

Original Research Article

Reported profiles of women who have sex with women in Dar-es-Salaam, Tanzania

Abstract

Aims: This study explored socio-economic characteristics, sexual and health behaviour of women who have sex with women (WSW) in Tanzania. The study was conducted to increase public and policy-makers awareness about WSW characteristics, findings may be useful in planning essential public health interventions targeting the WSW.

Methodology: We involved WSW and community leaders in this study. We used a cross-sectional descriptive formative design and conducted the study in Ilala, Kinondoni and Temeke districts in Dar-es-Salaam Region in Tanzania. We performed data collection through focus group discussion (FGD), in-depth interviews (IDIs), key informant interviews (KIIs) and life stories. We applied inductive thematic analysis where open coding approach was adopted using participants' language. We employed grounded theory approach in the analysis.

Results: WSW in Tanzania belong to various sexual groups including lesbian, transgender, tomboy and bisexual. Although sex between women is practiced by women of all ages, it is most common among young women. It is practiced by married women and women with children and commonly starts during Secondary School. WSW are of varying socio-economic status (education and income) with some WSW facing poorer socio-economic status due to rejection, stigma and discrimination propagated by family and the wider community. WSW engage in risky behaviours, sexual and other health-related behaviours such as promiscuity, transactional sex, alcoholism, smoking, and drug abuse.

Conclusion: WSW are of varying socio-economic characteristics, sexual and health behaviours. This may mean unique public health needs for different WSW and thus calling for tailored health education, health promotion, as well as socio-economic interventions to improve health-related behaviours, for better health outcomes of the WSW.

Keywords

Women who have sex with women, socio-economic characteristics, sexual behaviour, health behaviour, women's health, Tanzania.

Abbreviations

WSW- Women who have sex with women

IDI- In-depth interviews

Introduction

Homosexuality or same sex relationships are socially stigmatized and illegal in Tanzania. Same sex relationships are criminalized and offenders can be punished by law with jail time or fine[1]. Homosexuals or people practicing same sex relationships engage in risky sexual behaviours that put them at high risk of sexually transmitted infections (STIs) especially infection with HIV[2–4]. As a result, homosexuals are categorized into a group called key populations (KPs) when it comes to HIV infection. KPs commonly engage in sex with high risk partners and are a bridge population for transmission of STIs to the general population; this is because they have sexual relations with people in the general population as well[3, 4]. KP's rights to health care is recognised especially based on their vulnerability to STIs[5, 6]. Over the past few years quite a number of public health research and interventions have focused on men who have sex with men (MSM), female sex workers (FSW) and injecting drug users (IDUs) as key populations[3, 7–9]; however public health research or interventions among women who have sex with women (WSW) is almost non-existent[8].

WSW in Tanzania identify as lesbian, transgender, tomboy or bisexual. Same sex relations are practiced by women of all ages but common among the youth, practiced by married women and women with children, and commonly start in girls boarding Secondary Schools. WSW are of varying socio-economic status with some WSW socially disadvantaged due to rejection, stigma and discrimination. WSW engage in risky sexual and health behaviours, such as promiscuity, transactional sex, alcoholism, smoking, and drug abuse.

WSW exist and sex between women is becoming common in Tanzania[10]. Many reasons drive women towards having sex with fellow women, including misperceived low risk of STI transmission, pleasure, and exploration[11]. In Tanzania, women who have sex with women (WSW) operate in extreme secrecy within closed circle of trusted friends and acquaintances, as a result they are commonly thought as a hard-to-reach, "hidden" population[10]. The hidden nature of the practice has resulted to the lack of information about the WSW, their characteristics and their healthcare needs. The lack of information about the WSW may lead to missed opportunities for health promotion and prevention of illness [10].

WSW are a high risk population and have many healthcare needs [12–16] that may be left unattended if no efforts to understand who they are in terms of their socio-economic characteristics, sexual and health behaviours, and how these influence their health status. It is known that socio-economic factors shape health across a wide range of health indicators, settings, and populations[17–19]. Socio-economic characteristics may influence health-related behaviours including sexual behaviour and other health-related behaviours such as smoking, drug abuse, and alcohol consumption. Understanding the socio-economic and sexual and health behaviour profiles of the WSW may help stakeholders in devising effective ways to address social factors to improve health and reduce health disparities between WSW and the general population.

This study explored socio-economic characteristics, sexual and health behaviour of the WSW in Dar es Salaam. We sought to answer the following research question; what are the socio-economic characteristics, sexual and health behaviours of the WSW in Dar es Salaam? Findings from this study may be useful in understanding the uniqueness and/or similarities in socio-economic characteristics, sexual and health behaviours between women in the general population and women who practice same sex relationships. This information will increase public and policy-makers awareness about WSW and hopefully be useful in planning essential public health interventions targeting the WSW.

Methodology

We included WSW and community leaders in this study. This study was a cross-sectional descriptive formative study. It was conducted in Ilala (with 1,220,611 inhabitants according to 2012 census), Kinondoni (with 1,775,049 inhabitants according to 2012 census) and Temeke (with 1,368,881 inhabitants according to 2012 census) districts in Dar-es-Salaam Region; the population in Dar es Salaam is estimated to grow at 5% annually [20], therefore the population may be 5% higher in each study district. Dar es Salaam is the largest commercial city in Tanzania, known to host people from diverse backgrounds and lifestyles including those engaging in wide-ranging sexual behaviours and practices. The city, therefore, allowed easier access to study participants. WSW were recruited through snowball sampling in community settings. Snowball sampling technique was suitable for our study because WSW are hard to find as they operate very privately within closed circles, hence we relied on their peers to connect us to more participants. Snowball sampling technique is commonly used to recruit participants in research studies among key populations[21–23]. Inclusion criteria for the WSW included: age 18 years and above, this is because of the sensitive nature of the topic and that homosexuality is criminalized in Tanzania, therefore adult WSW had decision-making capacity to provide voluntary informed consent for participation in the study; residence in Dar-es-Salaam for six months or more because Dar es Salaam is the biggest commercial city in Tanzania whose residents have wide social connections, hence a higher chance of having an easier access to WSW than anywhere else

in Tanzania; engagement in same-sex relationship(s) in the past year and/or in same-sex relationship(s); and knowledge of WSW's lived experiences and willingness to participate in the study.

Community leaders were recruited through purposive sampling within communities from which our study WSW were recruited. Purposive sampling was appropriate for recruiting community leaders who provided in-depth and detailed information about the WSW. Community leaders were included in the study as key informants because of their position as representatives of the communities from which our WSW participants were recruited, and they were socially connected hence knew what went on within their communities and provided useful insight for this study.

Data collection was performed through focus group discussion (FGD), in-depth interviews (IDIs), key informant interviews (KIIs), and life stories. The study was interested in in-depth and rich experiences of the participants therefore we included 17 WSW and 3 community leaders, one from each district. We conducted 1 FGD with 6 WSW; 3 KIIs with the community leaders; and 11 IDIs with WSW. Trained interviewers collected information from participants. Research permission and consent was sought from authorities and participants respectively. Ethical clearance for this study was granted by the Muhimbili University of Health and Allied Sciences (MUHAS) Institutional Review Board. Participation in the study was voluntary and participants gave a verbal consent for participation.

With participants' consent, FGDs, KIIs, IDIs and life stories were audio-recorded, and research assistants took field notes as well. All tools were administered in Kiswahili; the national language spoken by almost everyone in Tanzania. The interviews included questions on socio-economic characteristics, sexual behaviours, smoking, and drug abuse and alcohol consumption. The following measures were taken to protect the identity of study participants- first, due to sensitive nature of the study, participants agreed to provide informed verbal consent not written; second, during data collection no personal identifying information was recorded; and third, the data was kept safe and confidential- data was stored in password protected computers with access only by study researchers.

After data collection, transcription and translation of data was conducted. We applied inductive thematic analysis where open coding approach was adopted using participants' language. We adopted grounded theory approach in the analysis because our research topic was novel; it had not been studied in Tanzania- nothing was known about the socio-economic characteristics, sexual and health behaviours of the WSW. We applied grounded theory to find out WSW's sexual and health behaviour, as well as their socio-economic characteristics which may explain why WSW behave in certain ways[24, 25].

Results

Socio-economic characteristics

Age

A total of 17 WSW participated in the study. Of these, majority (9) were between the ages of 20-29 years, followed by (6) between the ages of 30-39 years, while lowest (2) between 40-50 years. Majority of our WSW participants were young. Interviews revealed same-sex relationships are mostly common among younger people, even though they are practiced by women of all ages. This is indicated in the statements below;

“In my opinion I think most WSW are young, because most young people have a higher sex drive and they like to explore sexually, sometimes aimlessly. Some WSW are those that have lost hope and direction in life and think engaging in sex with fellow women is the right way to behave”. IDI Community Leader 2.

“I do not know for certain about their ages but I think they are those that are past adolescence.....but are not so old either”. IDI Community Leader 1.

“Right now, there is no specific age for having same-sex relationships...you may find an older woman that you respect practicing same sex relationships...so it has no specific age to practice...it involves the young and the old as well...that’s just how it is now”. IDI WSW 7.

Education level

Results indicate WSW have attended school, some did not complete primary school education, while others have attended colleges and universities. The minimum education by the WSW in this study is primary school education, majority have attained ordinary level secondary school education, and a few have diploma and degree. Interviews show that most WSW initiate same sex relationships in Secondary Schools, as indicated in the following comment;

“Most WSW are educated.... This is because experience has shown this behaviour is mostly prevalent among school girls as well as among female college students...They (the WSW) are not uneducated..” IDI Community Leader 1.

Although many WSW attend school, some do not finish due to social stressors including alienation from family and stigma from the community. This is indicated in the statements below;

“There is a question you asked about poor socio-economic status (income) among our WSW community....You may find a situation where the family discovers your sexual practice at a young age, they stigmatize and reject you, as a result you may be unable to proceed with education.... What do you expect when you deny education to a child huh?..... That’s how you find WSW that have not been able to complete school... Even though they are not so

many...Education is very crucial in this generation...If you are educated, even without money, you have somewhere to begin in life...So those who have been discriminated by the community lack even primary education and, hence, lack a basis from where to begin to improve their lives...." IDI WSW 10.

"Ahaaa...there is another case of a young woman who dropped from school when she was in Ordinary Level Secondary School (Form 3)... She could not complete school, she could not complete form 4....She was being harassed constantly...I realise many of our kind (WSW) do not complete school because of social problems." IDI WSW 5.

Occupation and income/economic status

WSW engage in conventional daily economic activities as everyone else in the general population. Some WSW are employed, some are self-employed, while some own businesses. WSW in our study were engaged in business (providing transportation services, owning salons, selling shoes); employed in a non-governmental organization, employed in salons, engaged in household activities as home makers, and some engaged in female sex work (FSW). These are described in the following statements;

"WSW are people who live a normal life just like everyone else ... They wake up in the morning to engage in various economic activities, maybe they are employed... They go to work just like all other employed people..... If they are self-employed or have a business they work on these as anyone else does." IDI WSW 13.

Some participants, both WSW and community leaders, commented that economic power may be a reason behind prevalence of same-sex relationships in Tanzania;

"Most WSW are middle income earners.....Some are employed, some self-employed....Many WSW use economic power to attract same-sex partners.....Economic power has facilitated progression of this sexual behaviour." IDI community leader 3

Some participants believe being a WSW limits chances of being employed and sometimes is a reason for dismissal from employment;

"Let me speak more on employment...You may apply for a job position but your appearance may limit your chances of getting hired/may cause you to be denied employment opportunity... Not only employment, appearance may cause you to be denied so many things including accommodation/renting house...This is among things that cause low income (among WSW)... Some WSW are better off because they come from well-off families where they get money including capital to start businesses." IDI WSW 8.

"I can give example of people I knew from work who left jobs/were terminated because of their sexuality/gender, I am talking about transgender women who were born male but have

transitioned to a woman...When their sexual identity was discovered, they got fired ... So there is discrimination. Even when you want to apply for a job...Many transgender people are discouraged...Many have university diplomas but they are not practicing their profession, instead they opt to do business.” IDI WSW 1.

“...there are WSW who are highly educated but they don’t get employment opportunities because of their sexual behaviour.” IDI WSW 4.

Marital status and number of children

Most of our WSW participants had never married. Those who married were divorced. Most did not have children, but few had up to two children.

“I was married in the past then I divorced... That’s when I got deeper into this sexual behaviour. I cannot sustain relationships with men...I just do not get sexual attraction from men...My family does not know this because I am living on my own.....My marriage lasted for 18 years...I faced violence because I was not enjoying sex with my husband...I could not have children...” IDI WSW 12

Sexual behaviour

Categories of WSW

Although WSW are collectively referred to as “lesbians” in Tanzania, our findings indicate our participants belong in several WSW categories: lesbian, tomboy, transgender, and bisexual. Participants described each of these categories as having the following characteristics;

- i. Lesbian- a woman who engages in sex with women, but can also engage in sex with men. They dress like women.
- ii. Lesbian top – takes on the role of a man in a lesbian relationship.
- iii. Lesbian bottom – takes on the role of a woman in a lesbian relationship.
- iv. Lesbian top cum bottom – can take on a male or female role in a lesbian relationship.
- v. Tomboy – is sexually attracted to women only, is never attracted to men because they see themselves as men, and thus never engage in sexual relations with men. They dress and act masculine.
- vi. Transgender male – Female transitioning to male/masculine gender.
- vii. Transgender female – Male transitioning to feminine/female gender.
- viii. Bisexual – is sexually attracted to and has sex with both women and men but is not a lesbian.

“In general women who have sex with other women are generally called lesbians by people in the community, but there are several categories of us...some of us identify as transgender-where some transition from male to female while others from female to male.” IDI WSW 3.

“Because when you look at me....I am becoming masculine. For example, I have started transitioning to a man...from female to male...when someone looks at me it may be obvious that I am going through gender transition.” IDI WSW 4.

Debut of sex with women

Participants reported starting sexual relations with women at a young age, while married, with relatives, or with friends at school as alluded in the following statements;

“I started this behaviour since 1990, I was around 15 or 16 years old...I was living with my aunt and sleeping in the same bedroom as my cousin sister whom I started having sex with. That is how I started this behaviour” IDI WSW 17.

“...When I was in school ...I went to all girls secondary school....The girls were attracted to me and we wrote love notes to each other...That’s how I started....I have had attraction towards girls since adolescence but I started engaging in same-sex relationships in advanced years of Secondary School...” IDI WSW 9.

“I used to see my female friends with a female lovers...When I used to visit their places I would see them and slowly got used to the idea and eventually I became attracted to another woman...” IDI WSW 13.

“I started having sex with a woman while married...I did not enjoy having sex with my husband...But that changed once I started having sexual relationship with a woman...I enjoy sex with a woman. Up until now I am not at all attracted to men...” IDI WSW 5.

“Most men are heartbreakers (cause stress in relationships) ...I got in same-sex relationship because I was stressed by a man I was dating...So, I decided to get into same-sex relationship...” IDI WSW 8.

Sexual partners (number and type)

Some WSW reported sex with women and men, and others reported sex exclusively with women.

“No, I have never had sexual relationship with a man....” IDI WSW 1.

“You may engage in sex with a man but not have any sexual attraction towards him (no emotional connection) ... Your feelings/emotions belong to another woman....But you are

with him at that moment there's nothing you can do about it...And if it happens you get pregnant, what can you do!? Will you abort !!?? IDI WSW 9.

"I don't want a man...I don't even want to see them, what for?... I get sexual satisfaction from women. ... So, why should I bother myself with men? ... I don't want those people....They have stressed me...They got me pregnant and left me with 2 children to raise on my own... I hate them! ... I don't want them at all!" IDI WSW 11.

It has also been reported that some WSW engage in sexual relations with married women. Married women facing relationship issues such as sexual dissatisfaction and maltreatment from male partner/husband opt for same-sex relationships as explained by our participants;

"...What happens is that married women would come to me for sexual relations...I don't search for them...There is one or two reasons for this.... Stress from men, the way men treat them during sex, some women have never enjoyed sex (never had an orgasm) even in marriage to the extent they feel something may be seriously wrong with their health/bodies, because they hear sex is supposed to be enjoyable but they have never had that experience...Some even experience pain during sexual intercourse." IDI WSW 2.

"Of course...The women (I am involved with) are married; they have their own families (husbands and children)" IDI WSW 1.

WSW also reported promiscuity is very common among their circle;

"Let me tell you...WSW may have up to 6 sex partners at once....Another issue is that lesbian relationships involve a lot of partner sharing....You might find yourself dating a friend's ex-partner or your current partner has dated your ex-partner....Lesbian relationships are not done openly....It is easier for WSW to approach women whom they know are already into same-sex relationships." IDI WSW 4.

Transactional sex

Some of our WSW participants reported transactional sex to be common among WSW where they exchanged sex for money and this can happen with both female and male clients;

"I use sex as an income generating activity.....I sustain my life through trading sex for money..." IDI WSW 12.

"There are some instances where a WSW is a sex worker, they are lesbian but also involved in transactional sex with fellow women....I have met sex workers who are lesbian...They may have male clients but have sexual relationships with women (to whom they are emotionally and sexually attracted)" IDI WSW 14.

“From what I know, some women engage in sexual relationships with other women for money...But there are women who engage in sexual relations with other women for enjoyment/love/partnership....I do it because I am her lover and she is my lover, I do not engage in transactional sex...We do it as husband and wife...” IDI WSW 2.

“There are married women experiencing sexual dissatisfaction; therefore, they give us money for sexual satisfaction.... They are afraid of having affairs with men due to complications that may arise from those relationships ...Therefore, they use us...Even if the husband finds us at their house with their wives they do not suspect anything...They give us money and we give them sexual satisfaction...” IDI WSW 8.

“Of course, sometimes I engage in transactional sex for money ... They (women) call me over my phone...I have a partner who calls me (when she needs me/sex).....” IDI WSW 12.

“I play both roles in sex with women ... Sometimes I act as a man and sometimes I am the woman...I can play whatever role ... My priority is to satisfy my clients ...They have money, right?... I get two hundred dollars per game (service)...” IDI WSW 17

“Yes, there are (women who engage in transactional sex) For example, there is a lady living out of Tanzania, living in a neighbouring country that was attracted to me after seeing my photograph from her friend She really wanted me to be her lover ... She used to send money to me I was never attracted to her but she would send money and also sometimes she would send transportation money wanting me to meet her....She wanted sexual satisfaction...” IDI WSW 16.

Other risky behaviours

Findings indicate presence of other risky behaviours among the WSW. Excessive alcohol consumption, smoking, and drug abuse is very common among WSW. Alcohol is sometimes used as a weapon to lure women into having sex.

“I use alcohol as a tactic to facilitate sex from women...I always give my sexual interests alcohol.....When I am attracted to someone, I get close to them...I try to make them comfortable and interested in me sexually....But if I fail to attract them sexually, I give them alcohol ... The get drunk then I make sexual advances on them.... If they become angry after my sexual advances I apologize and they forgive me...” IDI WSW 1.

“I am usually persistent on my sexual advances...Even when they get angry and I apologize we usually continue to consume alcohol...Finally, after several attempts they get used to the idea and we become sexually involved...” IDI WSW 1.

“I have done this on many women that have fallen into sexual relations with me because of alcohol.....Currently, I have two permanent partners.....Both are married women with families...” IDI WSW 1.

“People in the WSW community consume a lot of alcohol...Most of WSW drink alcohol, they drink excessively... They also smoke...They drink a lot ... They have multiple sexual partnersSo, risky behaviours are prevalent in this community...” IDI WSW 12.

Drug abuse is also prevalent, with some reports of marijuana smoking and injecting drug use among the WSW;

“Those who abuse drugs are people who engage in same-sex relationships...These are at greater risk because they sometimes share needles with their lovers...Most drug users (IDUs) have sex with female sex workers...A person who injects drugs cannot have sex with straight women...So, they usually go to sex workers (FSW) with similar sexual interests who most probably is also a drug user....Most drug users (IDUs) are 99% sex workers (FSW) ... FSW abuse drugs before going on the streets...They most probably don’t use condoms with clients...Then they also have sex with their permanent partners.... If they have gonorrhoea they end up infecting others...The risk is really high” IDI WSW 2.

“Some WSW have many sexual partners and engage in sex with men ... They are alcoholics ... They smoke cigarettes, smoke marijuana, and abuse drugs” IDI WSW 15.

Heavy drinking and drug abuse increases the probability of abuse. Findings show that drinking has led to sexual abuse among WSW, as reported below;

“Risky behaviours is where you have multiple sexual partners.....You may have many partners for sustenance...May be your partner cannot meet all your financial needs.....But, some are sexually violated after consuming alcohol or abusing drugs....They unwittingly get raped and may catch sexually transmitted infections...” IDI WSW 7.

“I have never been sexually abused...But, my friend has experienced rape...She went out with some women without knowing their true intentions...these women wanted to have sex with her...They gave her alcohol and raped her ... Several women raped herand video-recorded the incident...” IDI WSW 3.

Discussion

In Tanzania, there are women who report sexual relationships with other women. This study sought to explore socio-economic characteristics, sexual and health behaviour of the WSW in Dar es Salaam. Our findings indicate that WSW is a diverse group with various socio-economic characteristics, sexual, and other risky behaviours.

WSW behaviour, although common across all age groups, is mostly prevalent among younger women[26]. Same-sex relationships start quite early, most women start in (girls') boarding schools or practice with relatives and friends. Same sex-relationships are also practiced by married women and women with children. Several reasons for engaging in same-sex relationships with women include exploration, sexual dissatisfaction with men, relationship problems with men, and sexual attraction[10]. Although most commonly known as "lesbians", WSW in Tanzania identify into various sexual groups- lesbians, tomboys, transgender and bisexual. Each of these groups have unique characteristics and, hence, may have unique (public) health needs[14]. For example, tomboys and transgender men and women face disproportionately high discrimination and stigma from the society; in accessing social services and employment. They also face higher probability of experiencing emotional, physical, sexual violence, and lower utilization of formal healthcare services[15, 27–29].

Our findings indicate that, on the one hand, economic opportunities have given women money, power and freedom to practice same-sex relationships, such that some women use this power to buy sex from fellow women [19]. However, on the other hand, some WSW face socio-economic obstacles. For example, some WSW do not get chance of employment (by not getting into the jobs in the first place) or getting fired after their sexual behaviour is discovered. Even though most WSW have attended school, some did not finish or advance into the higher levels of education because of problems coming from families and communities including rejection, stigma, and discrimination. These socio-economic obstacles may propagate risky behaviours and health inequalities among the WSW. In turn, poor socio-economic status exposes WSW to poor health choices and outcomes[30]. Evidence has shown that health-related behaviours are strongly shaped by social factors, including education, employment, and income[19]. For example, education increases knowledge and skills and, thus, can facilitate healthier behaviours. Similarly, education is also linked to better and higher-paid work, higher social status, and better social networks.

WSW engage in promiscuous relationships with men and women and they may in fact be at greater risk of poor health outcomes than women with exclusively male partners [13, 14, 26, 31]. Having many lifetime sexual partners and having concurrent sexual relationships, is very common among WSW. WSW circles are small; therefore, they have a very small dating pool to choose partners from. Furthermore, the secrecy and illegal nature[1] of the practice causes sharing of partners to be very common. Sex for money is also quite common among WSW, sex is sold to fellow women and men for monetary gains[3, 4, 19]. For example, married women use money to purchase sex from fellow women for sexual satisfaction because the WSW seem low risk in terms of STIs risk than men and also, they cannot cause pregnancy. Therefore, married women would enjoy sex outside their marriage with little to no suspicion of infidelity from their husbands. WSW who engage in sex work need money to sustain life; hence, it is possible that economic strengthening and educational interventions could help curtail transactional sex.

Our findings concur with similar studies that being a WSW is a marker for increased risk of adverse sexual practices and risky activities[13, 14]. Our findings show high alcohol consumption, drug abuse, and smoking among WSW. Types of drugs abused include injectable drugs such as cocaine and heroin, and marijuana. It has been reported alcohol is a common factor in WSW behaviour, luring women into having sex unwillingly. Alcohol and drug abuse fuel sexual abuse, risky sexual behaviours, multiple sexual partners, transactional sex, unprotected sex, sex with risky partners such as bisexuals, and IDUs. Marginalisation experienced among WSW may lead to poorer mental health and experiences of abuse can combine to influence risk taking including substance abuse and risky sexual behaviours[29, 32]. High rates of drug abuse, smoking, alcohol consumption, promiscuity, and unsafe sex among the WSW has also been reported in similar studies [2, 14, 26, 31–33].

Due to the nature of our study population, this study was a pilot study and small. However, it has brought to light many issues of public health significance. Although our study did not look at health outcomes among WSW, empirical studies have shown WSW are more likely to report poor health status, with a higher likelihood of reporting STIs than regular women[12, 14, 26, 31, 34]. Findings such as these may suggest the need for health education and promotion among the WSW and healthcare providers to allow non-discriminatory access to healthcare among WSW who may otherwise feel stigmatised when accessing healthcare [27, 35, 36]. We recommend a larger study to measure health outcomes in WSW and possibly a comparative analysis of health outcomes between women who have sex exclusively with men, women who have sex with both women and men, and women who have sex exclusively with women. A comparative analysis may shed light on health outcome disparities between the WSW and the general population. For disparities discovered, effective and efficient socio-economic and behavioural interventions could be devised to close the inequality in health outcomes.

Conclusion

WSW have varying public health needs depending on their socio-economic status and whether they are lesbians, tomboys, transgender, or bisexual. Given the generalised riskiness of their sexual and social behaviours, stakeholders should intervene to activate health-promoting behaviours among established WSW groups, and also target schools and families with health education and promotion campaigns to interrupt health-damaging behaviours. Moreover, socio-economic interventions to improve social and economic standing of WSW may be needed to improve equity in health and health outcomes.

Consent

All participants gave a verbal consent for participation.

Ethical approval

This study was approved by the MUHAS Institutional Ethics Committee.

References

1. Kamazima SR, Mbishi J V, Saronga HP: **Female Same-Sex Legal Status and Its Implications to Women Who have Sex with Women ' s Health and Well-being in Tanzania : A Public Health Lens.** 2021, **40**:26–35.
2. Saronga HP, Mbishi J V., Bakar SM, Kamazima SR, Shaaban SK, Stanslaus BR: **Safe sex practices among women who have sex with women in Tanzania: implications for HIV and STIs control among this group.** *Int J Community Med Public Heal* 2021, **8**:4210.
3. Mpondo BCT, Gunda DW, Kilonzo SB: **HIV Epidemic in Tanzania: The Possible Role of the Key Populations.** *AIDS Res Treat* 2017, **2017**:15–17.
4. Boothe MAS, Comé C, Semá Baltazar C, Chicuecue N, Seleme J, Chitsondzo Langa D, Sathane I, Raymond HF, Fazito E, Temmerman M, Luchters S: **High burden of self-reported sexually transmitted infections among key populations in Mozambique: The urgent need for an integrated surveillance system.** *BMC Infect Dis* 2020, **20**:1–11.
5. Ministry of Health, Community Development, Gender E and C (MoHCDGEC) [Tanzania]: *National Guidelines for the Management of HIV and AIDS.* 2019(April).
6. NACP: *Comprehensive Package of HIV Interventions for Key Population.* 2014(September).
7. NACP: *Consensus Estimates on Key Population Size and HIV Prevalence in Tanzania.* 2014(July).
8. WHO Regional Office for Africa: *Focus on Key Populations in National HIV Strategic Plans in the African Region.* 2018(July).
9. Wambura M, Nyato DJ, Makyao N, Drake M, Kuringe E, Casalini C, Materu J, Nnko S, Mbita G, Shao A, Komba A, Changalucha J, Saidel T: **Programmatic mapping and size estimation of key populations to inform HIV programming in Tanzania.** *PLoS One* 2020, **15**:1–18.
10. Kamazima SR, Saronga HP, Mbishi J V, Bakar SM, Shabani SK, Stanslaus BR: **Existence and Implications of Women Who Have Sex with Women in Tanzania : A Public Health Perspective.** 2021, **3**:87–92.
11. Mbishi J V, Kamazima SR, Saronga HP, Bakari SM: **Context Within Which Female Same-**

Sex Develops and Practiced in Tanzania: Qualitative Study among Women Who Have Sex with Women in Dar-es-Salaam City. *J Med Res Surg Res* 2021, **2**:1–5.

12. Hughes C, Evans A: **Health needs of women who have sex with women.** *Bmj* 2004, **328**:464.

13. Tat SA, Marrazzo JM, Graham SM: **Women who have sex with women living in low- and middle-income countries: A systematic review of sexual health and risk behaviors.** *LGBT Heal* 2015, **2**:91–104.

14. Rahman N, Ghanem KG, Gilliams E, Page KR, Tuddenham S: **Factors associated with sexually transmitted infection diagnosis in women who have sex with women, women who have sex with men and women who have sex with both.** *BMJ Br Med ...* , **97**.

15. Knight DA, Jarrett D: **Preventive Health Care for Women Who Have Sex with Women.** *Am Fam Physician* 2017, **95**:314–321.

16. Cloete A, Sanger N, Simbayi LC: **Are HIV positive women who have sex with women (WSW) an unrecognized and neglected HIV risk group in South Africa?** *J AIDS HIV Res* 2011, **3**:1–5.

17. Braveman P, Egerter S, Williams DR: **The Social Determinants of Health : Coming of Age.** 2011.

18. Stringhini S, Sabia S, Shipley M, Brunner E, Nabi H, Kivimaki M, Singh-manoux A: **NIH Public Access.** 2010, **303**:1159–1166.

19. Braveman P: **The Social Determinants of Health : It ' s Time to Consider the Causes of the Causes.** , **129**:19–31.

20. **Dar Es Salaam Population 2022** [<https://worldpopulationreview.com/world-cities/dar-es-salaam-population>]

21. Magesa DJ, Mtui LJ, Abdul M, Kayange A, Chiduo R, Leshabari MT, Kayombo E, Tungaraza D: **Barriers to men who have sex with men attending HIV related health services in dar es salaam, Tanzania.** *Tanzan J Health Res* 2014, **16**:1–10.

22. Alexander Ishungisa M, Moen K, Leyna G, Makyao N, Ramadhan A, Lange T, Meyrowitsch DW, Mizinduko M, Likindikoki S, Leshabari M, Mmbaga EJ: **HIV prevalence among men who have sex with men following the implementation of the HIV preventive guideline in Tanzania: Respondent-driven sampling survey.** *BMJ Open* 2020, **10**:1–8.

23. Magesa DJ, Leshabari M: **Perceived barriers to access available health services among men who have sex with men in Dar es Salaam, Tanzania.** *Tanzan J Health Res* 2017, **19**:1–8.

24. Foley G, Timonen V: **Using grounded theory method to capture and analyze health care experiences.** *Health Serv Res* 2015, **50**:1195–1210.

25. Sbaraini A, Carter SM, Evans R, Blinkhorn A: **How to do a grounded theory study: A worked example of a study of dental practices.** *BMC Med Res Methodol* 2011, **11**.

26. Mercer CH, Bailey J V, Johnson AM, Erens B, Wellings K, Fenton KA, Copas AJ: **Women**

Who Report Having Sex With Women : British National Probability Data on Prevalence , Sexual Behaviors , and Health Outcomes. 2007, **97**:1126–1133.

27. Saronga HP, Mbishi J V, Bakar SM, Kamazima SR: **Women Who Have Sex with Women ’ s Experiences with Healthcare System in Low-income Countries : Qualitative Findings from Dar-es-Salaam , Tanzania.** 2021, **2**:142–145.

28. Bakar SM, Mbishi J V, Saronga HP, Kamazima SR: **Rape and Other Forms of Violence Among Women Who Have Sex With Women In Tanzania : A ‘ New ’ Public Health Concern ?** 2021, **6**.

29. Ssekamatte T, Isunju JB, Naume M, Buregyeya E, Mugambe RK, Wanyenze RK, Bukenya JN: **Barriers to access and utilisation of HIV/STIs prevention and care services among trans-women sex workers in the greater Kampala metropolitan area, Uganda.** *BMC Infect Dis* 2020, **20**:1–15.

30. Conron KJ, Goldberg SK, Halpern CT, Angeles L, Health C, Hill NC, Hill C, Carolina N: **Sexual orientation and sex differences in socioeconomic status: a population-based investigation in the National Longitudinal Study of Adolescent to Adult Health.** *J Epidemiol Community Heal* 2018, **72**:1016–1026.

31. Gorgos LM, Marrazzo JM: **Sexually transmitted infections among women who have sex with women.** *Clin Infect Dis* 2011, **53**(SUPPL. 3).

32. Ruth M: **Risks and prevention of sexually transmissible infections among women who have sex with women.** *Sex Health* 2005, **2**:209–17.

33. Kamazima SR, Saronga HP, Mbishi J V: **Biomedical & Translational Science “ Women trade sex from women in Tanzania ”: findings from qualitative formative research with women who have sex with women in Dar-es- Salaam City.** 2021, **1**:1–4.

34. Zaidi SS, Ocholla AM, Otieno RA, Sandfort TGM: **Women Who Have Sex with Women in Kenya and Their Sexual and Reproductive Health.** *LGBT Heal* 2016, **3**:139–145.

35. Sabin JA, Riskind RG, Nosek BA: **Health Care Providers ’ Implicit and Explicit Attitudes Toward Lesbian Women and Gay Men.** 2015, **105**:1831–1841.

36. Hurrem C, Balik A, Uluman OT, Sukut O, Yilmaz S, Buzlu S: **A Systematic Review of the Discrimination Against Sexual and Gender Minority in Health Care Settings.** 2020.