

Health-Related Risk Factors for Women Who Have Sex with Women

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Women, bisexual women, certain heterosexual women, and people of the same sex in a setting are all examples of women who have sex with women (WSW). Extensive research on the behavioral traits and health status of the WSW community has revealed that they have a worse overall health status, a greater risk of sexually transmitted disease infection, and a worse mental health status than heterosexuals. By doing a study of the WSW population's current characteristics, sexually transmitted disease infection status, mental and mental health state, and health-related risk factors, this paper establishes a foundation for health education and behavioral interventions with this population.

Keywords: Women Who Have Sex with Women; Health; Risk Factors; Epidemiology; Population

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SEXUAL orientation is a term that refers to a person's persistent emotional, romantic, and sexual attraction to both men and women. Heterosexuality, homosexuality, and bisexuality are all classified as broad sexual orientations, with homosexuals and bisexuals being classified as sexual minorities. A nationwide epidemiological study conducted in the United States found that 1.4% of respondents were classified as homosexual or bisexual, 3.4% engaged in same-sex sexual behavior, and 6% expressed same-sex sexual desire (1, 2). Women who have sex with women (WSW) exhibit complex sexual behaviors, have a greater number of sexual partners, and engage in sexual conduct with the opposing sex, among other characteristics. Infection rates for sexually transmitted diseases (STDs) are high, and many affected individuals use incorrect treatment methods, negatively impacting the health of the WSW population (3). Additionally, as a sexual minority group, WSW individuals maintain largely secret identities, face significant social

discrimination, live in a condition of social marginalization, and suffer from pervasive mental problems (4). This paper reviews the present WSW population's demographic features, sexually transmitted disease infection status, mental health state, and health risk factors, and provides a reference for health education and behavioral interventions.

Epidemiological Status

In American adults, sexual orientation and health status and discovered that the proportion of WSWs is 1.48%, with bisexual women accounting for 66% and homosexuals accounting for 41% (5). A study showed that Latino and Asian Americans > 18 years old made up 6.4% of the WSW population (6). According to the California State Health Survey, the 58 boroughs had the highest demographic densities of lesbian and bisexual women, at 3.05% and 4.16%, respectively, while the median densities were 0.49% and 1.24% (7). WSW affected 2.0% of the population aged

18-59, according to the Canadian Community Health Survey (8).

Demographic Characteristics

Accordingly, the WSW population is younger than the heterosexual population, with an average age of 39.7 years compared to 42.4 years, and the WSW population has a larger proportion of educational attainment and full-time work than the heterosexual population (9). Lesbians have a higher level of education than heterosexuals, a higher proportion of full-time jobs (65.7%) than heterosexuals (48.2%), and are younger in age than heterosexuals (10). Lesbians, on the other hand, are less likely to marry or cohabit than heterosexuals. The WSW population has a higher share of younger individuals and a reasonably high educational level (11).

Health Status

HIV/STD Prevalence

WSWs have more complex sexual behaviors, more same-sex partners, share sexual equipment, engage in finger-vaginal intercourse, and engage in other high-risk sexual behaviors, which contributes to their high rate of STD infection, including bacterial vaginosis, fungal vaginitis, gonorrhea, and condyloma acuminatum. A survey of the WSW population revealed a 2.9% HIV infection rate, a 6.3% human papillomavirus infection rate, a 7.7% cervical smear abnormality rate, and 33.8% bacterial vaginosis and fungal infections, respectively (12). Sexual minorities among American Indians and Alaska Natives showed that the HIV positive rate for WSWs who had sex with both men and women was 15%, whereas the HIV positive rate for WSWs who had intercourse with exclusively women was 5% (13). Sexual habits among WSW communities, as well as sexual behaviors with the opposite sex, increase the risk and rate of HIV/STD infection in WSW populations. As a result, education and intervention activities targeting this population's high-risk behaviors should be enhanced.

Mental Health

According to a Canadian assessment on the association between adult sexual orientation and mood disorders, the incidence of mood disorders was 2.6 times that of heterosexuals in the WSW population, with the highest prevalence among WSWs aged 18 to 29 (14). Suicide is the most devastating result of mental disease, including suicidal thoughts, attempts, and death by suicide. The WSW population's lifetime suicide attempt rate was 8.5% in the USA (15). One-third of the WSW population reported suicidal ideation and 17% attempted suicide in the previous year, a rate much higher than heterosexuals (16). Around 10% of the WSW population attempted suicide before the age of 18 (17). As a minority group, the WSW community is more prone to mental problems than heterosexuals, has a greater rate of suicidal behavior, and has a worse mental health condition. While intervening with high-risk sexual conduct, consideration should be given to their mental and mental health situations as well as effective psychological treatment.

Other Illnesses

Lesbians and bisexuals had a 1.6- and 2.2-fold higher risk of cardiovascular disease in the WSW population, respectively,

than heterosexuals (18). Premenopausal women in the United States, lesbians and bisexual women had breast cancer risk ratios of 1.2 and 1.3, respectively, which might be explained by obesity, childlessness, and alcohol misuse, among other variables (19). The mortality rate of WSWs for the first three years after marriage was 91.0% higher than for heterosexual women, possibly due to serious illnesses prior to marriage, but there was no difference between the two after years (20). In comparison to heterosexual women, the WSW population has a lower average health condition (21, 22). The health department should pay close attention to the incidence of chronic illnesses in the WSW community, and health education and promotion efforts for this group should be bolstered to support the development of healthy lifestyles and behaviors.

Health-related Risk Factors

High-Risk Sexual Behavior

Study about the STD risk factors in the Brazilian WSW community showed that the average age of first sexual intercourse was 16.7 years, with 66.2% of WSW patients having their first sexual encounter with a man (23). A study evaluating risk factors for bacterial vaginosis in a WSW population discovered that sexual partners with a history of bacterial vaginosis, vaginal lubricant use, and sexual tool sharing were all related to bacterial vaginosis, with a relative risk of 2.6, 1.7, and 1.5, respectively (24). Another study found that intercourse with the fingers and implements increased the risk of *Gardnerella* spp., a major pathogen of bacterial vaginosis, by 2.0 and 1.8 times, respectively, in the WSW population (25). Multiple sexual partners, sexual conduct with the opposite sex, sharing of sexual equipment, and poor condom usage are all common in the WSW community (26, 27). Lesbians experienced sexual assault at a rate of 49% during their lifetime, which was significantly higher than the rate for heterosexuals (28). Sexual assault rates in infancy and adulthood were much higher for homosexuals than for heterosexuals. While high-risk sexual behaviors are more common in men who have sex with men, where awareness of AIDS-related knowledge is low and the risk of HIV infection is high, they are also more common in WSW populations, which have a high prevalence of STDs and some have a history of sexual assault (29). This is due to their high-risk sexual behaviors, lack of preventive health care knowledge, and vulnerable status. As a result, personal safety and health care for the WSW population should be improved, as well as appropriate preventative measures.

Substance Abuse and a Poor Lifestyle

Substance use disorder encompasses all mental illnesses associated with the use of psychoactive drugs, including substance dependency and abuse. Substance abuse is a psychological and physical illness marked by great yearning for and frequent use of a drug to obtain pleasure or avoid displeasure. Symptomatic state is the continued use of a substance that has not yet formed a dependency on the user but has resulted in maladaptation. Many WSW people have unhealthy lives and engage in substance abuse, such as alcoholism, cigarette use, and drug use, all of which have a negative impact on their physical and mental health. For example, alcoholism, smoking, and obesity are more

prevalent in the WSW community than in heterosexuals (30). In Western Australia, approximately 28.1% of WSW women were smokers, more than double the rate for non-smokers, and 1/3 of WSW had taken drugs in the preceding six months, primarily marijuana and amphetamines, ecstasy, and so on. And they face sexual violence or assault, sadness or anxiety, and frequent partying, which are all risk factors for drug usage among sexual minorities (31). Bisexual women and lesbians in the WSW population were around 12 and 6 times more likely to use marijuana than heterosexuals, respectively, in the USA (32, 33). The prevalence of substance use disorders increases the risk of physical and mental illness in WSW populations and has a negative impact on their families, necessitating the establishment and implementation of effective prevention and behavioral intervention systems by society, the health sector, and families.

Social Discrimination

Discrimination against children based on sexual orientation, domestic abuse, and sexual assault can double or quadruple the likelihood of suicide attempts in WSW populations (34). In the USA, 48% of WSWs reported experiencing sexual orientation discrimination in the previous year, resulting in four times the rate of heterosexuals in terms of substance use disorders (35). In HIV-positive WSWs, family pressure, social discrimination, and violence increased their willingness to conceal their sexual orientation, and decreased their access to HIV-related prevention knowledge and medical treatment behavior (36, 37). In WSW communities, sexual orientation is a significant factor influencing social prejudice and violence (38). Some clinicians believe that homosexual orientation is a pathological condition and the source of disease in the WSW population; and some medical staff harbor prejudice toward the WSW population and sexual orientation. To a certain extent, a lack of information has an effect on the quality of medical treatment in the WSW population (39, 40). In the WSW community, prejudice and discrimination increase the likelihood of developing mood disorders, anxiety disorders, alcohol misuse, and mental problems (41). Thus, it is possible to increase people's correct understanding of sexual orientation through sexual orientation-related health education activities, thereby eradicating the negative effects of public discrimination or prejudice against the WSW population, fostering a positive social environment, and improving the WSW population's physical and mental health.

Access to Health Services

Of the WSW population in Beijing, only 36.8% of WSW patients visited a general hospital within the last year after developing STD symptoms, and only 10.5% of WSW patients informed their doctor about their experience with female behavior, which is not conducive to clinical practice, and they received focused medical and health treatments from physicians (42). When compared to heterosexuals, the WSW community has low knowledge of the danger of breast cancer, low confidence in medical personnel, and a lower rate of breast cancer screenings (43). WSW populations lack access to health insurance, health

screenings, and health care alternatives compared to heterosexual women. From the data of the California Center for Health Surveys, the proportion of WSW people seeking medical treatment for mental disorders is higher than the proportion of heterosexual people, and the overall proportion of WSW people seeking medical treatment is twice that of heterosexual people, which may be related to discrimination, violence, and stressful events (44). The majority of WSW individuals get fewer focused medical and health services, gynecological checkups, medical behavior, and health information, all of which have an effect on WSW individuals' health.

Concluding Remarks

Sexual openness and views regarding sexual orientation vary according to cultural background. In comparison to nations where sexual orientation is open and to countries where heterosexuality is dominant. A poll of college students indicated widespread hostility toward sexual minorities (9). As a result of social prejudice, the WSW community is socially marginalized and their identification is concealed. Due to the WSW population's complicated behavioral traits, discrimination is prevalent, high-risk sexual activities are common, STD infection rates are high, drug use disorders and mental and psychological difficulties are common. Thus, while examining the effect of sexual orientation on this group's health status, physical health and mental and mental health should be integrated, as should high-risk behaviors and the social environment, in order to better safeguard the physical and mental health of the WSW community.

To begin, given the influence of the WSW population's concealing of identification on intervention work, health education and peer education activities, such as HIV/STD prevention information, sexual orientation knowledge, and safe sex knowledge, can be conducted at their activity areas. Establish and improve a network system of health services for the WSW population, including disease consultation, public education about health care, intervention for high-risk sexual behavior and psychological problems, and the availability of specialized public health personnel to address the WSW population's problems promptly.

Furthermore, in light of the WSW population's irregular treatment and non-treatment of STDs, high-quality STD diagnosis and treatment institutions should be established to facilitate the WSW population's access to medical treatment, thereby reducing the negative impact of STD infection on the WSW population's lives. Behavioral treatments are necessary. By promoting awareness and education regarding sexual orientation, society and families may work together to eliminate social prejudice, familial pressure, violence, and sexual assault among the WSW community, as well as psychological and psychiatric disorders. Conducting in-depth studies on the WSW population's behavioral and sexual behavior features, as well as exploring active and effective preventative actions against potential risk factors, will be one of the key objectives for improving the WSW population's health in the future. ■

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