be considered usable in quantitative studies, a statistical significance is desired to show that there is an impact on this community, and it is this logic that leads to the recursive pattern of ignorance of trans men in HIV/AIDS research. This is largely tied in with the desire to be published, especially in higher prestige journals. This publication bias as it has come to be known leads specific communities and issues to be ignored and set aside for favor of concerns that either have a higher readership value or are more relatable to a wider group, rather than subcultures. In fact, some critics of the current system have noticed this disheartening trend stating, "Researchers generally assume that increased research leads to greater attention to health issues and better health conditions; however, in some instances, increased research can lead to incorrect or harmful notions relating to groups of individuals" (Melendez et al., 2006, p. 22). With all the concerns about how the information is collected for the transgender male community, it raises questions about its further use and actual helpfulness.

Chapter 2 — What are the changes that we see?

It is important to keep in mind while investigating resources and studies about HIV/AIDS that the timeline is relatively recent compared to other epidemics. The first cases, albeit under the misleading name of Gay Related Immune Disease (GRID), were identified by the CDC in 1981. Due to the political and social climate regarding the epidemic, the call to research was taken up much later than likely needed, only really gaining steam in the mid to late 1980s. This original research was aimed at the communities that saw the most devastation from the identification of the original cases, which mostly concerned gay men. As the disease mutated and the diversity of its patients became more apparent to the dominant culture of straight, cisgender individuals, programs and research shifted to include people of a variety of sexual orientations and backgrounds, largely due to massive protest from the affected marginalized groups. While transgender people have been present in the community and pivotal to movements for LGBTQ+/queer liberation, it wasn't until the late 1980s that the acronym and the agenda for liberation including transgender individuals. It is because of this demand for research and treatment that the CDC would eventually have to expand its definition of at-risk groups for HIV/AIDS to inform further legislation about healthcare and disability benefits for those affected (HIV.gov, n.d., Table Section 1992). The CDC definition for symptoms and at-risk groups would not change until 1992 because of such protests (HIV.gov, n.d., Table Section 1992). Prior to this landmark change, women were largely ignored in research as a possible population unless they had contact with at-risk men. Similarly, we don't see an inclusion of transgender people in research until after this change in definition, around the mid-1990s. Unfortunately, this pattern of excluding groups that are not thought to be at risk is something that continues today, with even the considerable amount of transgender HIV literature today being targeted around a select group

— transgender women.

Transgender women are a pivotal group to study, and in fact, are estimated by the CDC to have a rising number of cases that place this group as an at-risk group alongside the most affected groups of gay men and drug users (CDC, 2019, Section Numbers). This rise in prominence likely coincides with the rising amount of literature focusing on their specific community's needs. As of right now, most of the research that states it is focusing on “transgender people” or the “transgender community” uses a lot of information from the transfeminine community or uses data of trans men grouped from very small convenience samples to generalize about their risks (Melendez et al., 2006, pp. 24, 27; Lemons et al., 2018, p. e15; Stephenson et al., 2017, p. 424; Sharma et al., 2019, p. 54). Of the sixty papers that were studied for the purposes of this critique, over half (forty-eight) of the papers were published between 2010-2019. The earliest published work that was included was from 1998 and some of the most recent literature was published in 2020. Of the twelve remaining papers two were from the late 1990s, seven were published between 2000-2009, and three papers were published in 2020. These papers included ones focused directly on the transmasculine community, but also featured papers that considered the whole transgender community. Over the 20+ years that have passed since the start of transgender inclusion in HIV research, there have strides in some regards, but still similar troubling patterns that we saw early in the research process. Papers focusing on the whole transgender community were able to provide information regarding transgender women but information regarding the transmasculine community was consistently lacking. One pattern that was seen was papers citing that there was not a significant enough risk detailed in transgender men, which indicated low risk, but implied that if their sexual partners were in high-risk populations that there might be concern. These decisions could be made with or

without the inclusion of trans men inside their study design. This has been called out by some researchers including Schema and his colleagues going so far as to state that “Exclusion of trans MSM from research based on their natal sex is arguably unethical and contributes to their invisibility in the HIV response” (2016, p. 6). Other papers based a considerable amount of their information on the data they collected on trans women and made hypotheses about the generalizability of their data to the trans masculine community. The last, and possibly most concerning, pattern seen in these papers is the conclusion made that there is a lack of information on the community and that determining the risk factors or understanding more is a topic of further research. This commentary is often present in the papers concerning the transgender community as a whole, but unfortunately is seen somewhat in papers with a sole concern of trans men. This pattern is seen from the early papers in the late 1990s to early 2000s all through the papers published in 2020, without much headway being made as “topics of further research.” If more is to be done with reaching this community, more needs to be done to combat the continued exclusion of trans men from HIV research or the allegation of this community to the back burner due to lack of interest or data.

Chapter 3 — What could be skewing this data/is this data accurate?

While the understanding of the risk factors of trans people and even understanding how these may have changed over time, it is clear that there are base assumptions being made by those making the study questions or those treating the sexual health of transgender men. Assumptions in research allow for bias in both healthcare but also in how research is conducted. These assumptions could lead to the results that have already been collected to be skewed but also lead further care and research to be biased in similar manners. This is incredibly worrisome as it calls into question the validity and accuracy of the little information that we have about this community. These assumptions are largely based on faulty or misleading information, but they are common and often form the basis for design decisions for studies/questions or how clinics are run. Throughout the literature review, I found three common assumptions that were either present in the work itself or were stated in their paper to be prevalent throughout the healthcare field that they were studying. The first of these is the assumption about the sexual orientation of trans men only from hearing their gender identity. Many transgender men have stated to researchers a common experience of having individuals along the healthcare spectrum assume that they are heterosexual trans men (i.e., they have cisgender female partners). (Kenagy and Hsieh, 2005, p. 205). This homophobic and heterosexist assumption is often made without asking the patient of their own sexual identity and can often inform the type of care or treatment the trans man will receive, especially regarding their sexual health. In reality, gender and sexuality are separate identities and trans men have a wide variety of sexual orientations. In other words, some trans men have been denied sexual health care and testing while others don't even have the conversation with their primary care giver. A second assumption that is made about this community is simply about the type of body you are expected to have to be labeled a trans men.

Given that each individual decides what their level of comfort is in regard to how their body displays their gender identity there is not one set body type that can be seen throughout the trans masculine community. Some transmasculine individuals use gender affirming medicine including hormones and surgery, some don't, and others use individual parts of these treatments to reach their ideal body style. However, in the medical field there is a large assumption that to be classified as a trans man that there is either a psychological diagnosis component (some providers require a diagnosis of gender dysphoria to qualify for services) or that one needs to transition to the body image of the individual's gender identity (i.e., if you are a trans man, you should be under hormone replacement therapy or bottom and/or top surgery to look more like a "traditional man"). Not only does this assumption severely limit the realities of those with transmasculine identities that do not wish to medically transition or those that are not on the binary, but this assumption also has other implications. This assumption has given more stock to the medicalization of gender identities and the idea that there is a psychological issue that causes gender and sexual identities that are considered "abnormal" by society. The last common assumption that's seen is largely due to their lack of visibility in research. Some researchers assume that because there are a low number of transgender men in the data that it equates to a low risk for the transmasculine community as a whole (Kenagy and Hsieh, 2005, p. 195). In other words, if we aren't seeing the numbers or a statistical significance in research data that it reflects the needs of the community rather than a statement about the limitations of their study design. This assumption has led further study designs to exclude trans men on the basis of there not being a risk in this group above the base line risk of the general population. This leads to the extreme possibility of erasing this group from treatment and care plans, despite their reality of being at risk.

These biases are generally attributed by researchers to be due to the barriers of studying this group. These barriers stem from both sides, with research and care facilities not possessing methods sufficient to reach this population but also realities of the trans men that hamper their ability to be retained in research in care. A big concern for public health and epidemiological research and care are the strict definitions and labels used to describe the people and communities that they are hoping to study. Labels provided in the research of the biological and public health field's research/experiments often do not sufficiently capture the population that they aim to target. When researchers assume labels to be understood by the reader, misclassifications occur far more frequently. Lemons et al. in their paper *Potential Misclassification Of HIV-positive Persons As Transgender Men* remarks that often the label is determined by others than the individual: "Technical notes in New York City's surveillance report acknowledge that transgender status may not reflect the individual's self-identification; MMP [Medical Monitoring Project] relies on self-report, whereas surveillance data are obtained from diagnosing providers, medical chart reviews, and case report forms, in addition to self-report" (2018, p. e15). Being added to these national report systems only occurs once, often at the time of diagnosis and your gender at that time is recorded (that is if the service even requires that information). This does not consider that gender identity and gender expression can change over time, sometimes drastically, depending on the individual. This can lead to further complications with these people being retained in care and treated effectively. Barriers extending from the national level, include the fact that transgender status (i.e., identity as a transgender individual), and in some places sexual orientation, isn't collected in many national HIV/AIDS databases (Chen et al., 2011, p. 659; Shover et al., 2018, p. S277) and these issues extend further to the organizational and individual levels. In fact, it has been found in some studies that

disparities in gender minorities are obscured when gender identity and sexual orientation are not reported alongside HIV diagnosis and this prevents nuanced conclusions being formed (Shover et al., 2018, p. S277). Some of the barriers that we see start at the prevention stage of health with a general lack of information about HIV and sexual health being disseminated to care providers and even to the trans masculine community itself. This involves information about side effects, particularly how it interacts with existing hormone therapy regimens, of medications like PrEP (Rowniak et al., 2017, p. 306; Fisher et al., 2017, p. 212); about the risk factors that individual trans men might face (Rowniak et al., 2017, p. 308; Reisner et al., 2010, pp. 501, 504); and even about the importance of using condoms regularly (Rowniak et al., 2017, pp. 308-309). Even if information is spread to the community, some trans men interviewed by Reisner et al. in their needs assessment of the trans masculine community, stated that the information provided for sex education or HIV is not focused on transgender men or often is unhelpful (2010, p. 510). From this unhelpful information, some trans people avoid testing simply for the fear of a possible result due to horror stories that are spread more rapidly in the community (Scheim and Travers, 2017, pp. 991-992). For example, there is considerable and valid concern from trans men of color about the risks of government funded medications like PrEP or studies due to history of being taken advantage of by researchers, health care professionals and government bodies (Rowniak et al., 2017, p. 306). It has been found that this might lead to a lack of concern about HIV infection possibly because they simply thought that there was little concern (Fisher et al., 2017, 211) or because they were more concerned with risk of pregnancy than with risk of HIV/STIs (Scheim and Travers, 2017, 992; Fisher et al., 2017, 211). With limited knowledge on both sides (health care provider and individual transgender patient) it leads to research being insufficient to where researchers aren't developing methods that reach trans men outside of

metropolitan areas where services and access are more prevalent (Fisher et al., 2017, pp. 213-214; Seelman et al., 2018, 16). Even the specific language that is used by a research team can cause concerns with having good rapport with certain at-risk communities while interviewing them. If a positive relationship isn't formed, it can be a significant barrier to obtaining further data on this community as many trans men are afraid to disclose their status to researchers for fear of discrimination (Scheim and Travers, 2017, pp. 990-991, 993; Fisher et al., 2017, p.214). This severely limits the overall generalizability of the information as those that do not live within metropolitan areas and have less access in general to care and other transgender community in general (Rich et al., 2017, 8; Melendez et al., 2006, p. 23; Stephenson et al., 2017, p. 424).

There are also realities of having a transgender identity that directly tie to health care services and the ability to be retained in the current care continuum. A lot of transgender people face intense amounts of discrimination in many facets of their lives which can affect their ability to have housing, maintain a job, and even having/maintaining relationships. The economic realities of many transgender people prevent the initiation and continuation of care. The economic concerns can take the form of unstable housing, lack of employment due to discrimination (which may lead to the necessity of illegal activities to make money and therefore the risk of incarceration), unstable income, or full schedules due to needing multiple jobs (Rowniak et al., 2017, p. 307; Fisher et al., 2017, pp. 213-214; Westmoreland et al, 2020, pp. 1310-1311; Harper et al., 2019, pp. 35, 37, 40). On top of this, some treatments or preventative options like PrEP are often not covered by most insurance companies and the current assistance programs consistently in the balance, making them not feasible for many low-income transgender men (Rowniak et al., 2017, p. 307; Jadwin-Cakmak et al., 2019, p. 2; Westmoreland et al, 2020, p. 1310). Further incapacitating for many trans men, especially those below the

poverty level, are laws and policies currently in place that put requirements on receiving care, which could include an age limit, lack of health insurance/coverage on current insurance for HIV or sexual health care, lack of an ID (either having one at all or having an ID that lined up with their gender identity/name), and immigration status (Harper et al., 2019, p. 37). Dean Spade, a lawyer and professor of law at Seattle University explains the legal positioning of trans people as "being at the juncture of erasure and hyper-regulation in the law" (Spade, 2009, p. 289). On one side there are laws that refuse that transgender persons and their identities exist but on the other side there are a multitude of policies that require medical authority and documentation to determine gender classification in bureaucratic record keeping and identification systems. Spade's research has tried to analyze the governmental use of these laws and has found that the laws are used as tactics for discipline, sovereignty and biopolitics (2011, pp. 2-3). Spade argues that, "This understanding of laws as tactics that are a part of a decentralized context in which multiple and competing goals coexist is exceptionally useful for conceptualizing the limitations of legal equality and inclusion claims and for accounting for the distributions that occur through certain vectors of population or identity" (2011, p. 6). In our case, understanding that the government tactics of controlling the dispersal of resources and defining the understanding of gender allow for the control of certain communities, in our case transgender people. These laws largely continue a cycle of poverty that is nearly impossible to get out of without serious intervention and has been found to be largely responsible for lower quality of life because even if an individual desires care, it is not reasonable. To legally go around these policies it requires additional funds or a higher income, which is often, not an available option to better the care options of the trans masculine individual. It is precisely because of repetitive cycles that Spade states that in prioritizing legal work for transgender individuals that there needs to be a bottom-

up approach where if you are seeking to reform oppressive institutions/organizations than you must base your reforms on how the most vulnerable people in the community will be impacted (2009, p. 311). All reforms should include the most disenfranchised and should take account of the multiple oppressive systems stifling the success of this group, incorporating critical analysis systems of Critical Race Theory, women of color feminism, critical disability studies, queer people of color critique as well as critical systems discussing the impact of classism, colonialism, and capitalism (Spade, 2011, p. 1). In taking these viewpoints into account Spade agrees that we will likely find that the criminalization of sex work, drug possession/selling, and homelessness are considerable barriers of survival and success for transgender individuals and focusing on improving these systems will possibly have more impact on the transgender community than passing hate crimes and anti-discrimination laws (Spade, 2009, p. 311).

Even if clinics and healthcare services are available and economically feasible for some trans men, it is often a concern whether they will be able to utilize these services without feeling stigmatized, even if these services are specialized in HIV care or LGBTQ+ care (Rowniak et al., 2017, pp. 307-309; Scheim and Travers, 2017, pp. 990, 993-994; Rodriguez et al., 2017, pp. 978, 983; Jadwin-Cakmak et al., 2019, p. 13; Harper et al., 2019, p. 35). It is important to note that this transphobia/trans discrimination is coupled largely with the stigma of being HIV+ or testing for HIV as well as discrimination for participating in sex work (Harper et al., 2019, p. 35). Some researchers like Rowniak et al. highlighted voices of their participants commenting on internalized bigotry and divisiveness within the LGBTQ+ community as a whole stating, “It was felt by the majority that the umbrella term LGBT really means gay and often excludes the T for transgender. Even among those doctors who claimed experience with a transgender population, the feeling was ‘they’ll be like, oh, maybe I had one patient and then they’ll say stupid stuff’”

(2017, p. 308). These specialized clinics are often the last resort of many trans men as going through the traditional medical system, discrimination is almost considered inevitable. The most consistently cited concern by the transgender male community was that finding a trans-competent provider was often the deciding factor for continuing their care (Rowniak et al., 2017, pp. 308-311; Scheim and Travers, 2017, pp. 993-994; Rodriguez et al., 2017, pp. 974, 978; Harper et al., 2019, pp. 33, 35, 39; Poteat et al., 2019, p. 394). Their current experiences with the healthcare system are fraught with discrimination which is seen ranging from improper use of preferred name and pronouns to being denied care. This experience is largely found to be the same at every level of the HIV continuum of care, from prevention to being retained in care. The decision to disclose transgender status or talk about one's sexual preferences is also a considerable barrier for many trans people with some avoiding care altogether for these reasons (Scheim and Travers, 2017, p. 992; Fisher et al., 2017, p. 214; Harper et al., 2019, p. 38). If care is actually given to these individuals, and they chose to disclose their transgender status, much of the process is found to contain weird assumptions about the sexual identities and roles of trans men (Rowniak et al., 2017, p. 308; Fisher et al., 2017, pp. 212-213). Others have found that some providers exclude them from making decisions about their own bodies and their subsequent care, with researchers like Scheim and Travers noting "[...] reluctance or refusal to provide sexual health services to trans men may be related to misconceptions that they are at low HIV and STI risk. In line with this observation, some trans MSM described being explicitly discouraged from testing by healthcare providers" (2017, p. 992). Even if transgender men seek out health care, it has been found that their treatment and care plan does not reflect their interest and can largely be informed by the beliefs of the provider. This can include the administering of preventative treatments like PrEP, despite numerous research and studies pointing to the effectiveness of PrEP

as well as leading health officials suggesting its usage, PrEP uptake has been incredibly slow with only an estimated 10% of CDC determined at risk populations being prescribed/using it (Westmoreland et al., 2019, p. 1305). The exact cause for this discrepancy is unknown but could stem from multiple barriers including care providers not talking about sexual health, providers not believing an individual is at risk, not wanting to prescribe treatment “for a disease the individual doesn’t have” even though it is preventative, or a mixture of the former beliefs tied to insurance companies not willing to cover PrEP. Regardless of the reasoning, it destroys prevention efforts to curb the spread of the virus and could explain why there is a barrier to developing health sexual practices in certain communities.

The previous analysis of barriers is largely based on an U.S. system and is based on the influences of U.S. health care and U.S. policies. Most of the papers looked at took place within the populated American cities of San Francisco and Los Angeles, California; New York City, New York; and Boston, Massachusetts. Even between regions and states there is considerable differences in rates of infection, but many of the barriers to care/research and the basic risk profile is the same with the exception of PrEP usage. Geography played an important role in all participant groups in Westmoreland et al.’s study, which monitored uptake of PrEP in those that had never used PrEP before, those that currently used it and those that had formerly used it (2020, p. 1304). In this study, Westmoreland et al. aimed to find out whether or not location in the U.S. would be a signifier for how likely you it would be that you were prescribed or using PrEP for HIV prevention/treatment. In other words, Westmoreland et al. were trying to create a map of sorts of where PrEP-naïve, former PrEP users, and current PrEP users could be found so patterns of access could be analyzed. PrEP-naïve people were most often from the Northeastern U.S. and those that currently used PrEP were more likely to be from states that had Medicaid

healthcare plans available whereas the most PrEP-naïve users were found to be residing in the Southern U.S. (Westmoreland et al., 2020, pp. 1309-1311). The most considerable difference is between metropolitan and rural areas as there is a marked difference between the two regarding overall health care outcomes, let alone the HIV care continuum. In fact, it is found that currently the Southern U.S. is most affected by the current epidemic (Westmoreland et al, 2020, p. 1310). It is found that positive health outcomes are lower the further you are from care and this extends to HIV treatment and care, even with trans men. Research has yet to effectively change its methods to form any conclusions on the risk profiles of rural or less populated cities, as even with attempting to use Internet surveys those without Internet access or capable devices would be excluded from your studies (Poteat et al., 2019, p. 398). While some of the papers had a national focus, aiming to include more than the average four cities, couldn't come up with conclusive information about transgender men and cited many of the aforementioned barriers. Even in papers that tried to compare U.S. research/care to a more global audience came up with sparse, "insignificant" data where conclusions could not be made (Reisner & Murchison, 2016, pp. 13-14; Vaitses-Fontanari et al., 2019, pp. 282-289; Poteat et al., 2016, pp. S212-S213; Bauer et al., 2012, pp. 2, 9; Scheim et al., 2020, pp. 6-9). There are likely many additional barriers to gathering global data about HIV, especially regarding transgender individuals but the most prominent one is about the definition of transgender itself. Many cultures, especially those that are not based on Western ideals, have differing views and definitions of gender. Some cultures have specific names for people in their communities that have similar experiences to U.S. transgender people, but others have understandings of gender that are not equivalent to the Western binary. There was a general consensus among the papers operating with global data, however, that regardless of the specific labels used to explain gender and sexual identities,

common barriers to care are still financial concerns and gender discrimination (Scheim et al., 2020, pp. 5-6). One of the biggest barriers found in studying global data is that some nations have laws criminalizing being transgender or having a varying sexual identity and that directly would correspond with being able to obtain HIV care. Other nations don't have laws criminalizing transgender people but do in fact have laws against other LGB/queer identities, often regarding sexuality. In analyzing global data, it is imperative that the context of added legal challenges and barriers are understood in creating HIV/AIDS care and treatment programs to be able to reach these populations that are often made to hide to keep themselves safe.

One country that was consistently studied and showed some subtle differences in their HIV research and care continuum was Canada. It is important to note that the few studies conducted within Canada about transgender men were focused on the city of Vancouver, and the two provinces of Ontario and Quebec, which are densely populated, and it is subject to the same generalizability bias that we found in the U.S.. Overall, the rates of infection were similar in these areas so were many of the barriers to further research and care but there were two notably exceptions that lowered their rates below those of the U.S.. The first major exception was that are clauses and amendments in Canadian legislation that consider the civil rights of transgender people. While the individual biases of the researchers and care providers are present there is higher persecution of discrimination against gender and sexual minorities (Rich et al., 2017, p. 11; Bauer et al., 2012, pp. 10-11). In other words, the civil liberties of transgender people in Canada are protected even from prejudice that would be protected in the U.S. under "religious rights" and the transgender community as a whole is included in the creation of public policy. The other considerable exception that had an impact on care and retention rates was the needle exchange program present (at least at the time of the study) which allowed for healthy exchange

of intramuscular needles that are used by transgender people for hormone injections (Namaste, 1999, p. 96). This program at the capacity at which it is running is largely due to lesser criminalization of drug possession and use in Canada whereas in the U.S. programs of this caliber aren't funded. Intramuscular and intravenous needles are available at the pharmacy level as well, leading to a very low rate of needle reuse. While these show that there are subtle differences in the treatment of transgender people in the metropolitan cities of Canada, much of the information is again aimed at the transgender community as a whole and not necessarily at transmasculine people. It is also important to note that even with considerable differences in treating gender minorities, the current trends in healthcare regarding transgender people resemble the same problematic trends seen in the U.S.. This includes the assumptions made about sexual identities and roles and even avoidance of emergency rooms or services (Bauer et al., 2014, pp. 716,718). Unfortunately, there is still a considerable lack of information regarding the transmasculine community in Canada.

Another possible outlier regarding information about the transgender community is England. Kirwan et al.'s paper, "HIV prevalence and HIV clinical outcomes of transgender and gender-diverse people in England" revealed unexpected results about transgender men and gender nonconforming people compared to global averages and further suggested that there were no inequalities in receiving HIV care despite them facing higher levels of discrimination (2020, pp. 1, 7). Their exact phrasing is "Our findings indicate that the quality of HIV care in England is excellent for trans and gender diverse people. This is keeping with PHE data showing excellent outcomes for people living with HIV regardless of gender, sexuality, and ethnicity and geography" (Kirwan et al., 2020, p. 6). Further analysis of the results and conclusions from their paper lead the answer to be more inconclusive. This is one of the few papers that includes gender

non-conforming/gender diverse people within their results, which shows a little progress in reaching out to that community to gather data, but the transgender community is addressed as a whole and not split into its subcommunities (which some consider nonbinary people to be under the transgender umbrella terminology to begin with). The understanding of transgender that is used in the U.K. seems to operate similarly to how it is seen in the U.S. At the very least, the working definition of Kirwan et al.'s paper uses similar definitions to papers published in the U.S. and focuses more on the percent population of transgender or gender-diverse people in the U.K.. It is still important to realize there are issues with generalizability in their study.

Generalizability is a major concern as it suggests to policy makers and other researchers the level to which the results found in the paper with a small representative sample can speak to the experience of the wider community you are studying. In other words, for the data in Kirwan et al.'s paper to be generalizable it would mean that the conclusions found about the transgender community in their samples would be relatable to the greater transgender population of the U.K..

There are issues with generalizability, however, when the sample in your study is not representative of the community you are studying and if this occurs it means that whatever outcomes come from your data are unlikely to help the community you are reaching out to. Most transgender people involved in the study was found to be from London (57%) or other metropolitan cities and were primarily white (61%) (Kirwan et al., 2020, p. 3). This is odd considering the fact that London as a city has a largely person of color population compared to other English cities. This could suggest that like the U.S., race is a significant determining factor for the access to and the type of care that you receive in healthcare settings. Unfortunately, the paper does not analyze the possible reasons in which there are not more people of color transgender and gender-diverse people accessing their clinics and instead believe that they have

little need of their services. While the rest of their results stated a high percentage of patients of varying gender identities being retained in care (92% for transgender and gender diverse people versus 94% for cisgender people) the sample sizes were vastly different. Their transgender/gender diverse group totaled 150 patients whereas 82,115 participants were in the cisgender category. Only 10 (8 of which were retained in care) of those 150 patients were trans men and 26 were nonbinary or gender diverse, the rest of the category being transgender women. This brings to light the fact that despite their conclusion from this sample size is likely not largely generalizable to the whole of the transgender male community in England, let alone the U.K. or internationally. It seems that the care in the U.K. regarding HIV (which is largely unexplained and differentiated from international care) is efficient when people are captured by their current methods of education and outreach. Their data does not consider intersectionality, proximity to care, or even the experiences of the trans and gender diverse people regarding discrimination and therefore falls into a lot of the same pitfalls as we have seen in the U.S. and Canada previously. This does not mean that their claim of having effective care once in the system is not true and if it is, then it is a promising result for continuing to branch out their care.

With all the barriers present in research and medicine throughout all levels, from the organizational to the national and even global stage, it is extremely difficult to ascertain what the current data tells us. It is difficult to even decide whether the information is accurate and relatable to the communities that it says it covers. It can be said that even with the information that we have that there is a disconnect between what is collected and how it is used in care. With the lack of data on transgender men as a whole it is clear that the research, however accurate, is insufficient. Current research, regardless of field, largely operates on the scientific method and statistics to determine whether the information is based on chance or if it is usable, but these

methods have their limits when it comes to applications in other fields. These statistics determines the likelihood of chance in the data set and helps inform how usable the conclusions made on the data are. It is crucial to understanding significance that it is strongly influenced on the sample size and the smaller your population the more variable your values are. Almost all the papers that were studied in for this review had small sample sizes of transgender men (ranging from 4 to around to 150), and each stated this as a limitation of their research. If conclusions were in fact written based on the data that they created they often had low significance and led to conclusions that disproved their original hypothesis. Some took this to mean that the opposite of their conclusions was true, for example stating that their data shows that trans men were not at risk due to low significance in their sample. Others simply didn't include trans men in their conclusions at all or combined them in with their thoughts on transgender women. In any of the options, the overall outcome is an erasure of the realities of trans men and HIV, and it often leads to inaccurate information being dispersed based off premature conclusions that do not fully analyze the limitation of their work. With this information being spread as truth it affects further studies and healthcare outcomes while simultaneously allowing the community being studied to slip through every crack in the system.

Chapter 4 — How does this statistical significance have further consequences?

It is important to remember that the information gathered in either of the research or medical contexts that have been discussed have further implications. Research especially is used to inform further decisions all the way up to the funding and/or political level. This desire for statistical significance therefore is more crucial than just a p-value in the results section of a published paper. Of the papers reviewed that provided lenses for looking at the overall pressing concern of healthcare for marginalized groups, many used Ecological Systems Theory to show the multiple levels in which barriers were found that prevent the care from reaching transgender men. Through this lens you see that the individual transgender male is in the middle of a network of settings, each of which that adopt their own social interactions and affect the individual. The names of said networks change, however their meanings are relatively similar. These include: the microsystem or immediate level which contains the individual and groups like their family and friends; the mesosystem which covers the interactions between different microsystems which can include transgender people interacting with medical/health professionals for example; the exosystem which includes laws and policies that affect individuals, in this case antihomosexuality or antisodomy laws, private policies regarding insurance and what is covered by them, and even the socioeconomic class of the individual; the macrosystem that is the social beliefs, cues, and events that occur, in this case about gender and sexual identity and what it means to be a transgender male, that directly or indirectly inform interactions between individuals; and lastly the chronosystem which takes into account the factor of time and the patterns we see in the HIV health care continuum and how the policies and laws (found in the exosystem) change (Canoy, Thapa, & Hannes, 2019, pp. 3-4). With each of these levels relating to the situation of the transgender individual, it shows that a) this data that is collected by

researchers is not in a vacuum in which it will not be used and b) that further calls for change or research need to be cognizant of the interconnectedness of all these layers. These individual layers have an upward scale of individual microsystems interacting with services, like HIV clinics and healthcare offices run by federal or state funding but it also has a downward scale in which the laws created by these federal and state level governments severely impact the existence of minority communities and their continued success within their systems. With statistical significance often being the deciding factor to fund operations, research projects, and care goals, the continued lack of being able to reach that threshold in small research samples perpetuates the misconception that transgender men are at little risk and therefore further research and policies are not needed. Less research on this community can lead to less implementation of educational resources throughout the health care field and less inclusion in policies and laws that could improve health outcomes for the trans masculine community. Many critics of the current HIV healthcare continuum call for this system-based perspective to be used in each step of the care spectrum (even outside of the context of HIV/AIDS) and extend to each level of the care ladder from individual to policymaker (Divan et al., 2016, p. 83; Reisner et al., 2017, p. 3324; Harper et al., 2019, pp. 32, 41). The overall belief is that because each ecological system is interconnected that this gap in care, retention, and treatment of HIV in the transgender community, and in the focus of this review the transmasculine community, will remain until there is considerable change in equal rights in the law/political spectrums.

Considerable change has been made to get to where we are in the journey, and it is not surprising that more work needs to be done. There is a necessity for research as it provides data about communities and occurrences, but there are always limitations to these experiments and studies that should inform the conclusions being made. Statistical significance as a concept in

quantitative research can be considered a bit misleading as a term. It is helpful as it determines what the likelihood is of chance in your observed results and gives an idea of how confident the researcher is in their conclusions via statistical analysis. It is different from determining the cultural significance and impact of a researcher's findings on the studied community. In other words, it can help determine confidence in the validity of your research and the analyzation of your data, but overall, that doesn't necessarily translate to how well your data matches the lived experience of the communities that you are studying. In seeing only the numbers and statistics of research as your threshold for determining things that affect quality of life of marginalized groups, there is a dehumanization of the actual lived situations of many individuals. Syndemic theory which has been largely utilized to find spaces in the HIV care continuum where at-risk communities are being lost calls for considerable change in this manner of healthcare interactions. Using this model, researchers state that alongside diagnosis and determination of treatment, intervention with the transgender community must have consideration of the various body types and developmental goals of the different transgender identity alongside the means to include the needs of both adolescent and young adult trans men as well as adults (Operario & Nemoto, 2010, p. 4). One response to this dilemma in current research was to improve the technology of the collection methods to try and reach sections of the transgender (and in some cases specifically transmasculine community) that were not found via the current methods. Researchers used traditional survey methods using information displayed at various LGBTQ+ space spaces to gather volunteers but other methods included adding reminders and educational resources on LGBTQ+ dating apps and websites. Using the internet to spread awareness found that it could be a feasible tool to increase testing and education and can provide a tool to which transgender and gender nonconforming individuals can safely engage and choose their sexual

partners (Feldman, Romine & Bockting, 2014, pp. 13-14; Rhodes et al., 2016, p. 1453). Another response to this situation there is a rising presence of qualitative research about the lived experience of minority groups to better serve them. Many of these exist as interviews and panels of transgender male volunteers that have offered their ideas on topics of current care, discrimination that they have been faced, concerns and barriers to their care, and often most importantly what they would find helpful for support, education, and care regarding HIV. This research was then compiled into educational programs, support groups, and seminars created by transgender men, for transgender men. These pilot programs showed considerable positive feedback from trans men within the communities they were implemented in, implying that their reimplementation is a feasible method for reaching and educating this at-risk population (Reisner et al., 2016, pp. 189-202; Bockting, Rosser & Coleman, 2001, pp. 137-141; Martinez et al., 2019, pp. 1-6). A considerable amount of current information about the community and their relationship to HIV has been informed by pilot research programs like these and this system can be extended to gather further information that can inform future policy. An understandable limitation to these programs being introduced is funding, especially if building a system for trans/gender diverse people from scratch. It is important to remember that while formulating these programs, a need still exists with this community. In the meantime, if the resources or the funds are not present for development, then research and care options available to trans/gender diverse should match the gender that they identify with (i.e., a trans man should be offered resources and opportunities that would be provided to cisgender men) with the exception that their health care should be more patient-centric with their needs (Gianella et al., 2018, pp. 1464-1465). To reach out to this community involves using being willing to engage with them in a manner that is comfortable to their current needs and desires as a transgender man. The affirming

treatment of the participants was found by many of the pilot groups to allow the individuals to feel more comfortable disclosing information and voicing their concerns to researchers as well as recruiting more people for said studies (Jadwin-Cakmak et al., 2019, p. 12). The involvement of the transgender community in the research about them and assuring that the treatment of them is affirming and sensitive to their needs is crucial to be able to alleviate some of the disconnect currently seen between researchers and this community.

Qualitative methods were found to be considerably more effective in interacting with communities like trans men that are often hard to study outside convenience samples. Researchers like Melendez et al. surmise that this is the case because it allows participants from the community to discuss their lives in their own language and experience, as opposed to being led with researcher created questions (2006, p. 24). To further understand the experiences of trans men and the barriers they face regarding their health, the research will likely have to extend past the fields of public health and health care. Trans men have a unique community and culture and included in this are the stories and experiences of this community woven into art and literature. In these books, poems, art pieces, etc. you can find the lived experiences of trans men about transphobia, threats of murder and beatings, concerns about general health, conversations about what masculinity and femininity mean, and importantly, HIV and how it affects the community. In analyzing these works and using them to inform the qualitative research being gathered about this community, a more accurate picture of the effect of HIV on trans men can be seen. The main concern seen in comparing the conclusions told by qualitative research and written narratives directly involving trans men and the conclusions/generalizations of current quantitative research is that there is an incredible gap. In other words, the lived experience of trans men as told by them is vastly different than the image portrayed by the statistics reported

from researchers and public health organizations. Trans men display their understandings of risk and the reality of their situations which may place them at risk for contracting HIV but due to low sample size or a misunderstanding of the community, they are placed at low risk. Because the samples reached by current quantitative methods are consistently low this low statistical significance will repeat while the reality of the risks facing trans men are still occurring. To change the outcomes for trans men regarding HIV and healthcare lessons need to be learned from the qualitative experiences of the communities.

A prime example is the writings of Lou Sullivan, a trans male activist in the fields of transgender rights and the visibility of trans men, wrote his experience down in journals in vivid detail up until his death of AIDS in 1991. His journal entries were collected by a group of editors and trans visibility activist Susan Stryker to form a cohesive visible collection of his thoughts and experiences. He openly speaks to his fear and anger about receiving an HIV/AIDS diagnosis in the height of the AIDS epidemic (around 1980-1981), the assumptions made about his sexuality, and his experiences with finding providers willing to prescribe testosterone and do gender affirming surgeries when explaining he wanted to live as a gay man. He writes in a journal entry after a meeting with his psychologist from between the years of 1982-1986 that “He acknowledged that Laub’s refusal to operate on me smacked of homophobia and that someone needed to challenge that for the sake of gay rights. But to challenge him they needed a ‘squeaky clean’ case like Matlovich in fighting gay discrimination in the Army. But that I’ve been ‘doing everything with everybody’ and so they can’t challenge him” (Sullivan et al., 2019, p. 340). His experience throughout his life as a gay trans man was constantly dictated by the assumptions of other people, including his physicians that completed his top and bottom surgeries. Many physicians throughout his transition sought to make the process more medical

but giving him diagnoses of gender dysphoria as well as questioning their decisions to operate based on him wanting to live his life as a gay man (instead assuming that with his transition his preference for partners would change to straight women). After his diagnosis of HIV/AIDS in 1980 he writes in his diary that his doctor almost refused to complete his bottom surgery, writing “He was very concerned with himself — would he get AIDS if he stuck himself with the needle he’d use to sew me up? And he said a Black nurse who’d be attending agreed to sew me up if he didn’t want to. Pisses me off. I asked if this is a common normal occurrence that he’s sticking himself with needles. He of course said ‘no, but...’” (Sullivan et al., 2019, p. 364). On top of the transphobia and homophobia he experienced throughout his journey of medical transition, his AIDS diagnosis compounded the discrimination he faced. It is also highly problematic that the doctor was seemingly unconcerned with the health of his fellow nurses or Lou, seemingly only concerned with his own life. Lou doesn’t just focus on the negativity of his situation, instead trying to find solace as he comes to terms with his own impending death. He speaks to the community he’s built since he’s come out as a trans gay man, explaining that the solidarity leads to peace and the lack of it is demoralizing. He writes “Then this afternoon went to a social services agency that advertised a new support group starting up for transsexuals and transvestites with AIDS! Talk about minority groups. I was curious to see who’d be there, but I was the only one” (Sullivan et al., 2019, p. 364). Later on, through this section of the book the group slowly grows and many of the FTM participants even begin to look to Lou as a mentor and confidant. Throughout the last chapter while you see his progression to death he consistently writes about his feelings about death and what it means regarding his gender and sexuality. As his diagnosis came at the height of the AIDS epidemic, little more than palliative care and experimental drugs were available, how transgender (a term that while it existed in the 1980s had not gathered the

widespread adoption and popularity in use it has today and instead would have been more likely known as transsexual/transvestite to him) men were affected was not brought into consideration and he knew his death was insured when his diagnosis was revealed to him. It is interesting however to see his method of coming to terms as he writes, “I see the grief around me, but inside I feel serene and a certain kind of peace. My whole life I’ve wanted to be a gay man and it’s kind of an honor to die from the gay men’s disease” (Sullivan et al., 2019, p. 360). From Lou Sullivan’s written story and the life he lived we can determine an image of what HIV/AIDS looked like for trans men at the very height of the epidemic. Seemingly, from his description, his case look incredibly like the plight cisgender gay men were facing at the time save the additional transphobia he experienced from healthcare workers and even members of the queer community. Additionally, we also see that little to no support existed for trans men in the 1980s and what little that was present into the 1990s was created and started from the actions and work of Lou Sullivan himself and the community he built.

Lou Sullivan’s work provides an image of what the lived experience of trans men looked like in the past, showing the utter ignorance of the community. Another concern we need to analyze is the lived experience of trans men today and what has changed in the 30+ years since the epidemic started. From what we have seen earlier, research on transgender people and HIV started the mid to late 1990s and in-depth research into trans men and other minority groups like people of color took longer to be studied, and as such our academic understanding of these groups, especially how they intersect is limited. This is not to state that these groups, primarily trans men of color have been silent about their lived experiences. Similarly to Sullivan, the key to learning about the concerns still facing this community are best learned through their own art. An example of a purely literary collection of work is the book *Outside the XY* which contains a

collection of poems and prose about the experience of being a trans masculine or gender non-conforming person of color. The book explores a variety of cultures, with authors and poets explaining their Black to Indigenous to Asian to mixed heritages and how it informs their understanding of their gender and the unique challenges it adds to their lived experience. Each author lays out how their culture defines its understandings of gender and how they have changed, largely due to the effects of racism and colonialism. Nevertheless, the definitions are unique and inform the lived experience of each masculine person within the anthology, regardless of the term that they identify with. The editor of the book, Morgan Mann Willis, explains that the common thread of the anthology as:

“ Masculinity is not the thread of that connects our work. We are joined in our journey of re-learning that masculinity is not defined by men, or by patriarchy, or television, or its apparent need to consume and produce violence. Masculinity is an umbrella in the sky of identity. [...] Our relationship with and in masculinity is not rooted in any singular desire —aesthetic or sexual. We know that who we are simply *is* and requires no explanation”
(Willis, 2016, p. 9).

This understanding is crucial to understanding how masculinity is defined in other cultures and that the image currently seen in media is toxic and unrealistic for many. While these images of masculinity seep into these cultures, the reality is that those beliefs are often the product of colonization, slavery, and exploitation. While the book never focuses directly on the effect of HIV it still can provide critical insight into how their experiences with their culture shape their understanding of their body, their gender and sexuality, and even how they perceive institutions from which there has historically been abuse (while this could be the medical field, others talk

about the systemic racism present in the prison complex and educational systems). One of the authors encapsulates his experience as:

“Hi, my name is Kai M. Green. I am a Black Transman. I am a Black feminist, and my center is just as feminine as it is Black. I am struggling with my internalized homophobia, which for me, I think, stems from a fear of a loss of masculine privilege. [...] Sometimes I butch up my stride so that my walk is just a little bit easier, safer, but I know this is not the end. Being able to fit in, to move in line with, to assume a heteronormative position is not going to make more space for me or others who perhaps don't have the option or desire to fit in” (Willis, 2016, p. 167).

While it is inaccurate to state that Green's experience can be generalized to the experience of all trans men of color, aspects of their statement reveal that “passing” isn't the full goal for all trans people. Other trans masculine people of color are determined to separate themselves from current oppressive understandings of gender and for many, passing equates to hiding and constant code-switching. Analyzing Green's statement also reveals how pivotal being Black is to their experience as a feminist and a trans man. It reiterates a fine point that people of color have intersecting identities that add compounding challenges and risks. This is especially true when it comes to understanding their complex relationship to healthcare. Being a person of color impacts your level and quality of healthcare as does being a sexual or gender minority and often the effects are additive. Another author in the anthology, L. G. Parker reflects on the connections between race and gender in the Black community stating, “My queerness, it is believed, is holding back black communities, emasculating black men. I am to blame for how my body reveals to the boy how fragile and useless the standards of his masculinity are” (Willis, 2016, p. 72). Parker makes it clear that there is internalized homophobia and transphobia in the culture

that he grew up in but makes it clear as he continues with his piece that it stems from trauma of exploitation and emasculation at the hands of abusers and abusive systems. He continues by explaining, “Primarily, those forcing femininity on me were the women and girls who felt their own had been denied to them. [...] I understand that their forcefulness is due to their own trauma, though still no less offensive and at times traumatizing for me” (Willis, 2016, p. 73).

From his statements it is crucial to see that the abuse of people of color face (and have faced) in a variety of systems can follow generational patterns and can seep into all aspects of identity and reality from how they understand their sexuality and gender to how they interact with governmental organizations and especially the healthcare field. We do not see this conclusion clearly in the quantitative research, partially because research is often government funded and follows the patterns of abuse and exploitation of past studies. Until research considers other realities and involves people of color and trans people at every aspect of research (from planning and development to execution) then quantitative research will likely never analyze the biases and how it affects their results.

There is a work however that does more explicitly talk about the interactions of trans masculine people of color in healthcare settings. A book/pamphlet written by the Brown Boi Project called *Freeing Ourselves: A Guide to Health and Self Love for Brown Bois* is aimed at tackling this subject meant specifically for an audience of people of color. The book covers a variety of topics ranging from addressing mental, emotional and spiritual health and the trauma that is experienced from an intersecting identity to finding competent healthcare allies to understanding one’s body from all aspects, including how gender transition works for those that chose to medically transition. This book reads as a collection of medical information regarding the experience of people of color, written by people of color that openly and repeatedly

acknowledges and validates the trepidation that the community has with healthcare field. There is no explained definition of gender and sexuality used by the book to be inclusive to the differing understandings of masculinity in different cultures. Cole et al., write that the Brown Boi Health Manifesto considers that “As individuals and communities at the cross-section of multiple oppressions, we first reclaim our true selves from internalized stories of inferiority or gender superiority and celebrate the immeasurable value of all our lives. We will work to take back our decision-making power from those who do not hold our best interests at heart” (Cole et al., 2011, Chapter 6 para. 4). The book provides the relevant and accurate information that the community has called for and demanded to be able to take back their own autonomy regarding their health. In fact, the book has the underlying message that one of the ways to rebel against the oppression of intersecting identities is starting with self-love and the dismantling of internalized phobias forced upon you. In reality, the information that is spread throughout this book should be considered common education for healthcare professions and through systemic racism and transphobia, is not taught effectively or at all, revealing one of many reasons that trans men, especially those of color, are not seen to be receiving effective treatment both in overall wellness and that of the HIV care continuum.

Each of these books and anthologies provides a glimpse into the populations that organizations like the CDC and WHO characterize as high risk. In the writing is a wealth of information about the barriers to care, the prioritizations that these communities have to make, the discrimination and violence that these communities face, and even the response to being ignored and unseen in media and research. Each of these concerns are ones that are brought up by researchers in quantitative research, but unsurprisingly, due to small samples and or the setting aside of these communities, the questions never seem answerable via statistics and

numbers. Qualitative research provides some answers and reveals that the conclusions and generalizations made by quantitative means are often either inaccurate or incomplete when compared to the lived realities of these people. Continuing to use quantitative data in policy and research will further exacerbate the perpetual, cycle of being unable to study this community. For change to be made and achieving the goal of reaching the trans masculine community, the shift of research needs to change to incorporate trans men and their lived experience, including the intersecting identities contained within their realities. It needs to accountability for the injustices and ignorance of the past and work to validate the trauma that this has caused, especially for communities of color.

Further use of these pilot programs and more deeply analyzing first handwritten and art accounts of trans men are a few of many means to which improve education and care among this community, but these groups also revealed to researchers the main concerns of trans men when it comes to interacting with the care spectrum at all. One of the concerns mentioned was in fact a desire for a comprehensive education on the risks of unsafe behaviors and HIV and other aspects of sexual health as it relates to being a trans man (including pregnancy), especially in a way that was relatable to the transmasculine community, but this education was desired in almost every outlet of healthcare that they contacted with (Clements-Nolle et al., 2001, p. 82; Bockting, Robinson, & Rosser, 1998, p. 517; Rich et al., 2017, p. 8). A continued pressing concern for many transgender men is the discrimination and stigma that they face, especially in the health care community, regardless of STI or HIV diagnosis. The current system, including asking for treatments like PrEP, work on assumptions that individuals are comfortable discussing their sexual behaviors and risk factors with health providers in a system where transphobia is known to be rampant and affect the care decisions of some providers (Mayer, Grinsztejn & El-Sadr,

2016, p. S208). In fact, the impetus for education of their healthcare providers on what is needed for their treatment, care, and issues that they face as transgender men is often placed on the individual receiving care. In fact, it is found that often health personal and medical or insurance providers are untrained to provide proper, appropriate, and unbiased services to transgender patients, let alone doing so regarding HIV prevention and sexual behavior (Divan et al., 2016, p. 80; Reisner et al., 2010, p. 510). Many transgender individuals, trans men and trans women alike, called for more comprehensive and sensitive training of medical and healthcare providers in the needs and treatment of transgender individuals (Clements-Nolle et al., 2001, p. 87; Bockting, Robinson, & Rosser, 1998, p. 519). This is one of the ways that management of stigma, both for a transgender identity and a HIV diagnosis, can be approached in healthcare. Also, in response to the community's concern about discriminatory care and economic instability, some healthcare centers and transgender organizations have advocated for things like at-home testing that allows for a self-administered HIV test. Providing the tests with proper education to be able to administer the test and referrals to next steps and after care is a way to bolster the efficacy of this method as well as having media/social campaigns that normalize HIV testing (Poteat et al., 2019, p. 398). Allowing trans masculine individuals to maintain autonomy in disclosure and knowing what they need to care for their body is important to losing them along the HIV continuum of care.

Educational resources for both those caring for and those in the community are only one change that the transmasculine community is calling for. There is pressing policy and legal concerns that disproportionately affect marginalized groups, sometimes more so in the transgender community. A considerable barrier to care in the transgender community is directly tied to the stigma that these individuals face from many facets of their life. A high percentage of

young transgender men and women are forced into situations of housing and income stability possibly due to being kicked out of their houses by unaccepting parents/partners or losing jobs due to trying to transition among other situations. This affects the ability to gain future employment, health insurance, and even future housing. Considerable portions of transgender people, including transgender men, are then forced into survival situations where sex work is one of few viable income means (Bauer et al., 2012, p. 2; Herbst et al., 2008, pp. 2, 11; Clements-Nolle et al., 2001, pp. 74-75; Feldman, Romine, & Bockting, 2014, p. 9; Stephenson et al., 2017, pp. 437-438; Mayer et al., 2016, S207). Given that prostitution is still considered a misdemeanor in most states, this survival work places them at higher risk of incarceration, which can continue the cycle of unstable housing and income. Studies like that of Brennan et al. have found a significant relationship between sex work and incarceration with psychosocial health problems and these concerns are largely interconnected with sexual risk decisions and HIV infection, but income is often a necessity that triumphs “healthy practices” (2012, pp. 1755-1756). Other researchers like Scheim et al., suggest that having been arrested/convicted showed significant association with lack of access to condoms and healthcare (2016, p. 3). This conundrum is another focus of the transgender community, especially in tandem with those trying to improve HIV care continuums and their reach of these at-risk communities. Sex work is not the only reason that transgender people have faced incarceration globally as some countries criminalize sodomy, buggery, “homosexual propaganda,” and crossdressing, some of which affect transgender people at a higher rate (Divan et al., 2016, p. 80; Wansom et al., 2016, p. 87). The hyper-policing of the lives of transgender people leads to a higher possibility of being incarcerated, therefore continuing the cycle of poverty that is seemingly unescapable for them. The high level of policing in the lives of transgender people in combination with the

discrimination that they face in the judicial system discourages transgender people from going to police and/or seeking justice for crimes committed against them including hate crimes, rape, and assault (Divan et al., 2016, p. 80). While the attention is divided into many camps the goal is similar in that protections need to be put in place to be able to aide transgender people facing unstable housing and income situations, that are tailored to their situation. Whether the short-term goal is decriminalization of sex work or policies put in place that punish organizations that discriminate on the basis of gender identity when it comes to employment, education, or housing, the overall long-term goal is achieving civil rights for transgender people and changing systemic homophobia and transphobia. It isn't until we prioritize the human rights of transgender people, especially trans men, and see them as individuals rather than significant statistics that the goal of fully treating or removing stigma around HIV/AIDS will remain unreachable.

Chapter 5 — Conclusion

Assumptions about the sexual practices by health care providers and researchers when assessing risk of STDs and STIs, like HIV leads to wildly inaccurate information about the experience of the patients. Even when the transgender community is researched as a whole, the information is shifted towards transgender women and while they are an at-risk population that needs to be researched, trans men are often set aside or lumped into conclusions about their realities. There are similarities to trans men and trans women, but trans men also experience unique risks and challenges to their transition and how it relates to risk factors for HIV. Ignoring them in research about the community or setting them aside due to low statistical significance only serves to erase them for further decisions about their care. And not discussing the full limitations and generalizability of your research results leads to questions about the accuracy of your report. This research directly influences how policies are changed or how organizations gain funding so the statistical insignificance of trans men in HIV care can directly affect gaining more trans-competent providers and clinics.

Given the interconnectedness between research, policy, and healthcare steps need to be taken in each level to take accountability for the decisions and harm of the past and actively work to move forward towards actively including trans men and their lived experiences into the data being collected. Collecting purely quantitative data is clearly inadequate in regard to interacting with, studying, and helping improve the overall health of trans men, especially when it comes to HIV prevention and treatment. Firstly, with the cyclical recursive pattern that we see in determining the “overall risk” of trans men regarding HIV, other avenues need to be explored for improving how data is collected and used. Multiple areas of research like epidemiology and gender and sexuality studies need to collaborate in gathering data that is both valid and accurate

but also desperately needs to expand past the desire for statistics. It is past due for research to return the autonomy and experience back to the humans being studied as separating the data point from the person leads to dehumanization and separation from the problem at hand. In other words, separating the fact that trans men have been contracting and living with HIV/AIDS from the beginning of the epidemic with subpar and insensitive, often discriminatory care while only being concerned with the statistical significance of your data that leads to trans men being lumped into the further research category of a paper, is not only harmful it is arguably inhumane. Qualitative research needs to be utilized more in both transgender and HIV research to help bridge this gap of knowledge that much of the current research points to. This can be done by exploring written and visual narratives of trans men as well as creating spaces for interviews and panels that place the individuals in charge of the pace of conversation about their needs.

Secondly, research also needs to expand its study areas past those of the convenience samples in metropolitan areas. Trans masculine people often embody many other intersecting identities that often make these samples unrealistic. Active efforts need to be made to reach out to communities that have historically been ignored or harmed by past research including rural communities, people of color, and poor/underdeveloped areas. More so, connections need to be made as to how all these communities interact and effect each other as in reality no one experiences race, gender, sexuality, economic status, and ability separately and therefore none of these can be studied independently. Interdisciplinary research is necessary to be able to fully explore the experiences of trans men in a manner that will lead to change for policy. Lastly, whenever research is being done on the transgender community, transgender people need to be involved at all steps. In researching trans men, trans men need to be involved from the planning to the execution. This can be done in peer-led qualitative research, but it also means that there needs to be more

diversity in who is completing the science. For too long the primary researchers and scientists have been of one demographic — older, white, cisgender men. Slowly but surely there has been some diversity incorporated with people of color and women making it into these positions, but the field is still primarily dominated by these older white men. There need to be active campaigns in various institutions and organizations to hire researchers and scientists that add diversity and new perspectives to science including more people of color, more queer people, more women, and in our case more transgender men and women.

Policy and healthcare are tied together and ultimately rely on the results of research to inform funding for further research and to allocate resources to where they are supposedly needed. So, in reality, without changing how research is done at its core, little can be accomplished in this area. This is where the dehumanization of data, the inaccuracy of data, and having ungeneralizable results are incredibly damaging and harmful to the communities that the research is done to supposedly help. Because of the cyclical pattern of stating the trans men are either a) not at risk due to statistical insignificance in reported cases or b) assuming that they aren't at risk and excluding them from data or c) moving trans men to the further research category from decade to decade, policies regarding the healthcare and legality of trans men or HIV/AIDS (let alone where they intersect) are either nonexistent or have remained unchanged in the 30+ years since the start of the epidemic. To start to remedy this many things need to happen in tandem with the changes in research. First and foremost, it is imperative that transgender and gender nonconforming people gain protections and rights from legislature across the board, from the federal level downward. Allowing for discrimination of trans people in any form leads to inescapable cycles of poverty and wellbeing from being denied jobs to housing to even effective medical care. Once this discrimination is punishable then can changes implemented in other

fields be more effective. Secondly, alongside the punishment of discrimination throughout the different legal levels, governments need to push for serious changes in research. The changes proposed above need to be implemented for more than just the purpose of studying the effect and prevalence of HIV/AIDS in the trans masculine community. These changes need to be implemented throughout various disciplines from public health to sociology and to do so policies need to be created that actively support these changes. To reach the UNAIDS/WHO/CDC goal of 90-90-90, governmental bodies need to provide their support and take the continued epidemic seriously as many lives have been lost due to purposeful governmental inaction. This includes creating protections and plan B options for current HIV/AIDS legislation like the Ryan White Care Act and making them present throughout the state level. Lastly, alongside the current legislation around HIV/AIDS and discrimination, the manner that HIV/AIDS healthcare and LGBTQ+ healthcare are taught and done needs serious reform. Nationally, the topics taught in healthcare education systems (e.g. medical school or nursing school) needs to have an inclusive and comprehensive curriculum incorporating information on sex education, LGBTQ+ healthcare, transgender healthcare specifically, the history of the abuses/experimentation present in the medical field (including periods of medical history like eugenics), and when studying pathologies, how these would look on people of color (e.g. how do symptoms of dermal pathologies appear on non-white skin). The education and training of people working in healthcare needs to be inclusive and the curriculum needs to be standardized as far as these topics are concerned. It is not the responsibility of the marginalized groups (whether it be people of color, transgender people, women, etc.) to educate their own physicians on the anatomy of their bodies or the care that they need to receive based on their identities. Given that healthcare workers will inevitably come across people from all walks of life each individual working in

healthcare needs to be prepared and willing to work on/for/with others that have identities and realities different from their own. If students of medicine/health are not willing to do so, then working in healthcare is not the job that they fit well in. People should not be avoiding healthcare because they do not wish to be discriminated against by their own healthcare provider. By reforming the healthcare field, that also means that legislation around health insurance needs to be reformed. Far too often what stops trans men and women from receiving care either for gender affirming reasons, reasons related to STIs and HIV/AIDS, or both, is price and what will and won't be covered by insurance. Some insurance providers will not cover gender affirming care, others will not cover the cost of preventative medicine like PrEP, and some will not cover either. Many of these services then need to be covered out-of-pocket or avoided altogether which leads to serious healthcare inequalities. What is problematic is that research exists to show the effectiveness of PrEP or the improvement in the quality of life that gender-affirming care provides, but the legislation doesn't reflect this (Westmoreland et al., 2019, p. 1305; Newfield et al., 2006, pp. 1448, 1451-1452). Insurance legislation needs to actually reflect the data that is being collected and discrimination in this field should not be tolerated.

In reality, all of these changes need to be incorporated to some degree to allow for change to occur for trans masculine people and their health care, including that for HIV/AIDS prevention and treatment. This gap that we see in research and care does not mean that the trans masculine community is unreachable or unaffected by HIV as a whole, but instead shows that we have work to do to make our current research and healthcare systems more inclusive and helpful to the communities we wish to study/help. Researchers like Harper et al. suggest that "This can be achieved by moving away from a framework of cultural competence, which falsely implies that a person can achieve the outcome of competence in another person's culture, and toward a

framework of cultural humility” (2019, p. 41). Once it is understood that one cannot truly understand the experience of those of another community, one can focus on actively listening to the community and what they desire and need. Some of the things that have been demanded by this community to improve their reality are decriminalization of their identities and sex work that they use to survive, more inclusion about research about them, improved education of healthcare providers, but most importantly civil rights. Without protections and rights set in place for trans men, as well as all other people with gender and sexual orientation minorities, the rest of these changes cannot occur effectively. If we as a society are to accomplish the goal of 90-90-90 (or 95-95-95 that some AIDS-research and relief organizations are aiming for) actions need to be taken to actually help the groups in which we see rising prevalence. Words alone do not relieve the burdens and discrimination that trans men face regarding HIV healthcare. They have shared their lived experiences with HIV/AIDS and how it affected their communities but the current research that informs policies aimed to ending the AIDS epidemic do not reflect their stories. No longer can we allow the recursive pattern of allocating studying trans masculine and gender non-conforming people in regard to HIV/AIDS due to a lack of statistical significance. We need to take strides to finally completing the “further research” regarding trans men and gender non-conforming people as we move into the third decade since the start of HIV research on transgender people.

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