Healthcare Experiences of Cisgender Male Sex Workers and Transgender Female Sex Workers: A Review of the Literature

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Abstract

Best healthcare practices for cisgender men who have sex with cisgender men and engage in sex work (MSMSW) and transgender women who have sex with cisgender men and engage in sex work (TGWSW) have not been thoroughly researched. What is known is that men who have sex with men and transgender women (MSMTGW) and sex work (SW) communities separately experience disproportionate rates of HIV, STIs and mental illness while also facing increased discrimination, violence, suicide and legal challenges as compared to the general population. Medical mistrust as well as providers' focus on purely biological diagnoses and treatments, as opposed to comprehensive care, have also been shown to discourage marginalized populations from seeking healthcare services. These extrinsic factors create barriers for these individuals to address their own health outcomes. Stigma related to sex work and MSMTGW identity elevates and exacerbates this community's risk of poor mental and physical health; being an exceptionally underserved population, their health promotion is of great public health significance. In order to better understand how this group engages in healthcare services and how to best improve their experiences with medical care, a literature review was conducted through the MEDLINE database using PubMed and Ovid search engines to explore best practices that effectively engage and serve MSMTGWSW who make up a "dually-stigmatized" vulnerable population. Ten studies were identified after screening out articles that were from outside the US, did not address this specific

community, did not evaluate healthcare factors, or were reviews, protocols or similar non-original pieces. Results showed that rapid warm hand offs and linkages to care for new HIV diagnoses, MSMTGWSW-competent providers, and integrated healthcare facilitate service engagement while stigma and medical mistrust create barriers for how MSMTGWSW engage in HIV prevention and primary care. Recommendations for further research and practice are discussed.

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Preface

MSM- Cisgender Man who has Sex with Cisgender Men

TGW- Transgender Woman

MSMTGW- Cisgender Men and Transgender Women

SW- Sex Worker

MSMTGWSW- Cisgender Men and Transgender Women who both have Sex with Cisgender Men and also Engage in Sex Work

MSMSW- Cisgender Man who has Sex with Cisgender Men and Engages in Sex Work

FSW- Cisgender Woman who Engages in Sex Work

TGWSW- Transgender Woman who has Sex with Cisgender Men and Engages in Sex Work

HIV- Human Immunodeficiency Virus

AIDS- Acquired Immunodeficiency Syndrome

LGBT- Lesbian, Gay, Bisexual and Transgender

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1.0 Introduction

Health care service provision models that only incorporate medicalization of conditions inadequately address the holistic health needs of marginalized communities. Medicalization refers to "the process by which medical definitions and practices are applied to behaviors, psychological phenomena, and somatic experiences not previously within the conceptual or therapeutic scope of medicine" [1]. This process has had beneficial results: the legitimization of certain phenomena like anorexia, gender dysphoria and substance use disorders, via recognition by the American Medical Association and the American Psychiatric Association has led to positive changes in societal perceptions and stigma as well as increased provision of services [2]. This validation of biological need has improved access to care by requiring (via the Affordable Care Act of 2010) health insurance companies to cover services like medication assisted treatment (MAT) for opioid use disorder [3]. Although medicalization has provided needed medical support for certain illnesses, it creates a hierarchical schema where medical diagnoses and procedures are the sole focus of treatment while housing stability, marginalized identity, mental health, substance use and social support are considered supplementary. This disproportionately impacts minorities and people with fewer resources and less access to services. For example, cisgender men who have sex with cisgender men and transgender women who have sex with cisgender men who both also engage in sex work (MSMTGWSW), who are the focus of this critical literature synthesis, are burdened with poorer health outcomes compared to the general population. This is shaped, in part by social conditions like stigma and discrimination based on their occupation and MSMTGW identity, which are largely ignored in medicalized perspectives [4-8]. To comprehensively meet

the social and biomedical needs of this population, a holistic assessment of their individual circumstances is imperative for their improved health.

This critical literature synthesis will focus on MSMTGWSW due to their unique health needs stemming from higher risk sexual behavior and stigma. Cisgender women who have sex with cisgender men and/or cisgender women and cisgender men who exclusively engage in heterosexual behavior with cisgender women are not included in the study population as their health risks and stigma they face are dissimilar to MSMTGWSW. The definition of sex work used in this study will be that an individual, had recently or currently, engaged in sexual intercourse for payment in money, favors or gifts. This definition is inclusive of people who may be engaging in sex work to obtain substances, money or favors out of hopelessness and who would not engage otherwise. Having said this, the author does not wish to place value or moral judgments on individuals for their reasons in engaging in sex work. This grouping is simply used to emphasize that some individuals experience differing safety issues, financial challenges, substance use and other concerns.

The prioritization of medical provision over a person's needs like housing, food security, mental health, legal assistance and social support deemphasizes their non-medical contexts. It also neglects to incorporate a person's marginalized sexual, racial and gender identities which may be critical to understanding appropriate and individualized care. In referring to this issues, Davis report that "Medicalization prioritizes health care vulnerability over health status vulnerability..." [9]. It has also encouraged the deflection of responsibility from oppressive, structural factors to the individual. Providers may not be differentiating between treating someone with an isolated, diagnosable condition and someone who may also be the subject of systemic abuse, which Davis refers to as "depoliticizing social issues" [1].

Many providers, healthcare systems and pharmaceutical companies at all levels neglect the underlying social causes of disease. The Socio-Ecological Model demonstrates how structural, interpersonal and individual level factors all affect a person's health [6]. It serves as an alternative to the medicalization of healthcare. Poverty, for example, has been shown to multiply disadvantage in healthcare outcomes. People living under 100% of the federal poverty level were shown to have significantly worse self-reported health conditions as compared to individuals with greater resources [10]. Research conducted by Earnshaw demonstrates how housing segregation at a structural level, provider stigma at a relational level and internalized homophobia at an individual level create multiplicative disparities in health outcomes [11]. Structural issues like access to care are also necessary to consider; in a study comparing low and high income areas of Atlanta, it was reported that [mostly Black] people living in low income areas who had access to a vehicle (and could easily attend clinic appointments) had significantly lower HIV viral loads compared to those with less transportation access [12]. To give an example of ways in which multiple determinants impact health, a person living in poverty may lack transportation to medical appointments and eventually lose their job due to excessive sick leave. Unable to find a job due to racial prejudice in their community, they may then engage in survival sex work to put food on the table. The individual may then be arrested for prostitution, which leaves them with a criminal record, and prevents them from reentering the formal economy [13-15]. It is individual and structural level factors like these that shape individuals' motivations, self-efficacy, and financial capacity to engage with the healthcare system. Although provider empathy and quality of care are essential, their treatment in the clinic can only go so far; healthcare providers must also engage with and intervene to mitigate external factors such as racism, sexism and transphobia that oppress their patients from a systemic, policy and societal level [16].

On a interpersonal level, when it comes to communication with patients from minority communities, cultural competence is pivotal in maintaining trusting relationships and retention in care [17, 18]. Evidence shows that sensitivity trainings for providers can help them understand patients' backgrounds and can significantly improve how their patients engage with the healthcare system [17, 19]. The race-based assumptions that providers make have been shown to inflict lasting damage to the patient-provider relationship and result in the perpetuation of the systemic level barriers discussed [17, 20]. A study showed that Black cisgender men who have sex with men (BMSM) reported higher levels of homonegativity, HIV stigma and racial prejudice from providers compared to White MSM. Moreover, this study was conducted in Mississippi which has not expanded Medicaid, providing an additional structural barrier for many of these men who have low incomes and have no options for health insurance coverage [20]. Research shows that provider comfort with talking to MSM patients about sexual history was associated with their initiation of Pre-exposure prophylaxis (PrEP), a lifesaving HIV prevention medication [21]. Another study found that nonjudgmental communication and rapport was important for patients with diabetes mellitus to express their self-care needs [22]. These behaviors and illnesses require empathy and established trust in order to facilitate a collaborative, health promotive conversation between patient and provider. Providers may also foster an affirming and sex-positive environment to counter or minimize distress attributed to experiences of societal and familial homophobia and rejection [21, 23-25]. Individuals with substance use disorders may also have experiences of trauma, abuse and social disconnection that demand attention and exploration by providers in order to effectively link patients to appropriate treatments [23, 26].

While acknowledging that providers deliver medical services with beneficent intent; frequently physicians only have a short time to identify a patient's needs and provide treatment or

referrals. However, minimizing health inequity in marginalized communities requires addressing structural factors that create and sustain these problems. The necessary changes need to start from the policy and structural level and must address what patients' identify as their most urgent needs (housing, social support, mental health services) [27]. At the individual level, once equitable health policy and interpersonal connection with providers have been established, patients can concentrate on improving mental health/psychosocial conditions like depression and internalized homophobia and disease outcomes (e.g., HIV/STIs).

1.1 Purpose of Research

An understudied area of public health in the United States is the experience of cisgender men who have sex with cisgender men and transgender women (TGW) who engage in sex work for gifts, favors and money. Research concerning healthcare engagement and provision has largely excluded this population and has focused on either cisgender female sex workers (FSW) or the Lesbian, Gay, Bisexual and Transgender (LGBT) community separately. Not only are there few existing studies addressing MSMTGW who engage in sex work (MSMTGWSW), these studies tend to focus only on HIV prevention and neglect the wide array of health concerns that these individuals face. There are multilevel challenges that impact MSMTGWSW including criminalization, prejudice, and increased risk for HIV and other diseases. It is vital that continued research be performed to better understand how to improve outcomes for this marginalized population [4, 28-30].

The purpose of this literature review is to identify gaps in research surrounding healthcare provision to MSMTGWSW. From a public health standpoint, it is critical to identify the structural

factors that MSMTGW and sex workers face from providers and society alike in order to remove barriers and improve outcomes. In addition to identifying gaps in the literature, this paper will document recommendations for providers about best practices for working with this community, as well as indicate, for policy makers and researchers, the structural changes necessary for health equity for MSMTGWSW. A critical literature synthesis using two MEDLINE database searches using PubMed and Ovid identified studies that have focused on the MSMTGWSW population and its experience with healthcare provision.

This paper will be organized as follows: The first chapter will provide a background of extant literature on this complex population in regard to health outcomes in general, disparities in HIV prevalence and care, sex worker health disparities and experiences in healthcare provision. Methods for the literature review will be addressed in the second chapter. A results table of the search results accompanied by an explanation of findings will be described in the third chapter. The fourth chapter will synthesize the results with supplementary data to create recommendations for further research and scale up of healthcare strategies. The fifth chapter will conclude the paper with a summary.

While acknowledging the diversity and uniqueness of oppression experienced by marginalized communities across intersections of social identities, the purpose of examining these populations together is that they have historically faced discrimination within healthcare settings. It is also critical to note that TGWSW have very unique needs as compared to MSMSW and should not be conflated. This mistake has consequences for discouraging TGW from accessing services they feel are only tailored to the needs of MSM [31]. These two populations are combined in this review due to their shared occupation and their experiences of stigma and discrimination [4, 15]. The term MSM is used in this study as opposed to gay or bisexual to emphasize that, especially in

the sex work population, many of these cisgender men do not identify as gay or bisexual and report that they have sex with men for economic reasons or substance acquisition [32, 33].

1.2 Background

1.2.1 Disparities – MSMTGW

Men who have sex with men and transgender women (MSMTGW) experience disproportionate rates of HIV in the United States [34-36]. Furthermore, the MSMTGW community is disproportionately affected by mental illnesses such as anxiety, depression, eating disorders and substance use, as well as physical illnesses such as HPV, and STIs [23, 37-40]. MSMTGW are disproportionately burdened by poor and co-occurring health conditions in the United States compared to their heterosexual and cisgender counterparts. These disparities are commonly attributed to marginalization experiences and social stressors (e.g., stigma and discrimination) that serve as barriers to critical resources within their communities, neighborhoods, and health systems [8, 11, 41-45]. Employment, housing and medical discrimination prevent MSMTGW from obtaining these key resources, exacerbating health disparities [23, 46, 47]. These barriers are especially pronounced when accounting for those who identify with multiple marginalized social identities across race, sexuality, gender, social class, and disability statuses [41, 48, 49].

1.2.2 Sex Work Health Disparities

Given inconsistencies in definitions of sex work in peer-reviewed literature, the documented prevalence of sex work varies from study to study. The term sex work is a broad term that encompasses a variety of transactional contexts, exchanging sexual intimacy for financial and other economic resources (e.g., housing, food), and commonly motivated for procurement of basic resources. For this literature review, sex work is defined as "the provision of sexual services for money or goods. Sex workers are women, men and transgendered [sic] people who receive money or goods in exchange for sexual services, and who consciously define those activities as income generating even if they do not consider sex work as their occupation" [50].

Sex worker engagement is pertinent to better understand the underlying factors that affect these patients. Prior studies have found that sex work is particularly common in economically strained contexts [14]. Economically motivated sex workers may have less agency to negotiate physical and sexual safety, ultimately elevating their risk for HIV [51]. A prior study suggests that while most cisgender male sex workers (MSMSW) identify as sexual minorities, these men are more likely to live and socialize outside mainstream gay community spaces; thereby minimizing health promotion initiatives and outreach tailored to sexual minorities [52]. Furthermore, MSMSW and TGWSW (MSMTGWSW) may be less inclined to discuss sex work practices with a health provider based on anticipated stigma, concerns around confidentiality, and sex work criminalization [8, 28].

Sex workers, by the nature of their trade, are likely to have a large number of sexual partners who may not want to use prophylactic tools like condoms. The unequal power dynamic present in sex work transactions decrease the agency many sex workers have in making decisions about safe sex, putting them at higher risk for HIV and other diseases [16]. MSMTGWSW

therefore are at a dual risk due to power dynamics and higher risk sexual practices [37, 39, 53, 54]. While some factors affecting the MSMTGW community have improved in recent years, such as some policies and community norms, the medical community still lacks competency in providing quality care for this population [28, 55]. The criminalization and prevailing stigma surrounding sex work allows for continued barriers in healthcare settings [28]. MSMSW and TGWSW are members of both the LGBT community and sex work community which creates a "dual-stigma" for MSMSW and TGWSW. Not only do these individuals fear incarceration, violence and health risks related to their occupation, they also experience discrimination, assault and other negative social consequences by simply identifying as MSMTGW and/or performing sexual behaviors that are perceived as deviant, gay or queer [53, 56]. Health disparities faced by each community are exacerbated and more nuanced when considering individuals who belong to both groups [15, 57, 58]. Black TGWSW, for example, may fear accessing care due to being stigmatized for their trans identity, racially stereotyped and shamed for their occupation [59].

Although people who engage in transactional sex may do so for a variety of reasons, there is a significant proportion who do so to procure substances, favors and money to pay for basic needs. Predictors of engagement in sex work include homelessness and previous incarceration [60]. Housing instability has been associated with SW non-initiation of preventive HIV treatment [61]. Substance use rates are higher in both sex work and MSMTGW populations, which further complicates these individuals 'emotional and occupational readiness to access services [62, 63]. Experiences with violence from clients and employers also exacerbate the health of SW and further socially isolate these individuals [53, 64]. Stigma and the criminalization of sex work lead to increased substance use to cope with stress, which in turn has been shown to increase the likelihood of violence [51]. SW, due to the structural factors and interpersonal concerns described above

associated with their work, suffer from disproportionate rates of mental illness [63]. These factors create a synergistic effect that impacts health outcomes for SW [63]. At the same time, it is important to note that not all SW experience these challenges and outcomes: many SW report that they entered sex work willingly and not for survival reasons and may be content with their occupation [16]. It should also be noted that this paper is not meant to imply that the sex workers, people of color, and MSMTGW individuals are intrinsically linked; they are different communities who have similar health challenges and needs.

1.2.3 Disparities – Race

Racial and ethnic minorities continue to experience alarming annual rates of HIV incidence. The Black community in the United States has experienced disproportionate rates of HIV since the beginning of the AIDS crisis. For example, Black Americans make up about 12% of the US population but comprise 42% of new HIV diagnoses [34]. Black MSM (BMSM) make up less than 1% of the US population, but represent 25% of all new HIV diagnoses [36]. This population has also consistently experienced significantly higher mortality due to AIDS than any other group [65, 66]. This group has been found to use safer sex practices and have similar numbers of sexual partners compared to the general MSM population, which suggests that external factors, such as racial discrimination and lack of access to preventative services, are to blame for this vast disparity in outcomes [20, 24, 67, 68]. A systematic review of HIV incidence in the US predicted disturbing numbers of HIV in the gay community. Within this group, BMSM showed numbers that were twice as much as their white counterparts [11, 65]. In multiple studies, it was reported that Blacks experience continued racism in medical settings, reducing access, developing trust with providers and retention in care [11, 20, 44]. One study found that Black respondents were

significantly more likely to believe that their providers would subject them to unnecessary risks than Whites [69].

Mistrust of the medical community from communities of color stems from a history of medical experimentation, the legacy of slavery and manipulation on behalf of health researchers and providers on Black Americans [24, 45, 67, 70-72]. Eugenics in the early 20th century aimed at reducing the Black American population which was deemed inferior [72]. The Tuskegee syphilis trials lasted into the 1970s and led to many Black men's deaths at the hands of White medical professionals [73]. These atrocities have had a lasting impact on the health of the Black community. Compared to their White counterparts, Black MSMTGW have been shown to have lower HIV medication adherence, feelings that HIV treatment is either useless or intentionally harmful and increased loss to care [20, 45, 70]. Research has indicated potential strategies to improve Black patients' relationship with their healthcare providers. One study at a diverse HIV clinic with individuals who were highly medically adherent suggests that the patient-provider relationship was one of the most significant predictors of an individual's being undetectable.

1.2.4 Addressing Healthcare Quality for MSMSW and TGWSW

The intersectional nature of the identities and lives of MSMSW and TGWSW demands that individualized care be provided to this population in healthcare settings [15, 74]. Trauma experienced from childhood surrounding MSMTGW identity, racial prejudice, incarceration, violence and medical mistrust must all be taken into account when addressing an individual's needs [74, 75]. The unique needs and barriers these individuals face create opportunities for healthcare providers to get to know them as a whole person and not simply as a patient who need a diagnosis and treatment plan [76]. One study found statistical significance in the HIV suppression

of individuals who perceived that their provider "knew them as a person" compared to people who did not feel the same closeness and empathy from their providers [76]. Physical touch during moments of high emotion, trust and rapport and accessibility were noted as being particularly impactful with adherence and appointment maintenance [77].

Harm reduction is an approach that is beneficial for MSMTGWSW. The tenets of harm reduction include individualism, autonomy, accountability without termination, humanism, incrementalism and pragmatism [27]. Although traditionally applied to substance use as an alternative to an abstinence only model, harm reduction has recently been implemented into a variety of social and healthcare services to mitigate risks and reduce shame-based tactics [27, 78]. Compared to the general population, MSMTGWSW typically have fewer resources, experience higher rates of mental health issues and have difficulties accessing healthcare; they may rely on substances to alleviate their stress [79, 80]. Introducing harm reduction principles of non-judgment and empathy, coupled with the assumption that abstinence may not be a priority for individuals may prevent HIV, HCV and other communicable diseases in the MSMTGWSW community. Pragmatism encourages the development of realistic solutions that are achievable. For example, one study suggested policy level changes aimed at stopping harassment and incarceration of SW, as well as individual level harm reduction trainings to educate SW about negotiating condom use, avoiding dangerous areas, and obtaining clean needles for SW who use IV drugs [81]. Another tenet of harm reduction that may benefit SW is individualism, which suggests recognizing and utilizing a person's strengths and talents to increase their self-efficacy to improve their lives, as well as tailoring interventions to be responsive to the person's needs [11]. Many individuals have developed resilience through their experience of adversity which should be lauded and manipulated to the benefit of the individual [41]. Autonomy respects the dignity of each person

and promotes an egalitarian, non-paternalistic approach to the relationship with a patient or participant. Incrementalism recognizes that behavior change is incredibly complex and encourages congratulating individuals even when they make the smallest improvement. These recommendations build from a harm reduction strategy that uses no judgment and does not assume that the participant's goal is to stop selling sex or using substances.

1.3 Theories Used to Frame the Literature

Syndemics theory posits that health outcomes derive from both population level and individual level factors. As opposed to simple comorbidity which states that diseases coexist, Syndemics states that not only are factors like poverty, race and MSMTGWSW status typically comorbid, they interact with and amplify the impact of each other, exacerbating health outcomes. Providers, therefore, must examine a patient's needs based not just on their current disease state, but factors like race, sexuality, history of abuse and socioeconomic status when creating a treatment plan for these unique individuals. Syndemics theory posits that factors like poverty, childhood sexual abuse, mood disorders and chaotic substance use have a synergistic relationship and produce more profound negative health effects than if they were experienced in isolation [8, 82]. Instead of treating individuals as though they live in vacuums, these models theorize that multilevel considerations of networks, resources, history of medical care and stigma are pivotal in being capable of interacting in a meaningful and transformative way with patients [57, 83]. This approach encourages providers to develop a clear picture of the extrinsic and intrinsic factors that have led to the current health outcomes.

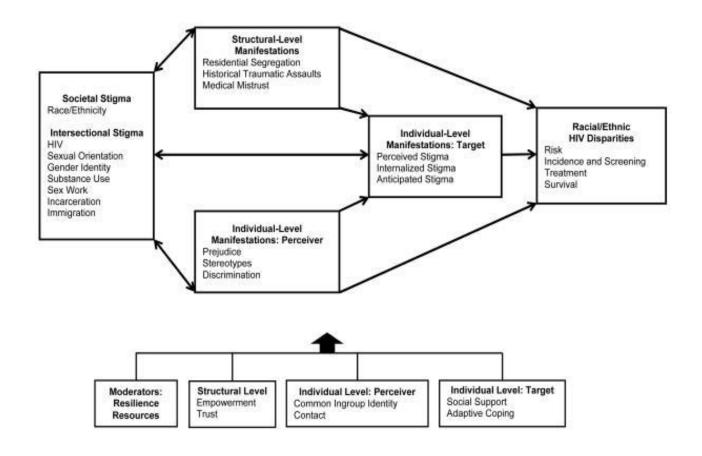


Figure 1 HIV Disparities and Stigma Model

[11]

The HIV Disparities and Stigma Model (HDSM) promotes a holistic approach to assessing an individual's health needs. Structural factors like housing status, societal factors like stigma around sex work and sexuality and individual factors like social support are all taken into account to create a sort of genogram in order to better understand a person's situation. For example, the trauma and lived experiences of each person is considered before making assumptions about their circumstances [8, 11, 24]. A key component of HDSM is the concept of intersectionality. A term coined by the scholar Kimberlé Crenshaw in 1989, Intersectionality states that "...failure to embrace the complexities of compoundedness [of gender, race, etc.] is not simply a matter of political will, but is also due to the influence of a way thinking about discrimination which

structures politics so that struggles are categorized as singular issues" [84]. She posits that a systemic oppression exists that has derived from White patriarchal dominance. Therefore, as stated previously, the poverty and high rates of HIV, for example, are not organically related to MSMTGWSW or other MSMTGW, they are the residue of generations of discrimination and resource exploitation by hegemonic powers. For example, the criminalization of homosexuality and homophobia globally has been well documented as a major barrier to care for MSM [7, 85].

Racially biased assumptions pervasive in society and healthcare settings alike include the belief that BMSM are more promiscuous than white and straight people, use safe sex practices at lower rates than White MSM, and BMSM do not get tested as frequently as their white counterparts. However, a 2015 study suggested that "racial disparities in HIV may be driven and/or maintained by a combination of racial differences in partner characteristics, assortativity by race, and increased sexual network density, rather than differences in individual's HIV risk behaviors" [68], which again underscores the point that health is influenced by multiple levels of determinants.

1.4 Study Objectives

The rigor of research that has been performed to understand the needs of the MSMTGWSW community is inadequate. A holistic view of health is also lacking as HIV and other sexual health concerns are almost always the only outcome examined in the extant literature as it relates to MSMTGWSW. The invisibility of this community presents a barrier to gathering necessary data and the illegal nature of sex work only exacerbates this issue [86]. This literature review attempts to compile and synthesize the available research and present recommendations on

further research and best practices in healthcare for this demographic. Thus, the objectives of this paper are to:

- 1) Identify the extent to which prior studies assess the provision of healthcare services to MSMTGWSW with regard to HIV prevention and treatment, primary care services, and ancillary services (e.g. substance use treatment) in the United States;
- 2) Identify patient and provider characteristics linked to healthcare engagement and provision among MSMTGWSW;
- 3) Propose recommendations for future research and service provision to scale up health promotion and HIV prevention among MSMTGWSW.

2.0 Methods

A literature review was conducted using two separate searches of the National Library of Medicine's MEDLINE database using PubMed and Ovid search engines. Separate search terms were used in Ovid to ensure that healthcare provision was included. The tables below (3.1.1, 3.1.2) display the terms used in these searches. To expand the reach of the search, bibliographies were mined as a form of snowball sampling.

Table 1 Search Terms - PubMed

1	homosexuality[mesh:noexp] OR "homosexuality, male"[mesh:noexp] OR
	transsexualism[mesh:noexp]
2	(msm[tiab] OR "men who have sex with men"[tiab] OR homosexual*[tiab] OR transexual*[tiab]
	OR trangender*[tiab])
3	#1 OR #2
4	Sex Work[mesh:noexp]
5	(prostitut*[tiab] OR sex industr*[tiab] OR sex work*[tiab])
6	#4 OR #5
7	#3 AND #6
8	hiv infections[mesh:noexp] OR Acquired immunodeficiency syndrome[mesh:noexp] OR hiv
	seropositivity[mesh:noexp]
9	(hiv[tiab] OR aids[tiab] OR Acquired immunodeficiency syndrome[tiab] OR human
	immunodeficiency virus[tiab])
10	#8 OR #9
11	#7 AND #10
12	#11 AND english[la]
13	#12 AND 2009:2020[dp]
14	((#13 AND (north america[MESH:NOEXP] OR united states[MESH])) OR (#13 NOT
	(africa[MESH] OR asia[MESH] OR australia[MESH] OR canada[MESH] OR central
	america[mesh] OR europe[MESH] OR south america[MESH] OR "Caribbean"
	Region"[mesh:noexp] OR Aruba[mesh:noexp] OR "Caribbean Netherlands"[mesh:noexp] OR
	Curacao[mesh:noexp] OR "Sint Maarten"[mesh:noexp] OR "West Indies"[mesh:noexp] OR
	"Antigua and Barbuda"[mesh:noexp] OR Bahamas[mesh:noexp] OR Barbados[mesh:noexp] OR
	"British Virgin Islands"[mesh:noexp] OR Cuba[mesh:noexp] OR Dominica[mesh:noexp] OR
	"Dominican Republic"[mesh:noexp] OR Grenada[mesh:noexp] OR Guadeloupe[mesh:noexp] OR
	Haiti[mesh:noexp] OR Jamaica[mesh:noexp] OR Martinique[mesh:noexp] OR "Saint Kitts and
	Nevis"[mesh:noexp] OR Saint Lucia[mesh:noexp] OR "Saint Vincent and the
	Grenadines"[mesh:noexp] OR "Trinidad and Tobago"[mesh:noexp])))

Table 2 Search Terms - Ovid

1	homosexuality/ or homosexuality, male/ or transsexualism/
	(msm or "men who have sex with men" or homosexual* or transexual* or
2	trangender*).ti,ab,kw.
3	1 or 2
4	Sex Work/
5	(prostitut* or sex industr* or sex work*).ti,ab,kw.
6	4 or 5
7	3 and 6
8	limit 7 to english language
9	attitude of health personnel/ or delayed diagnosis/ or "Delivery of Health Care"/ or "patient acceptance of health care"/ or "Practice Patterns, Nurses"'/ or "Practice Patterns, Physicians"'/ or "treatment adherence and compliance"/ or attitude to health/ or Culturally Competent Care/ or Culturally Competent Care/ or Health Equity/ or health knowledge, attitudes, practice/ or health services accessibility/ or healthcare disparities/ or medication adherence/ or no-show patients/ or patient compliance/ or patient dropouts/ or patient participation/ or patient preference/ or patient satisfaction/ or retreatment/ or treatment failure/ or treatment outcome/ or treatment refusal/ (((physician* or nurse*) and (attitude* or belief*)) or "health care" or adhere* or complian*
10	or cultural competen* or disparit* or embarrass* or equity or healthcare or preference* or satisfaction or shame*).ti,ab,kw.
11	hiv infections/ or acquired immunodeficiency syndrome/ or hiv seropositivity/
12	(hiv or aids or acquired immunodeficiency or human immunodeficiency).ti,ab,kw.
13	Emtricitabine/ or Emtricitabine, Tenofovir Disoproxil Fumarate Drug Combination/ or Pre- Exposure Prophylaxis/
14	(prep or Pre-Exposure Prophylaxis or preexposure prophylaxis).ti,ab,kw,rn.
15	((emtricitabine and tenofovir) or DESCOVY or microbicide* or truvada).ti,ab,kw,rn.
16	9 or 10 or 11 or 12 or 13 or 14 or 15
17	8 and 16
18 19	(17 and (north america/ or exp united states/)) or (17 not (exp africa/ or exp asia/ or exp australia/ or exp canada/ or exp central america/ or exp europe/ or exp south america/ or "Caribbean Region"/ or Aruba/ or "Caribbean Netherlands"/ or Curacao/ or "Sint Maarten"/ or "West Indies"/ or "Antigua and Barbuda"/ or Bahamas/ or Barbados/ or "British Virgin Islands"/ or Cuba/ or Dominica/ or "Dominican Republic"/ or Grenada/ or Guadeloupe/ or Haiti/ or Jamaica/ or Martinique/ or "Saint Kitts and Nevis"/ or Saint Lucia/ or "Saint Vincent and the Grenadines"/ or "Trinidad and Tobago"/)) limit 18 to yr="2010 - 2020"

2.1.1 Inclusion criteria

In the literature search, only English language articles were included. Due to the unique healthcare structure of the U.S., specific cultural concerns and historical background that race, sex work and MSMTGW identities have played in this context, studies originating outside the US were excluded. Although systematic reviews were excluded as the author wanted to highlight the paucity of original data collection used in research with MSMTGWSW, citations from meta-analyses, systematic reviews, and scoping reviews were mined for relevant articles. In order to maintain current findings, studies before 2009 were not included. Articles that did not include sex work as a part of their research were excluded as the MSMTGWSW population was the core demographic being explored in this paper. Studies that did not evaluate healthcare factors (provider discrimination, clinic MSMTGW competency, retention in care, etc.) were not included. Bibliography screening yielded relevant articles to supplement the literature review's background and discussion sections.

2.1.2 Study selection

The PubMed search produced 260 studies with the search terms listed in Table 1. There were 245 records found in Ovid with the search terms listed in Table 2. Of these, only 11 were unique and the others were discarded as duplicates from the PubMed search. Although Non-US studies was used as an exclusion criterion, 144 articles from outside the US still appeared in the original search. Seven studies were excluded for not including sex workers in the study population, 50 were excluded for not having measured healthcare factors and 20 additional studies were excluded for another reason, usually due to irrelevance of topic. Thirty-five records were not original papers and were usually reviews or protocols. After a preliminary screening of the original 271 records, 16 results remained. Full text review was then completed which found two more nonoriginal reviews, two that did not include sex workers in the study population, two for not including healthcare factors and one non-US study. After full text review, one additional study was discovered during a review of literature citations. Ten studies were selected as meeting all criteria and were included in the critical literature synthesis. Data extraction was conducted after full text review and results are displayed in Table 3 which includes target population and sample size, study aim, type of study design and results. (It should be noted that the broad inclusion criterion used for sex worker population included some studies which only briefly discussed sex work or included sex workers as a small proportion of the sample population).

Figure 2 below displays the screening process for selecting relevant literature for this review.

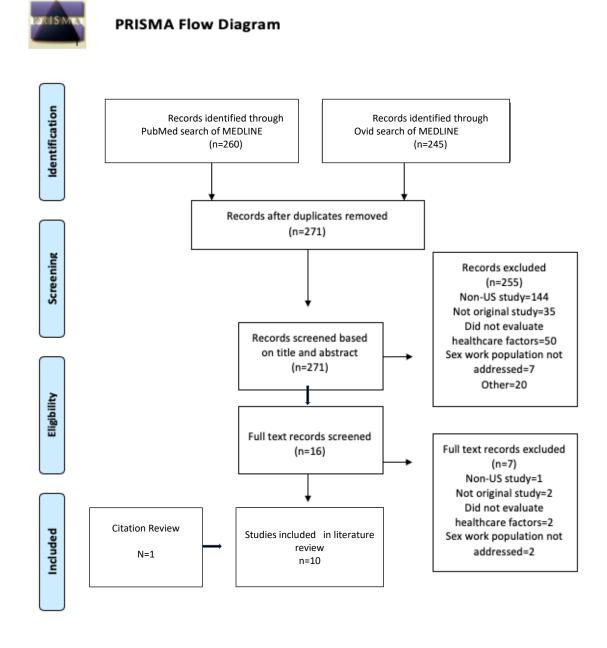


Figure 2 PRISMA Flow Diagram

3.0 Results

Recognizing that factors associated with MSMSW and TGWSW engagement in healthcare may be multilevel, each study's findings were individually scrutinized to identify themes in the literature.

3.1 General Findings of Database Searches

Of the ten studies identified, three used quantitative methods: two used surveys and one was a retrospective case study [87-89]. Six studies were qualitative and used either interviews or focus groups [59, 75, 87, 90]. One study was mixed methods and included a survey and a post-program completion interview [33]. The ten studies ranged in date of publication from 2009-2019. Only two studies by Jones and Washington exclusively examined MSMTGWSW [52, 75]. The study by Harawa used a sample including a mix of FSW and TGWSW [91]. The study by Clement included a large sample of individuals with a majority being MSMTGW people of color [88]. Doblecki-Lewis' research included MSM and TGW clinic patients [89]. Senreich's study assessed 866 people who were in a substance use treatment program and either identified as 1) cisgender and heterosexual with "histories of same-gender sex" (HSGS), 2) MSMTGW-identified people and 3) others who neither had HSGS and identified as cisgender and heterosexual. The research question was to explore whether these three groups' SUD outcomes differed during treatment [33]. Both of Underhill's studies compared experiences of MSM and MSMSW [59, 90]. TGW were the focus of Sevelius' research [31]. It is worth noting that only one of the studies (Reback, 2012)

examined effects of interventions or healthcare techniques on improved health outcomes (i.e. biomarkers like increased CD4 counts). Study results are summarized in Table 3.

Clement (2019)

The Clement study was a retrospective case study of a program in North Carolina that sought to improve linkages to care from sexually transmitted infection (STI) clinics to a federally qualified health clinic (FQHC) providing PrEP. There was no control population as it was retrospective and examined patient chart data. However, the majority of the patients were MSM and people of color. The research assessed the association of race, insurance coverage, and sex work as primary income with PrEP adherence. Only six of the participants were engaged in sex work.

Of the 196 patients referred to the PrEP clinic, 60% attended their initial PrEP appointment at the FQHC, 43% followed through by filling their PrEP prescription, 38% were retained in care for at least three months, and 30% reported almost perfect medication adherence at follow-up. Of the patients who made it to their first appointment, 53% were Black, 18% were Latinx and 19% were White. 81% of patients were MSM and 9% were transgender. At the time of their first appointment, 47% had no health insurance, 42% had private insurance and 11% had public insurance.

Several findings came out of this research including positive impacts of rapid protocol linkages to primary care from STI clinics. It was found that these linkages promoted initiation of PrEP, retention in care and adherence to medication. Of the non-initiators, there was a higher proportion that were sex workers compared to the PrEP initiators (12% vs. 2% p=0.05). Black patients were also less likely to initiate PrEP and were more likely to be lost to care earlier than

Whites (73% vs. 45%, p = 0.02). Uninsured patients were less likely to initiate PrEP as well (64% vs. 40%, p = 0.05) [88].

Doblecki-Lewis (2018)

The United States National Institutes of Health PrEP Demonstration Project (Demo) was examined to identify trends in PrEP adherence and retention in care. A total of 557 MSM and TGW were followed for a year in regular 12-week intervals after a preliminary appointment and 4-week follow up. The program was implemented in three clinics in Washington DC, Miami and San Francisco. Multiple surveys were conducted and pill counts, dried blood spotting (to check PrEP levels), mental health screenings, and STI testing were also performed during the study. Surveys were conducted via phone-based questionnaires and addressed information related to PrEP awareness, depression, substance use, risk perception, condom use and financial assets. 30 individuals were engaged in transactional sex at the time; this was defined as "giving/receiving money for sex".

Of the participants in the Demo Project, 66.1% had optimal retention and did not miss any appointments, 22.9% had intermittent retention and 11% were considered early loss to follow-up (ELTFU). Younger age and homelessness were predictors of both ELTFU and intermittent retention as compared with full retention. Black race, disability, unemployment, low income, financial uncertainty, lack of PrEP awareness, transactional sex and lack of primary care physician were significantly associated with ELTFU compared with full retention [89].

Findings identified retention in care for racial minorities as a focus for clinics to reduce high rates of ELTFU. Discussing motivation and social supports was suggested for early PrEP appointments to aid in the reduction of racial disparities.

Harawa (2009)

This cross-sectional survey study took place in Los Angeles and was administered to 104 FSW and 128 TGWSW. All individuals were currently engaged in transactional sex. The HIV Testing Survey (HITS) was used to gather data on active versus passive HIV prevention services. Social factors like race, healthcare usage, income, marital status etc. were used to identify gaps in intervention strategies. Active prevention included engagement like HIV testing and education while passive included superficial interaction like viewing a social media post about safe sex or receiving condoms at an event.

It was found that over 40% of participants reported no health insurance and only 38% had sought medical care in the past year. TGWSW and FSW were both more likely to passively interact with prevention materials than actively. African American (as opposed to Latinx) race/ethnicity, higher household income, cohabitation/marriage, and not seeking recent health care were all predictors of low utilization of prevention services. For TGWSW, Latinx race/ethnicity, foreign birth, illicit drug use, exchange sex, being HIV positive, having a known HIV-positive sex partner, having private health insurance, and having sought health care in the prior 12 months were the main predictors of receiving passive prevention. A positive discovery was that TGWSW who reported having a regular source of healthcare (primary care provider) had higher active HIV prevention [91].

The study concluded that HIV prevention should be scaled up for Black SW as well as younger SW. It was also suggested that SW who have SUD and SW from low socioeconomic backgrounds may have more urgent needs and concerns than HIV services; prioritizing substance use treatment or basic needs may be more beneficial.

Jones (2009)

Jones produced a small, qualitative study using interviews with four MSMSW in a southeastern US city. The aim of the study was to explore experiences of Black MSMSW and gain insight regarding accessing outreach services. All four of these individuals were currently engaged in transactional sex.

A salient theme developed over the course of the research was that internalized and experienced stigma and discrimination were reported as barriers to healthcare. Due to past experiences of stigma, a trusting relationship with a provider was described as both important and fragile.

Recommendations by participants included integrating primary care with substance use treatment, mental health services, and sexual health services at a "One stop shop". Transportation was another service mentioned that participants reported as a factor that would keep them engaged in services. Participants noted that they had a "need to belong," which fueled a desire to find a place to build connections with others. Similarly, non-judgment and "realness" were stated to be vital to gaining trust with outreach workers [52].

Reback (2012)

A risk reduction HIV prevention program for "high-risk" TGW was evaluated for its effectiveness after its pilot iteration. An assessment gauged the influence of prevention case management (PCM) on homelessness, transactional sex as primary income, incarceration and substance use. To ensure cultural humility, counselors for PCM were TGW from the community. Hour long sessions allowed for client centered service coordination planning and goal setting. It was reported that, at baseline, 41% of participants were engaging in transactional sex.

The majority (75%) of the 60 participants completed all ten sessions. Of the individuals who completed all ten sessions, 96% completed the follow up evaluation six months later. An average of \$196 was given as incentive to the participants depending on the number of sessions completed. The follow up evaluation revealed that participants experienced improved mental health outcomes, decreased homelessness and reduced economic reliance on transactional sex. The importance of having an individualized case management experience was emphasized by these TGW. This model allows for the exploration of multiple challenges individuals are facing including housing stability, substance use and mental health. An important finding was that housing was a priority for participants who reported that they would typically not be interested in medical and SUD treatment until they were stably housed [87].

As there was no control group and the sample included TGW with relatively stable living conditions, the study results cannot be generalized. The study reported that more economically disadvantaged TGWSW who use street sex work instead of indoor venues may have differing outcomes and should be focused on as well.

Senreich (2015)

Senreich used a mixed methods approach with a survey and post program interview of non-LGBT and LGBT individuals in a substance use treatment program (n=866). This study is one of a kind in that it is purportedly the first piece of research assessing the experiences of heterosexual identifying sex workers who have a history of homosexual sex in substance use treatment. It sought to evaluate whether self-identified heterosexual individuals with a "history of same gender sexual behavior" (HHSGS) engage with and experience substance use treatment differently than their heterosexual, cisgender peers without HSGS and LGBT peers. This study did not indicate how many individuals engaged in transactional sex, but it was reported that this may be due to the

sensitivity many of these heterosexual individuals felt surrounding the shame involved in their history of same sex behavior.

A striking finding was that there were significant numbers of HHSGS individuals in this substance use program. The male HHSGS expressed shame and anger regarding their homosexual behavior while most women HHSGS did not. Male HHSGS had higher program dropout rates, multiple substance use treatment experiences, higher rates of substance use, and reported concerns for physical health [33]. These concerns were highlighted in that they reported rarely accessing primary care. The normalization of same sex sexual activity in treatment contexts was identified as an important take-away, as stigma may be associated with reduced program completion for both LGBT identified participants and HHSGS. This study generalizability is limited due to only having assessed one SUD program in a large metropolitan city.

Sevelius (2016)

Concerned with the common conflation of TGW and MSM in public health research, Sevelius aimed their study at PrEP uptake by TGW to ascertain what participants knew about the HIV prophylactic drug and how they felt it was marketed to them. Service organizations in the San Francisco area were used as recruitment sites to find participants through snowball sampling. Three focus groups and nine individual qualitative interviews with 30 TGW were conducted to discuss their awareness of and engagement in PrEP and HIV prevention. It was not indicated numerically how many engaged in transactional sex, but it was reported that "most" did.

One theme revealed through the interviews was that PrEP awareness among TGW is very low. Interviewees reported barriers including marketing of PrEP not being trans-inclusive (programs are MSM centered), low agency to engage in safe sex, concern that PrEP will negatively

impact hormone replacement therapy (HRT) efficacy, managing multiple appointments and medications and medical mistrust due to transphobia.

HIV related stigma with taking PrEP was also reported as a barrier to PrEP initiation. Other life stressors like lack of housing and substance use may trump PrEP as priorities. A facilitator to adherence was that PrEP was seen as potentially protective risk reduction. Access to a transcompetent provider was reported as important for study participants [31].

As this study was conducted in a large metropolitan setting, generalizability is reduced.

Underhill (2015)

This study's aim was to assess how MSM or MSMSW identity influenced their experiences and engagement in healthcare and HIV prevention services. Focus groups were conducted with 56 MSM and MSMSW who were recruited in Rhode Island. Participants who reported selling sex in the past six months were grouped into the MSMSW (n=31) category and those that did not report this were placed into the "other MSM" (n=25) category. They were given cash incentives to participate. Focus groups revealed that MSMSW less frequently disclosed sexual history to medical providers than other MSM. They also reported higher rates of mistrust, judgment and perceived discrimination. MSMSW reported prejudices based on socioeconomic status, race, homelessness and substance use in addition to sexual orientation and/or behavior. A major implication of the study was the need for an intersectional perspective for providers to understand the overlapping layers of stigma that may hinder MSMSW/MSM from accessing critical HIV prevention.

Findings were similar to the Stigma and HIV Disparities Model in that overlapping identities and factors combine to exacerbate outcomes and reduce access to and interest in healthcare. MSMSW reported a higher proportion of homelessness and non-gay identity which

indicates increased marginalization. Heterosexual MSMSW may be less likely to disclose samesex sexual behavior to their providers increasing their health risk [90].

The fact that most participants were White limits generalizability. The MSMSW participants were mostly from low income backgrounds and were street-based. MSMSW from other settings were not captured. Data was self-reported and subject to self-report, recall and social desirability bias.

Underhill (2014)

Focus groups (n=38) and in-depth interviews (n=56) with both MSM and MSMSW were conducted to compare these groups' awareness of, access to and initiation of PrEP. Three of these groups focused solely on self-identified MSMSW and five included other MSM who did not engage in transactional sex. Recruitment was conducted via fliers in bathhouses, clinics, entertainment venues and via internet social media channels. Around 10 participants were involved in both the focus groups and the interviews. Participants who reported selling sex in the past six months were grouped into the MSMSW (n=31) category and those that did not report this were placed into the "other MSM" (n=25) category.

Results showed that MSMSW were more likely to access care in emergency departments, be uninsured and report unmet healthcare needs like primary care. Other MSM reported receiving care at clinics and PCP offices, being insured and report more frequent STI (excluding HIV) testing than MSMSW [59].

There are a few limitations of this study. It was conducted in Rhode Island, a progressive state with greater access to MSMTGW care than the US average. Rhode Island also has comprehensive MSMTGW non-discrimination ordinances in place and studies show that MSMTGW individuals living in states with greater MSMTGW protections have better health

outcomes [92]. The sample was relatively small and was not randomized and therefore is not generalizable to the general MSMTGWSW population. For example, most MSMSW participants were street based, non-gay-identified, low-income and White which may skew results.

Washington (2011)

Washington explored the perspectives of Black MSMSW who use IV drugs about using the Human Sexuality Education Model (HSEM) as a training tool for substance use treatment counselors. This model educates professionals about MSMTGW sensitivity, HIV competency and sex positivity. A convenience sample was used with community outreach members to recruit focus group participants. Focus groups with 105 Black MSMSW who use IV drugs assessed the incorporation of this model into SUD treatment programs. All participants were currently engaged in transactional sex. It was discovered that these men felt that recovery counselors should be informed about safe sex practices and the overlapping trauma that Black MSMSW experience. It was also reported that BMSMSW needed counselors who were trained in recognizing and reducing their own biases and stigma around MSMTGW and racial identities.

Focus groups indicated that the HSEM may be effective in treating BMSMSW who use IV drugs. In addition, a comprehensive approach was recommended including HIV education, sex work sensitivity and an understanding of the interaction of substance use with MSMTGW and racial identities. In order to provide a safe space for MSMSW, SUD professionals were suggested to be trained in this approach [75]. Due to the nature of focus groups, it was an inappropriate setting to explore childhood sexual abuse and details about substance use with participants which limited findings.

Table 3 Results Summary

	Population (sample size)	Study Aim	Study Design	Results
Clement (2019)	Mixed sample. Majority MSMTGW people of color including some SW (n=196) *only 6 of whom engaged in "sex work"	Asses the association of race, insurance coverage and sex work as primary income with PrEP adherence	Retrospective Case Study of clinic chart documentation	Rapid protocol linkage to PrEP and primary care services increase retention in care and medication adherence. Sex workers and people of color were less likely to follow up after STI screening "noninitiators [of PrEP] hada higher proportion of sex workers (12% vs. 2%, $p = 0.05$) relative to PrEP initiators"
Doblecki- Lewis (2018)	MSM and TGW individuals with increased risk of HIV from STD clinics in Miami, DC and San Francisco (n=557) *30 of whom "gave or received money for sex"	Sought to identify trends in PrEP retention using the United States National Institutes of Health PrEP Demonstration Project	Surveys, pill counts, biological samples, STI testing, mental health screening and follow up questionnaires were administered at intervals for 52 weeks	Engagement in sex work was found to be associated with Early Loss to Follow Up (aOR 4.67; CI: 1.49-14.58) as well as Black race (aOR 3.32; CI: 1.09-10.16)
Harawa (2009)	Cisgender Female Sex Worker(n=104) and Transgender Women Sex Worker (n=128) *All were currently engaged in transactional sex	Evaluated social factors of FSW and TGWSW and their influence on awareness and utilization of HIV prevention services	Cross Sectional HIV Testing Survey (HITS) Quant Survey	TGWSW and FSW were both more likely to passively interact with prevention materials than actively. African American (as opposed to Latinx) race/ethnicity, higher household incomes, cohabitation/ marriage, and not seeking recent health care were all predictors of low utilization of prevention services. For TGWSW, Latinx race/ethnicity, foreign birth, illicit drug use, exchange sex, being HIV positive, having a known HIV-positive sex partner, having private health insurance, and having sought health care in the prior 12 months were the main predictors of receiving passive prevention.

Table 3 Continued

	Population (sample size)	Study Aim	Study Design	Results
Jones (2009)	Four MSMSW, three of which identified as gay or bisexual (n=4) *All were currently engaged in transactional sex	Explores experiences of African American MSM involved in commercial sex trade, and gain insight regarding accessing outreach services	Semi-structured interviews	Internalized and experienced stigma and discrimination reported as barriers to healthcare. A trusting relationship with provider was described as both important and fragile Recommendations by participants included integrated primary care with substance use treatment, mental health services and sexual health services available at the same location
Reback (2012)	"High-risk" TGW (n=60) *41% of participants reported transactional sex as their primary source of income at baseline	Influence of Risk Reduction HIV prevention program on homelessness, transactional sex as primary income, incarceration and substance use	Pilot study using program evaluations	Following a prevention case management (PCM) intervention, participants experienced improved mental health outcomes, decreased homelessness and reduced economic reliance on transactional sex.
Senreich (2015)	Racially diverse group of non-sexual and gender minority and sexual and gender minority individuals in a substance use treatment program (n=866) *It was not reported what proportion engaged in transactional sex	Evaluate whether self-identified heterosexual individuals with a history of same gender sexual behavior (HSGS) engage with and experience substance use treatment differently than their LGBT and straight, non-HSGS counterparts	Mixed methods. Two- part survey with qualitative interview after completion of treatment	There are significant numbers of HSGS men and women in substance use program. The men expressed shame and anger regarding their homosexual behaviors, most women did not. HSGS men had program higher dropout rates, history of multiple substance use treatment attempts, higher rates of substance use, and reported concerns for physical health.

Table 3 Continued

	Population (sample size)	Study Aim	Study Design	Results
Sevelius (2016)	TGW (n=30) *"Most" of whom reported engaging in selling transactional sex	Objective was to address the gap in the literature by exploring barriers to PrEP acceptability identified by TGW	Qualitative interviews	PrEP awareness among TGW is very low. Barriers include marketing of PrEP not being trans inclusive (programs are MSM centered), low agency to engage in safe sex, concern that PrEP will negatively impact HRT efficacy, managing multiple appointments and medications and medical mistrust due to transphobia. HIV related stigma with taking PrEP was also reported as a barrier to PrEP initiation. Other life stressors like lack of housing and substance use may trump PrEP as priorities. A facilitator to adherence was that PrEP was seen as potentially protective risk reduction Access to trans-competent provider was reported as important for study individuals
Underhill (2015)	MSM (n=38) *16 of which engaged in transactional sex "sold sex within the past 6 months"	Assessed how being MSM and/or MSMSW influenced engagement in healthcare	In depth, semi- structured interviews Thematic Analysis	MSMSW reported less frequent disclosure of sexual history to medical providers than other MSMs. They also reported higher rates of mistrust and judgment and perceived discrimination. MSMSW reported prejudices based on SES, race, homelessness and substance use in addition to sexual orientation and/or behavior
Underhill (2014)	MSM (n=56) *31 of which engaged in transactional sex "sold sex within the past 6 months"	Assessed how being MSM and/or MSMSW influenced awareness of, access to and initiation of PrEP	In depth, semi- structured interviews Focus Groups Thematic Analysis	MSMSW more likely to access care in ERs, be uninsured and report unmet healthcare needs like primary care. Other MSM reported receiving care at clinics and PCP offices, being insured and report more frequent STI (excluding HIV) testing than MSMSW

Table 3 Continued

	Population (sample size)	Study Aim	Study Design	Results
Washington (2011)	Black MSMSW who use IV drugs (n=105) *All participants were currently engaged in selling sex	Assessed Incorporation of Human Sexuality Education Model in substance use treatment for BMSMW sex workers	Focus groups	Focus groups indicated that the Human Sexuality Educational Model may be effective in treating BMSM involved in both sex work and IV drug use. SUD professionals were suggested to be trained in this approach Cultural competence around HIV status and Black/ LGBT identity was reported as necessary for treatment completion Participants reported high rates of stigma and homophobia in substance use treatment programs

4.0 Discussion

The purpose of this literature review was to identify the extent to which prior research has assessed MSMTGWSW healthcare engagement, identify patient and provider characteristics linked to healthcare provision and propose recommendations for future research and service provision. Several themes came out of this research including the overwhelming effect that stigma and discrimination have on MSMTGWSW, the overarching role that structural factors play in hindering care and the need for individualized, integrated health service provision.

The literature shows that for both MSMTGWSW struggling to get adequate substance use treatment and TGWSW who are seeking providers who are trained in the provision of hormone replacement therapy, stigma is a profoundly detrimental factor in how these people access quality care. Sex work discrimination is challenging to tackle, as the criminalization of the occupation maintains SW as a "hidden" group further ostracizing them. A large cohort study in Canada revealed that sex work stigma was independently associated with having barriers to healthcare services (aOR=1.85 CI: 1.07, 3.20) [93].

A review by White Hughto on the structural, interpersonal and individual levels of stigma that transgender people experience daily provides practical and recommended routes for intervention. This review states that, according to fundamental cause theory, even when certain progressive innovations are made (e.g., gender affirmation surgery), there will continue to be other factors (i.e. providers who refuse to perform said surgery) that keep healthcare inequitable [94]. Here, the medicalization of gender comes into play as the Diagnostic and Statistical Manual (DSM) considered gender non-conformity to be sexually deviant behavior until 2013. One review suggests that, although individual level therapy to reduce gender dysphoria can produce beneficial results,

collective activism for a common cause of equality can make lasting change [94]. Similarly, sex work must not only be decriminalized and demedicalized, it needs to be accepted as a legitimate and respected form of employment by our society [13, 28]. Grassroots organizations led by SW minorities and informed by their experiences are key to creating lasting societal perception change.

To contextualize, while there has been progress toward achieving civil rights racial policy or marriage equality and this progress has had a substantial influence on population health, marginalized communities continue to be challenged by persisting structural factors that hinder health equity. This is made evident by continued violence, discrimination and unequal health outcomes in both racial minorities and MSMTGW respectively [53, 56, 74, 95]. MSMTGW youth have been shown to partake in more risk-taking behavior to alleviate disproportionate rates of anxiety they face. Additionally, the increased sexual trauma and bullying they experience translates into poorer health outcomes as adults [23]. A study examining MSM who use IV drugs in Vancouver found that these men had significantly higher odds of having experienced childhood sexual abuse (aOR 2.65) [54]. The shame resulting from psychological trauma is exacerbated by medical professionals who perpetuate it with sex shaming, homophobia and transphobia. These synergistic factors are only multiplied when considering racial minority MSMTGW who also engage in transactional sex work [8]. In our review, associations between SUD and childhood sexual abuse was a significant finding as demonstrated in Washington's study [75]. The author suggested that shame significantly decreased participants' willingness to discuss this trauma with SUD counselors. Training substance use treatment counselors on sensitivity around MSMTGW identity and the stigma SW face is imperative to the clients' improved substance use outcomes.

4.1.1 HIV Prevention Service Engagement

HIV prevention services were evaluated by all of the studies except Washington, Senreich and Underhill (2015). Key findings from this theme include that MSMTGWSW had low awareness of PrEP and low access to prevention services. Rapid linkages to care and rapport established with providers were reported by participants as being factors for retention in care. Sevelius' study included commentary from TGWSW who felt PrEP was "not for them" and public health efforts to promote PrEP was perceived as cisgender gay male centric. These same individuals expressed discomfort in accessing clinic services that are geared towards MSM. Not only did they feel it was not tailored to their needs, but they also felt that the assumptions that "LGBT friendly" clinics make about the similarities of this diverse community imply that MSM and TGW are the same, which they may find offensive [31]. In Underhill's PrEP study, MSMSW got tested less frequently, accessed care in the ER, were uninsured and had unmet primary care needs as compared to other MSM (who did not engage in sex work) [59]. Implications for medical providers and social workers include MSMTGWSW competency trainings, transgender specific clinic capacity and scale up of outreach to increase awareness for the most "hidden" groups.

Reback's program evaluation of a Prevention Case Management (PCM) service for HIV prevention produced several important findings. Individualized care for TGWSW created by PCM was associated with decreased homelessness (p=<0.01) less reliance on sex work as a primary income generating activity (p=<0.05) and improved mental health outcomes (p=0.05). A salient finding in this study was that intensive case management provided genuine discussions to take place between counselor and participant. This social connection allowed for underlying issues to be explored and goal setting to occur, leading to sustainable changes.

Sevelius' research states that TGWSW expressed concern about taking PrEP because they felt it would create a perception in their community that they were HIV positive. They did not wish to perpetuate the already harmful stereotype of TGWSW as being "vectors of HIV" [31]. However, some TGWSW reported that they felt PrEP could be used as risk reduction as some of their clients preferred "bareback" or condomless sex. This should be viewed as a harm reduction strength by providers since respondents also reported this sexual exchange as a way to affirm their sexuality and gender identity.

The engagement of Black MSMTGW is indicated in multiple of this review's studies and outside literature as well. Doblecki-Lewis commented that the motivation and social supports of Black MSM must be assessed to screen for potential loss to care. Since low retention in care coupled with concerningly high rates of HIV have been reported for this population, rapid linkages to care and social services should be provided [65, 89-91, 96].

4.1.2 Primary Care and General Healthcare Engagement

In Clement's study, the rate of individuals (mostly Black MSM) attending their first PrEP appointment after visiting an STI clinic was very high (60%). It was found that the majority of individuals who missed their appointment or did not adhere to their medication and subsequent appointments were Black MSM and/or sex workers. Reasons for missing these appointments were identified: transportation problems, scheduling conflicts, cost of medications and unsure interest in PrEP [88]. These factors describe more structural barriers while the other studies discovered more interpersonal hindrances reported in the next paragraph.

Underhill's (2015) qualitative interviews revealed that many MSM and especially MSMSW feel they cannot trust their healthcare providers and are hesitant to disclose their sexual

history or their involvement in sex work. For others, some individuals felt it was irrelevant or inappropriate to discuss sexual issues while at the doctor's office. MSMSW, in particular, were not only less likely to trust providers than other MSM, but were also more likely to feel they had no provider choice [90]. This suggests that MSMSW lack self-efficacy to explore healthcare options. TGW in Sevelius' study reported medical mistrust due to transphobia, difficulty in finding trans competent providers and desire to find clinics that had integrated HRT and PrEP services [31].

4.1.3 Patient-Provider Characteristics

Underhill's 2015 study addressed patient-provider relationships and their association with health outcomes. During interviews and focus groups, MSMSW reported higher rates of using an emergency department as a primary source of healthcare and had less health insurance coverage than other MSM. MSMSW also indicated that they had not been tested as regularly as other MSM. A common theme in many of these studies was that HIV was not considered a priority for participants. "When asked about unmet healthcare needs, participants rarely mentioned HIV-specific services such as testing or PEP [post-exposure prophylaxis]. Instead, they tended to prioritize care for current conditions causing pain or stress. This finding reflects the complex and multifaceted nature of healthcare needs in the MSM and MSMSW populations..."[59]. Frequently, researchers and providers assume that a life threatening disease like HIV would be the chief concern for any individual; the literature is indicating this may not always be the case. This hierarchy of needs indicates an important direction for future research.

Provider mistrust reported by MSMSW was higher compared to other MSM. A respondent in Underhill's study said he could not complete treatment due to the stigma he faced: "Listen,

that's my biggest problem with getting clean. [E] very treatment center I go to, I uh, I have to lie about my, my life.... I can't sit in a crowd of people and say, 'Yeah, I fucking, let 70 year old men fucking blow me every day' So I end up leaving ... my issue doesn't get resolved because I, I can't even talk about it with anybody" [90]. This quote demonstrates the common theme that retention is care is consistently associated with stigma and the quality of the provider and patient relationship.

Adding to this theme, interviews with TGW in Sevelius' study noted that these women feel comfortable and safe in a clinical setting that is trans competent. "Sometimes just to find a doctor that's trans-friendly and make sure that we're on our right hormones is hard enough. I think there would be trans women who would be scared [to take PrEP] because it's all about finding that right doctor"[31]. MSMTGW competence and training is pivotal for maintaining relationships with these vulnerable individuals.

In Washington's focus groups, researchers found that Black MSMSW faced homophobia, serophobia and stigma based on their sex work. Interviewees indicated a need for MSMTGWSW-competent treatment providers who would not shame and embarrass them for their work or their identity. One respondent stated training would be needed "To help [counselors] understand how substance abuse plays into the sexual acts that go in between MSM and substance abuse...coming into a facility and you feel like you have an issue like sexuality and that facility is not equipped to handle that" [75]. Traditional treatment centers were said to not be capable of dealing with the trauma and sexual abuse that these men experienced.

4.1.4 Ancillary Services

The Washington study on Black MSMSW who use drugs found several significant findings for this population. Study participants stated that many treatment programs for substance use disorders are not LGBT competent and they experience high rates of homophobia from counselors (even though many of them self-identify as heterosexual and only have transactional sex with men as opposed to romantic). Similarly, interview participants reported high rates of childhood sexual abuse, which were typically not discussed in therapy sessions due to fear of judgment. Participants also suggested that a way to retain BMSM in substance use treatment is to create comprehensive care that includes HIV education, racial and LGBT sensitivity, sexual health and an understanding of the sex trade. The use of the Human Sexuality Educational Model in SUD treatment was approved by participants who felt that it would educate counselors on the nuanced reasons that Black MSMSW use substances and instruct them on the language and culture of the population [75].

Senreich's study showed significant levels of shame and trauma among HHSGS SW in the substance use program. Their guilt for having engaged in homosexual behaviors indicates deeper emotional issues that need to be addressed in treatment. Interviews elucidated some of the profound trauma leading to substance use for these "gay for pay" men.

"I was in prison for 12 years and I had sex with men. My wife found out about it. It was part of the reason she left me. I never talk about it. Because of the feelings of shame, I sometimes drink over it. I'll take this with me to my grave. It could get me to relapse to numb the pain."

Participant feedback suggests that tailored substance use therapy for the trauma that men who are HHSGS SW is necessary to address the underlying guilt they have about their homosexual behaviors.

Women, whether MSMTGW or otherwise, did not have similar thoughts of guilt and shame for their homosexual behavior [33]. A need for competent care tailored to MSMSW who identify as heterosexual was identified in both Senreich and Washington.

Treating and preventing HIV is essential; identifying and reducing the structural factors that exacerbate health disparities, although more long term, is even more crucial [30]. Until sex workers feel safe and comfortable to discuss their source of income with primary care providers, they will have limited medical care engagement altogether, increasing their susceptibility to HIV and other STIs. The threat of incarceration is a hindrance to healthcare for these individuals suggesting policy level changes are needed to foster health promotion in sex work communities [28, 81, 97].

Research indicates clear disparities in mental health outcomes for MSMTGW individuals, but there are few studies providing recommendations for best practices to address psychological and sexual trauma in the MSMTGWSW population. Scores of studies have been produced indicating disproportionately high rates of HIV among sex workers, people of color and MSMTGW [34, 79, 98, 99]. The literature examined in this paper surrounding the MSMTGWSW population in particular primarily addresses HIV prevention and PrEP uptake. This population's high rate of HIV and trauma-induced mental illness demands ongoing research efforts to better understand how to treat and provide services to those who are living with HIV and experiencing co-morbid mental illnesses.

Medicine has prolonged and improved the quality of human life over the past few centuries, however, over diagnosing, prescribing and treating individuals who need help addressing underlying issues isn't always the solution [9, 100]. Sex worker participants in these studies reported prioritization of housing, substance use treatment and other social services [31, 75, 90,

91]. Scholars should be engaging with these individuals to create interventions to alleviate the more pressing factors like housing instability, serious mental illness, legal challenges, addiction therapy, intimate partner violence, etc., which keep these individuals from engaging in healthcare in the first place [15, 29, 30]. Lessons from syndemics tell us that recognizing and addressing underlying trauma, mental illness, food insecurity, incarceration, violence, housing instability etc. should not be seen by providers as a secondary issue [8, 26, 57, 58, 82, 101]. They are intrinsically linked to the person's current health status. Integrating the healthcare of sex workers with counseling, case management and legal services should be the gold standard for care. The fragmentation of healthcare disrupts retention in services and exacerbates health outcomes [39, 102]. As indicated in the Sevelius and Reback study, when individuals are preoccupied with the stress of sleeping on the street they may not want to be told by a provider that they need to take their HIV medication [31, 87, 103]. Instead, providers should address the priorities of their patients; once these challenges are overcome, the patients may be able to redirect their attention back to their medical needs.

To expand, housing first harm reduction models, which do not require residents to abstain from substance use, have been shown to prolong housing stability and have had similar substance use outcomes compared to traditional, abstinence models [104]. On a larger scale, legal diversionary programs that prioritize treatment, housing and rehabilitation have been shown to reduce recidivism and improve health outcomes [105]. These person-first concepts prioritize basic needs over their substance use [78, 104]. When a person is safe and housed, they can address other, less urgent matters. The prioritization of substance use treatment before essential resources is a vestige of the legacy of the war on drugs and social stigma surrounding substances. Coerced substance use treatment is the medicalization of an underlying personal issue that may not be

solved by unnecessary interventions [106, 107]. Similar to findings in this literature review, other studies have indicated that simple social support and human connection may be the missing link to successful engagement in care and improved health outcomes for vulnerable populations [108, 109]. Placing a label on someone, giving them a pill and discharging them is not a panacea. Integrated healthcare with rapid linkages to care and warm handoffs to holistic social services may be a beneficial alternative to quick fixes like abstinence only substance use treatment or simply giving someone an anti-depressant without therapy [39, 102]. MSMTGWSW suffer from disproportionate rates of SUD, incarceration, HIV, mental illness and homelessness. The multiplicative effect of syndemics demonstrates the urgency of providers and policy makers to remove barriers to prevent recurrence of symptoms and imprisonment respectively [13, 28, 82, 97, 110]. SW, in particular, desire and deserve human connection and respect from providers and the general public.

Importantly, this work acknowledges that while many individuals identify with multiple marginalized social identities, these communities, specifically MSMTGW, people of color and sex workers, have unique social experiences that may be linked to health. Furthermore, this review intends not to perpetuate biological essentialist concepts of sexuality, gender and race. Specifically, social determinants (e.g. poverty, racism, homophobia and violence) and health outcomes (e.g. HIV status and depression) are intrinsically linked to systems of White supremacy, a legacy of medical mistreatment and oppression; they are *not* inherently linked to the identities (e.g. MSM, TGWSW, Black MSMSW) themselves [20, 24, 70, 111].

It was discussed in the beginning of this paper that conflation of differing social groups by stereotypes can be detrimental to these marginalized communities. More research needs to concentrate on MSMTGWSW and more specifically, TGWSW or BMSMSW since these

populations are unique and have needs that are distinct. Much of the extant literature uses small and non- randomized sampling in specific urban areas. Large, representative samples should be used so that more generalizable evidence can be produced.

The focus of many of these studies was HIV prevention and PrEP initiation and retention; although these are important interventions, treatment of SUD and mental illness as well as housing and legal services should also be rigorously examined to create MSMTGWSW centered programming that addresses their needs other than HIV.

The criminalization of sex work and the conflation of human trafficking and consensual transactional sex are both extremely harmful to sex workers [112]. Policies should be evidenced based to avoid this conflation and perpetuation of an already marginalized population. Western European countries like the Netherlands have decriminalized sex work and instituted programs to support sex workers regardless of sexual and gender minority status[113, 114]. India has also shown promising, innovative programming led by sex workers who are capable of identifying people who may be victims of human trafficking and those who are consensually offering sex[115].

4.2 Limitations

As with all literature reviews, this study could not capture, with certainty, all research that has been produced on this topic. The literature search only used PubMed and Ovid to find records within MEDLINE and a search of other databases could produce different findings.

There are several limitations for the studies explored in the literature review. Almost all studies centered around HIV prevention which is not negative in and of itself, but this demonstrates

how the medicalization of treatment for this population can have unintentional negative consequences. By neglecting structural barriers to healthcare like transportation, racial segregation, MSMTGW stigma and survival economies, research may indirectly perpetuate stereotypes about HIV status in this population. It also places the burden of change on this marginalized population instead of redirecting attention to structural issues that could create lasting change like decriminalization of sex work or funding educational programs for disadvantaged communities. In addition, many of the studies had limited generalizability due to sample size and study design.

Some of the studies used samples that were either unclear about the proportion of participants that were engaged in transactional sex or they included very small numbers of such individuals. This limits the generalizability of findings to the wider MSMTGWSW populations. The Clement study, for example, only captured six people who reported sex work out of the 196 study participants. The Sevelius study only states that "most" of its participants, at some point, engaged in sex work. The definitions of sex work vary throughout the studies; some use "sex work" and others use "transactional sex as their primary source of income". The Doblecki-Lewis paper defines it as "giving/receiving money for sex" which again limits our findings as it does delineate who is buying and selling.

5.0 Conclusions

The U.S. healthcare system is moving closer to prioritize social determinants of health as they relate to the health and well-being of marginalized communities. Research and social activism have motivated change for the ways illness is viewed and medical providers practice with respect for the dignity of human beings.

Healthcare providers include social workers, physicians, nurses, therapists among others. It should be a goal of every one of these people to eliminate stigma and barriers to care. Participating in sensitivity trainings and practicing self-awareness by recognizing our own biases are a great way to start. On a structural level, there must be a reinforced commitment to fighting for health equity of all people by encouraging policy makers to enact policies that support the health of sex workers including sex work decriminalization, Medicaid expansion for people with mental illness, decriminalizing substance use, and creating affordable and quality housing for those in need.

Millions of dollars are spent on research that has identified barriers to care and described health disparities, but there remains a lack of robust evidence on how to ameliorate the inequities that burden sex work populations. Ronald Weitzer of George Washington University suggests strategies to reduce sex worker stigma that span the socioeconomic model from individual to interpersonal to structural. He recommends that first, we must change our language about SW. Similarly with the trending out of the "N" word or "faggot", we should push back on the use of "whore", "prostitute" and the like to reframe the way we speak about these people [116]. On a more structural level, Dr. Weitzer recognizes the important work of St. James Infirmary in San Francisco, a hospital dedicated to SW healthcare. This organization paid for ads posted in buses

stating "someone you know is a sex worker" to humanize SW. Institutions that respect and approach care for SW in this way should be the rule and not the exception. Normalization of an array of human sexuality and identity is key to the health of all.

It's been 71 years since the WHO created their definition of health: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Medical care has come a long way, but the hierarchical scaffolding of our healthcare system that places treatment and diagnosis over human connection and trauma silences and disempowers the most marginalized. Addressing the humanity and dignity of sex workers who are sexual and gender minorities can avoid the pervasive theme that "Medicalization prioritizes health care vulnerability over health status vulnerability..."[9]. Healthcare systems that understand the whole person and address their most urgent needs as well as connecting them to services regardless of profit and prejudices is imperative to begin to close the health disparities gap for this marginalized community.

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