

The Global Impact of HIV on Sexual and Gender Minority Older Adults: Challenges, Progress, and Future Directions

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Abstract

According to Joint United Nations Programme on HIV/AIDS (UNAIDS) data, 36.9 million people are living with HIV worldwide. Older adults, those aged 50 years and older, with HIV are increasing worldwide; however, the prevalence and incidence differ substantially across regions. The purpose of this article is to provide an overview of how HIV is impacting older adults globally, with a focus on sexual and gender minority older adults. The article is organized using the eight geographical regions from UNAIDS, with information on the prevalence and incidence among older adults. Among sexual and gender minority older adults, key risks are identified, including laws that criminalize same-sex relationships; issues of stigma and fear; and the concomitant lack of access and barriers to HIV testing, treatment, and prevention. Progress within each region toward the UNAIDS 90-90-90 targets is included, and suggestions for future directions of research and service delivery are made.

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Introduction

Human immunodeficiency virus (HIV) continues to be a major public health issue and impacts people, including sexual and gender minority (SGM) older adults, globally. According to Joint United Nations Programme on HIV/AIDS (UNAIDS; 2018a), in 2017 there were 36.9 million people living with HIV worldwide. In 2017, 1.8 million new infections were reported globally. Death rates from HIV have declined in most regions, with an estimated 940,000 HIV-related deaths in 2017. Because new infections outstrip the number of HIV-related deaths, the global prevalence of HIV will likely continue to grow (UNAIDS, 2018a).

Older adults living with HIV are diverse in terms of gender, race, ethnicity, sexual orientation, and gender identity in addition to their place in HIV history. On one hand, we must discuss sexual orientation and HIV with caution as not to reinforce the belief that HIV is only a “gay disease” recalling a time when that was the prevailing assumption. On the other hand, we know that some segments of SGMs are disproportionately impacted by HIV. Recent surveillance data on older adults found that in 2016, among newly diagnosed older males, 67% were attributed to male-to-male sexual contact (Centers for Disease Control and Prevention [CDC], 2018b). Although annual reports from UNAIDS provide data on the proportion of HIV cases attributed to men who have sex with men (MSM), transgender adults, and the others at high-risk populations, their surveillance reports do not typically include people older than 50 years (ICF International, 2012).

Populations of SGM, including older adults, are disproportionately affected. MSM are 27 times more likely to acquire HIV than their heterosexual peers, while the likelihood of acquiring HIV is 12 times greater for transgender women compared with adults aged 15 to 49 years (UNAIDS, 2018a). Marginalized populations are reluctant to identify themselves in environments where their actions or identities are stigmatized and considered unacceptable or punishable by law (UNAIDS, 2018b). Human rights are universal, regardless of sexual orientation, gender identity, or sexual behavior, yet discriminatory laws continue to criminalize HIV transmission for MSM, sex workers, transgender people, and others (UNAIDS, 2018b). Currently, 78 countries criminalize sex with a same-sex partner (UNAIDS, 2014b).

In 2014, the UNAIDS (2014b) developed a comprehensive strategy to end AIDS by 2030. The strategy involves three targets known as 90-90-90. The goal

is that by 2020, 90% of all people living with HIV will know their status, 90% of those will receive sustained antiretroviral treatment, and 90% of people in treatment will reach viral suppression. To compare these targeted goals, UNAIDS organizes global HIV efforts into eight global regions. This article is organized consistent with this model.

Combination antiretroviral therapy, referred to as cART, reduces the amount of HIV in the body, keeping the immune system working and preventing illness. Individuals with less than 200 copies of HIV per milliliter of blood are considered virally suppressed (CDC, 2018c). Without viral suppression, HIV infection progresses to AIDS, defined as being diagnosed with one or more AIDS defining conditions or having a CD4 T-cell count less than 200 cells/mm³ (AIDSinfo, 2019). If left untreated, the majority of individuals will die within 2 years of an AIDS diagnosis (Poorolajal, Hooshmand, Mahjub, Esmailnasab, & Jenabi, 2016).

The UNAIDS strategy does not focus on age groups beyond children aged less than 15 years or adults between the age of 15 and 49 years, limiting vital information about people aged 50 years and older living with HIV (Sprague & Brown, 2017; UNAIDS, 2018b). Although UNAIDS (2014a, 2016) has created documents focused on older people, many countries do not collect surveillance data past age 49 years (ICF International, 2012).

The prevalence of adults aged 50 years and older living with HIV, is steadily increasing (Mahy, Autenrieth, Stanecki, & Wynd, 2014), particularly in Europe, the United States, and Canada (Tavoschi, Dias, & Pharris, 2017). According to UNAIDS (2016), at the end of 2015, an estimated 5.8 million adults, 50 years and older, were living with HIV worldwide. These increases are attributed to greater longevity due to increased access to cART, combined with new infections among this population (Tavoschi et al., 2017; UNAIDS, 2014a). The prevalence of HIV among older adults differs by country and geographic region. In low- and middle-income countries, older adults make up approximately 10% of HIV cases. In upper, middle, and higher income countries, that proportion is much higher (Tavoschi et al., 2017).

The purpose of this article is to provide an overview of the impact of HIV on older adults globally, with particular attention to SGM older adults. Using the eight geographical regions, we assess the differential impact of HIV on MSM, including gay and bisexual men, and transgender older adults and provide suggestions for future research and advocacy.

Western and Central Europe and North America

In this region, there is significant growth in the proportion of older gay and bisexual men and MSM adults living with HIV, with transgender older adults also at risk. According to UNAIDS (2018a), 2.2 million people were living with HIV in 2017 in Central and Western Europe and North America. Although

inconsistencies in surveillance protocols make comparisons across countries difficult, one consistent pattern is the proportion of new HIV cases among adults aged 50 years and older. The European Centre for Disease Prevention and Control (ECDC) estimates that across the European part of the region, 17% of all newly diagnosed HIV cases in 2016 were of the age-group of 50 years and older (Tavoschi et al., 2017). Similar incidence is seen in the United States (CDC, 2018b); in Canada, approximately 20% of all new HIV cases are aged 50 years and older (National Coordinating Committee on HIV and Aging (Canada), 2015). An estimated 52% of all new infections across all ages in this region are among gay and bisexual men and other MSM (UNAIDS, 2018b).

In Canada, at the end of 2016, more than 63,000 people of all ages were estimated to be living with HIV (Public Health Agency of Canada, Centre for Communicable Disease and Infection Control, 2018). A total of 2,344 new cases of HIV were reported representing an approximate 12% increase from 2015. MSM continue to represent the largest number and proportion of adults living with HIV in Canada (44%; Public Health Agency of Canada, Centre for Communicable Disease and Infection Control, 2018). Comparatively, at the end of 2016, 991,447 individuals were living with HIV in the United States (CDC, 2018a), including 542,000 (54.6%) individuals whose HIV transmission was reported as MSM (CDC, 2018a).

Greater longevity resulted in an increasing prevalence of older people living with HIV. Using mathematical modeling, Smit et al. (2015) estimated that among those individuals with HIV in the Netherlands, 73% will be 50 years and older by 2020. In the United States, 48% of all persons living with HIV are 50 years or older (CDC, 2018a) with projections suggesting that by 2030, 70% of those with HIV will be 50 years or older (Wing, 2016). Of those 70%, approximately half will likely be gay and bisexual men and other MSM. The region is making “steady progress toward ending the AIDS epidemic” (UNAIDS, 2018a, p. 308). Eighty-five percent of people in the region and 76% of those receive cART know their status. Viral suppression increased to 65% between 2015 and 2016.

Many older adults living with HIV in the region experience physical, functional, cognitive, mental, and social challenges (O’Brien, Bayoumi, Strike, Young, & Davis, 2008). The rising prevalence of cardiovascular disease, diabetes, joint disorders, neurocognitive disorders, and frailty adds to the complexity of disability experienced over the life course (Guaraldi & Palella, 2017). Multimorbidity, having both a physical and mental health condition, increased with age (Kendall et al., 2014). Studies in North America found that adults aging with HIV face additional challenges of ageism, stigma or discrimination, mental health issues, income insecurity, and lack of access to social support as well as to long-term care and supportive housing (Emler, 2006; Havlik, Brennan, & Karpiak, 2011; Roger, Mignone, & Kirkland, 2013).

As a result of stigma and the lack of SGM and age-specific education, there is the ongoing threat of late diagnosis, supported by surveillance data. Late diagnosis is defined as meeting the case definition for AIDS within a year of being diagnosed with HIV (Mugavero, Castellano, Edelman, & Hicks, 2007), which often means more advanced disease and higher rates of mortality. Surveillance data from the ECDC (2017) show an increase in late diagnosis with age, with the highest rate (60%) among adults aged 50 years and older. Similarly, in the United States, late diagnosis increases with age, with more than one third of older adults receiving a late diagnosis (CDC, 2018a). In addition, individuals who are HIV-positive may unknowingly infect sexual partners (Taborelli et al., 2017). Late diagnosis is a result of providers' lack of knowledge and low clinical suspicion of HIV risk among older adults. Stigma and discrimination in health-care settings negatively impact older gay and bisexual men and other MSM, sex workers, injection drug users (UNAIDS, 2018a), and transgender woman, fostering a climate of distrust that may contribute to fear and late diagnosis.

As the prevalence of older adults with HIV continues to grow, it is important to target prevention and education messages to those at highest risk, including SGM older adults. Successful models of HIV prevention efforts, such as the "Age Is Not a Condom" (n.d.) campaign, provide useful material and strategies for improving the knowledge and understanding of HIV.

Eastern Europe and Central Asia

HIV diagnosis and treatment of gay and bisexual older men and MSM and transgender older adults in this region are impacted by structural challenges as well as severe HIV stigma, homophobia, and transphobia. Eastern Europe and Central Asia have an estimated 1.4 million people living with HIV in the region. Annual numbers of new HIV infections continue to increase with an estimated 190,000 people newly infected in 2016, a 60% increase over 2010 (UNAIDS, 2017). Twenty-one percent of new infections are attributed to gay and bisexual men and other MSM; however, a threatening environment discourages HIV testing, treatment, and accurate accounting of HIV risk (UNAIDS, 2018b). Gokenigen et al. (2018) found that in 10 countries, the major route of HIV transmission was through MSM in the region.

Although there is a growing epidemic in the region of HIV among transgender individuals and MSM, these trends are understudied due to cultural and societal views (UNAIDS, 2018b). Discriminatory legal and societal responses to HIV make it difficult to fully assess the impact of HIV among SGM older adults; however, societal and cultural values, including viewing homosexuality as unacceptable behavior, stigma, and fear, contribute to the underreporting of HIV and create barriers to access cART for SGM older adults. Providers must communicate behavioral risks to both the older patients, in general (Aronowitz, 2017), and SGM older adults, in particular, to help them understand how to

protect themselves. Without proper and timely testing, there is an increased risk of undetected infection leading to late diagnosis. Rates of late diagnosis in this region are high, with some countries including Georgia, Bosnia Herzegovina, and Albania as high as 60% to 80% (Gokenigen et al., 2018).

Barriers to initiate the ART once diagnosed exist. Nearly two thirds of the 1.6 million people living with HIV in Eastern Europe and Central Asia at the end of 2016 were aware of their infection. Of those who knew their HIV status, 45% were accessing ART and an estimated 22% were virally suppressed (UNAIDS, 2018b). Although AIDS-related deaths are decreasing worldwide (UNAIDS, 2017), Eastern Europe and Central Asia have shown a pattern of increased AIDS-related mortality. The annual number of AIDS-related deaths rose from 32,000 in 2010 to 40,000 in 2016 (UNAIDS, 2017). AIDS-related deaths may be even greater for those aged 50 years or older and who were living with HIV in this region.

In addition to barriers to education, the general population is “unforgiving to those who have become infected sexually” reflecting cultural values about same-sex sexual behavior (Balabanova, Coker, Atun, & Drobniowski, 2006, p. 486). Formal laws and sanctions against SGM contribute to fear of testing and impact access to care. Although there are limited data available, the available information suggests serious problems with prevention, education, availability to testing, treatment, and services for SGM older adults living with HIV in the region.

Middle East and North Africa

HIV in this region is complicated by stigma relating to aging and sexuality, homophobia (Emlet, 2006), and transphobia, with older adults generally less aware of HIV risk and testing resources and SGM older adults under threat of punitive legislation and practices. The Middle East and North Africa region had an estimated 220,000 individuals living with HIV at the end of 2017 (UNAIDS, 2018a). Testing and treatment coverage is far below the global average (UNAIDS, 2017). With respect to 90-90-90 goals, approximately half of those living with HIV at the end of 2016 were aware of their status and less than half of those were accessing cART, with an estimated 22% of people living with HIV on ART (UNAIDS, 2017). Like other regions, such as Eastern Europe and Central Asia, there is little information about HIV among older adults (Sprague & Brown, 2017); therefore, it is necessary to interpret issues based on broader surveillance data, remembering that issues may be exacerbated for SGM older people. Prevention efforts are limited in the region, while stigma and the criminalization of same-sex sexual behaviors impact prevention efforts and testing. Tohme and Ghanem (n.d.) examined experiences in the Arab world and found 32% of respondents had been physically assaulted due to their perceived sexual orientation, while nearly half affirmed to be religiously associated with guilt due to their sexual orientation. More than a third of those surveyed

(37.6%) experience internalized homophobia. It is likely that these issues are intensified for SGM older adults.

Although the incidence rate of new HIV infections has remained relatively stable over time, with approximately 18,000 new cases per year (UNAIDS, 2018a), the progress toward 90-90-90 goals raises concerns. Among the 50% who are aware of their status, 41% were on ART (UNAIDS, 2017). In addition, the region's death rate due to AIDS-related conditions rose from 3,600 to 11,000 between 2000 and 2016 (UNAIDS, 2017). The mortality rates from HIV-related issues increase with age; however, whether that is the case here is unknown.

HIV data in this region are scant and have been called a "hole" in terms of HIV epidemiological data (World Bank, 2010, p. 1), including for older adults in general (≥ 50 years) and SGM older adults in particular. Continued advocacy is necessary to better understand the impact HIV has on SGM older adults in the Middle East and North Africa region.

Caribbean

Throughout the Caribbean region, culture beliefs, societal attitudes, and laws that criminalize same-sex relationships (UNAIDS, 2018d) create double or triple jeopardy for SGM older adults. Approximately 310,000 individuals live with HIV in the Caribbean (UNAIDS, 2018b). Recently, there has been important progress made with regard to prevention and treatment of HIV. For example, the annual number of new HIV cases declined by 18% between 2010 and 2017. In 2017, 15,000 new HIV cases were diagnosed regionwide. Deaths from AIDS-related illnesses declined by 23% during that same period (UNAIDS, 2018c). Examining 90-90-90 targets, an estimated 73% of people living with HIV in the region know their status and slightly more than half of those are receiving HIV treatment (UNAIDS, 2018d). Less than half of those have attained viral suppression.

With regard to older adults, current estimates suggest that approximately 13% to 15% of those living with HIV in the region are aged 50 years and older (UNAIDS, 2014a). Trend data show a consistent increase in the prevalence of older adults with HIV in the region between 2005 and 2013 (Mahy et al., 2014), while Caro-Vega et al. (2018) found significant increases in the number of older adults in Haiti receiving HIV treatment between 2000 and 2015. Approximately 13% of those aged 50 years and older in the study were SGMs.

Advocates and HIV service providers recognize the negative impact of HIV stigma and ageism, homophobia, and transphobia on the quality of life in this population (Pan Caribbean Partnership Against HIV/AIDS, 2018). Efforts are being made by HIV advocacy groups and AIDS education centers to educate the public about issues associated with aging with HIV (Singler & Lewis, n.d.) and the stigma facing SGM older adults. Caro-Vega et al. found that more than

50% of those entering HIV treatment of the age 50 years and more met the case definition for AIDS, suggesting long-standing, undetected HIV infection.

A major challenge for this region is the societal attitudes and discrimination toward SGM, which are intensified for older adults in this population. The prevalence of HIV in this population varies across the region, but in Trinidad and Tobago, it is estimated to be 32%. Regionwide, 23% of all HIV cases are attributed to MSM, while 1% are made up of transgender women (UNAIDS, 2018d).

In a public opinion survey across seven Caribbean countries, more than 50% of respondents in St. Vincent stated they “hated” homosexuals, and an additional 20% tolerated them (Beck et al., 2017). Although slightly lower rates were documented in Grenada and Trinidad or Tobago, the region overall exhibits strong societal and cultural intolerance of same-sex sexual behavior. Culturally, a prevailing norm of compulsory heterosexuality may fuel stigma directed toward gay and bisexual men and MSM. Education, testing, and access to ART are making important improvements in the Caribbean to stabilize or lower the number of new infections per year and decrease AIDS-related mortality. Working for increased acceptance of SGM of all ages and decreasing HIV-related stigma will be important markers of progress.

Latin America

Similar to other regions, gay and bisexual older adult men and transgender older women in this Latin America face multiple challenges in terms of the potential for new HIV infections, comorbidities, and late-diagnosis of HIV, suggesting the need for increased education, outreach, and services targeting these communities. According to UNAIDS (2018a), 1.8 million people in Latin America were living with HIV at the end of 2017. Of those, 77% knew their status and 61% of people who knew their status were receiving treatment. Of those, more than 50% had reached viral suppression. The region’s strong performance in these areas has resulted in AIDS-related mortality declining by 12% over a 7-year period. Still, SGMs are at particular risk in this region, with 41% of new infections occurring in gay and bisexual men and MSM, while an additional 6% occur in transgender women (UNAIDS, 2018d). Incidence of new HIV infections varies widely across the region. Although some countries such as Columbia, Nicaragua, and Uruguay have seen dramatic decreases in new cases of HIV, Chile and a number of central American countries such as Guatemala, Costa Rica, Honduras and Panama noted increases between 2010 and 2016 ranging from 9% to 34% (UNAIDS, 2018b).

An estimated 13% to 15% of people living with HIV in Latin America are aged 50 years and older (UNAIDS, 2014a). In a recent study that examined trends in HIV care throughout the Central and South America network (CCASAnet) that includes the Caribbean, Caro-Vega et al. (2018) found an

increase in the number of adults aged 50 years and older receiving HIV treatment. Although UNAIDS (2018b) identified the problem of late diagnosis across all age groups (approximately 33%), Caro-Vega et al. (2018) found that among older adults receiving HIV treatment, more than 50% were diagnosed with AIDS at the time of HIV diagnosis. Belaunzaran-Zamudio et al. (2017) found that people aged 50 years or older, receiving HIV treatment, had significantly higher mortality and comorbidity rates than those younger than 50 years. Potentially, the higher levels of non-AIDS-related comorbidities may reflect poor health screening and clinical care, placing SGM older adults at heightened risk.

Torres et al. (2013) compared older and younger adults living with HIV in Rio de Janeiro and found the proportion of men reporting HIV transmission as MSM was approximately half among all men aged 50 years or older in the study. There was, however, a decrease in the proportion of MSM as a transmission category among the older age-group. The decrease in MSM as a transmission category may be an artifact of culturally held views of sexuality and societal stigma, and older men may be less comfortable reporting sexual practices that involve same-sex relationships (Torres et al., 2013). Torres et al. (2013) documented an increase in the number of non-AIDS-related comorbidities as well as increased AIDS defining illnesses among those aged 50 years and older and noted an increase in depression among the older adults, raising concerns about the need for mental health interventions. These findings point to the need for targeted prevention and education efforts for older gay and bisexual men and MSM as well as treatment for physical and behavioral health issues.

Asia and the Pacific

The number of SGM and transgender older adults living with HIV in this region continues to rise. Education and services that address stigma and related human rights issues are needed to address their distinct and growing needs. It is estimated that approximately 5.2 million people are living with HIV in the Asia and the Pacific region. Outside of the two African regions, more people are living with HIV in Asia and the Pacific than any other region (UNAIDS, 2018a). This region, made up of 40 countries, is vast and diverse in terms of geography, culture, views of HIV, and progress toward eradicating the epidemic. New infections decreased regionwide by 14% between 2010 and 2017, while annual deaths from AIDS-related conditions decreased by 39% during the same period. New infections, however, rose by an alarming 170% in the Philippines and 29% in Pakistan (UNAIDS, 2018b) illustrating intraregional differences. Approximately 30% of all new HIV cases in 2017 were among gay and bisexual men and MSM and transgender women (UNAIDS, 2018d). Among those 5.2 million people living with HIV regionwide, 74% knew their status,

approximately half of those were receiving HIV treatment, and 45% of those reached viral suppression (UNAIDS, 2018d).

UNAIDS (2014a) data indicated a consistent rise in HIV prevalence among older adults regionwide, while other country-specific studies suggested similar trends in China (Liu et al., 2012), India (Help Age International, 2016), and Australia (Jansson & Wilson, 2012). A study of older adults in Eastern India, for example, found a significant increase in the number of older women diagnosed with HIV over a 5-year period (Help Age International, 2016).

Although there is limited information on SGM older adults living with HIV in this region, we will examine what is known in China as a country-specific example. A steady increase in HIV infections has been reported among older adults living in China (Xing et al., 2014). Liu et al. (2012) reported an 11-fold increase in the number of adults aged older than 50 years living with HIV comprised of both new infections as well as increased survival. It was reported in 2015 that there were 501,000 reported cases of people living with HIV/AIDS (including 205,000 persons living with AIDS and 296,000 living with HIV; “2015 China AIDS Response Progress Report,” 2015). The same year it was reported that there were 159,000 HIV/AIDS-related deaths in China (China AIDS Response Progress Report, 2015). By 2015, the primary mode of transmission of HIV changed from high-risk intravenous drug users to gay and bisexual men and MSM (Zheng, 2018). Currently, the primary route of HIV transmission in China is through sexual activity, yet sexuality among SGM and older adults is highly stigmatized, and partners as well as the society fail to address unsafe sexual practices (Xing et al., 2014).

Although China has embraced a “pragmatic approach” to the HIV/AIDS epidemic, the number of people infected continues to grow steadily (Zheng, 2018). Despite the increasing number of SGM older adults living with HIV, the programmatic response to their distinct needs, including reducing stigma in prevention, treatment, and services, has been inadequate. In addition, human rights abuses of sexual and gender minorities as well as among those living with HIV continue to be reported (Human Rights Watch, 2017).

Eastern and Southern Africa

According to UNAIDS (2018d), 16 of the 21 countries in this region criminalize same-sex sexual acts. The extent to which the laws and punishment (i.e., imprisonment) are enforced is unclear. However, such laws reinforce stigma, secrecy, and lack of disclosure concerning HIV and SGM status. Eastern and Southern Africa is the region most affected by HIV, with an estimated 19.6 million individuals accounting for 45% of the world’s HIV infections with 800,000 new infections in 2017 (UNAIDS, 2018a). The region has been successful in lowering the number of AIDS-related death by 42% and reducing infections by 30% between 2010 and 2017 (UNAIDS, 2018b). With regard to UNAIDS 90-90-90

goals, an estimated 81% of people living with HIV know their status, while two thirds of those are receiving treatment. Of the 12.9 million people who are receiving HIV treatment, approximately half (52%) have achieved viral suppression (UNAIDS, 2018d).

Reflective of the overall impact HIV has on the region, Mahy et al. (2014) note that the greatest burden that HIV has on older people worldwide is in sub-Saharan Africa where an estimated 2.5 million older adults live with HIV. Sprague and Brown (2017) indicated that understanding the demographics of aging with HIV is limited in this region, due to scarce data. When examining country-specific research, ICF International (2012) indicated that in Eswatini, 1 in 4 adults aged 50 to 54 years and 1 in 10 adults aged 60 years and older are infected with HIV. In Mozambique, nearly 15% of women aged 50 to 54 years are HIV-positive. Older men in the region do not routinely use condoms despite having multiple sexual partners and high HIV prevalence (UNAIDS, 2014a). Negin et al. (2016) examined HIV risk in Eastern Zimbabwe and found that older adults use condom significantly less compared with young individuals. A recent study of HIV testing among older adults in Kenya found age discrimination and reluctance or outright refusal by hospital staff to test older adults for HIV as significant barriers (Kiplagat & Huschke, 2018).

Structural barriers to HIV testing among older adults need to be eliminated to provide proper prevention, testing, and treatment services and to reduce the increased risk of multimorbidity and AIDS-related illnesses (UNAIDS, 2014a). Although regional data are scarce (Sprague & Brown, 2017), it is clear that HIV knowledge is lower among older adults as is condom use. Substantial barriers exist to nondiscriminatory testing without age bias. Gender differences also exist as men account for the majority of AIDS-related deaths, while gender-based violence place women at greater risk for HIV infection.

Across all ages, there is a “dearth of literature on population-based HIV prevalence among MSM in the African context” (Singh, 2013, p. 1), reflecting a view that homosexuality is “un-African,” spurring violence against African MSM (Singh, 2013). African MSM commonly endure sexual assault and depending on the country can face criminal charges. Such societal, cultural, and legal barriers make obtaining valid information on SGM older adults particularly difficult, deterring access to valid epidemiological information as well as care.

Western and Central Africa

Twenty-one percent of the world’s new HIV infections come from this region (UNAIDS, 2018a) as well as 30% of global deaths from AIDS-related conditions. According to UNAIDS (2018b), at the end of 2017, there were 6.1 million people living with HIV in the region with 370,000 new HIV infections in 2017. The region also had the third lowest rate of antiretroviral coverage worldwide

with an estimated 40% of people with HIV infection on treatment (UNAIDS, 2018b) and only 29% achieving viral suppression. According to UNAIDS (2018d), the region's HIV responses "lag behind the rest of sub-Saharan Africa" (p. 198).

It is estimated that approximately 12% of HIV cases in the region are attributed to same-sex sexual behavior, yet 40% of countries throughout the region criminalize same-sex relationships adding to mistrust and barriers to accessing treatment (UNAIDS, 2018b). Tailored prevention messages need to target key risk populations in the region including SGM and MSM older adults.

Mahy et al. (2014) reported a steady increase in the prevalence of HIV among adults aged 50 years and older living in the region, with HIV prevention among older adults lacking. According to a UNAIDS (2014a) report on adults aged 50 years and older, more than 80% of men over the age of 50 years surveyed in Côte d'Ivoire did not use a condom during their last sexual encounter despite having multiple sexual partners. Contributing obstacles to HIV education, prevention, and testing are HIV and SGM stigma and discrimination. Substantial number of people in the Congo and Liberia stated that health-care professionals disclosed their HIV status without permission, breaching confidentiality and undermining trust and belief in HIV services (UNAIDS, 2018b).

In addition to stigma and distrust, intimate partner violence is high with women reporting physical and sexual assault by sexual partners (UNAIDS, 2018b). These data, however, are based on people aged 15 to 49 years, so the impact of physical and sexual assault among older people in the region is unknown.

When examining issues related to prevention, testing, and treatment, it is evident that many older adults do not engage in safe sex practices (UNAIDS, 2014a). Older people living with HIV are known to experience high degrees of HIV, age (Emlet, 2006), and SGM stigma. In a region with high levels of societal and cultural stigma, and misconceptions about HIV as well as SGM populations, SGM older adults experience substantial barriers to testing and treatment.

Future Directions and Research Needs

The purpose of this article was to provide an overview of the impact of HIV on older adults based on the eight UNAIDS regions, with specific attention to SGM older adults. Overall, data on HIV among older people globally are inconsistent, and refined data on SGM older adults are nearly nonexistent (ICF International, 2012). We have identified four important trends that need to be underscored: the intersectionality of stigma, the increasing prevalence of HIV among older people, the need for improved and acceptable testing and treatment options, and increases in multimorbidity. We do know that stigma, discrimination, and human rights issues impact SGM populations across the globe, with SGM older adults especially invisible and potentially vulnerable. Numerous

countries have laws that criminalize same-sex behavior. The lack of data on SGM older adults living with HIV in non-high-income countries is perhaps most telling. These groups, at high risk of exposure, face significant cultural and structural stigma throughout their lives; frank conversations are desperately needed, calling for expanded surveillance information on SGM older adults, as long as human rights protections exist.

The Intersectionality of Stigma

SGM older adults living with HIV face the intersectionality of stigma and discrimination based on age, sexuality, sexual orientation, gender identity, and expression. Not only do they often face HIV-related stigma but ageism (Emlet, 2006) and homophobia and transphobia as well. In many regions of the world, sexual orientation, particularly homosexuality among men, is not only stigmatized but criminalized, compounding enacted stigma. Balabanova, Coker, Atun and Drobniewski (2006) indicated that in Russia, for example, society's view of HIV, if contracted through sex, is "unforgiving." When we compound already complex social processes related to HIV, with additional layering of stigma due to SGM status, age, or drug use, the potential for multiple manifestations and risks can be overwhelming. The development of targeted antistigma interventions and human rights campaigns that recognize those living with HIV and SGM older adults will be important steps forward.

Increasing Prevalence of Older Adults and Improved Surveillance Data Worldwide

There is an increasing prevalence of older adults, 50 years and older, living with HIV infection worldwide. Patterns of increased prevalence were found among low- and middle- as well as high-income countries. Despite these patterns, key reports and data assessing 90-90-90 goals are hampered by the exclusion of older adults. How we as a global community progress toward improving the lives of SGM older adults with HIV infections is seriously hampered if appropriate and needed data are unavailable.

Improved Prevention, Testing, and Treatment Options

Issues surrounding barriers to prevention, testing, and treatment options for SGM older adults emerged consistently. According to UNAIDS (2014a), every year an estimated 100,000 people aged 50 years and older in low- and middle-income countries acquire HIV. Studies from the African regions point to low levels of condom use among older men despite multiple sexual partners. Barriers to testing were noted in Kenya where ageist attitudes were common in hospital-based HIV testing sites (Kiplagat & Huschke, 2018).

A pattern of late diagnosis exists across multiple regions, and across low-, middle-, and high-income regions. North America and Western Europe, Latin American and Eastern Europe, and Asia all reported late diagnosis as an important concern. This cascade of disease trajectory begins with poor HIV-related knowledge among SGM older adults and low clinical suspicion coupled with ageism by providers. This in turn results in increased HIV infection, poorer response to ARV treatment, advanced disease progression and disability, and premature mortality. Furthermore, across regions there was evidence of lack of access and barriers to care for SGM older adults living with HIV.

AIDS-Related and Non-AIDS-Related Multimorbidity

Older adults living with HIV infection face age-related comorbidity typically associated with aging as well increased likelihood of both a physical and mental health condition (Kendall et al., 2014). For example, HIV was associated with greater rates of cardiovascular, renal, neurocognitive, oncological, and osteoporotic diseases (Wing, 2016). The additional barriers to testing, treatment, and access to services among SGM older adults place them at greater risk of complications resulting from comorbidities. Although AIDS-related mortality declined in many regions of the world, a comprehensive approach to managing multiple conditions is needed. Rehabilitation science, vastly underutilized, may provide a more restorative approach to the concerns of age and HIV-related disability (O'Brien et al., 2008).

Summary

The prevalence of SGM older adults living with HIV is increasing, especially among gay and bisexual men, MSM, and transgender women. Identifying problems and barriers to HIV prevention and education, testing and care, and addressing cultural stigma are critically needed. Furthermore, advocacy is warranted to eradicate laws that criminalize same-sex relationships and safeguard human rights protections across the globe. More comprehensive surveillance and trend data across regions will help providers, researchers, and policy makers to better understand and be informed to effectively respond to the growing public health threat of HIV among SGM older adults.

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