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CURRENT CONTROVERSIES (P KLEINPLATZ AND C MOSER, SECTION EDITORS)

Age Is Not a Condom: HIV and Sexual Health for Older Adults

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Abstract
Purpose of Review This review was conducted to illustrate how the emerging recognition of sexual health in the older adult is informed by research on the growing aging HIV population in the USA and globally. Assessing the sexual health needs of the older adult through the prism of HIV prevention is not ideal. But, there are data and "lessons learned" that advance our understanding of the barriers and needs of older adults' sexual health.
Recent Findings Data confirm many of these older adults with HIV remain sexually active and do engage in risky behaviors as do their younger counterparts. HIV and other STI testing in older adults is not being done adequately as these individuals carry the disproportionate burden of AIDS diagnoses in the USA.
Summary Under the duress of persistent HIV and AIDS stigma, marginalized older adults living with HIV try to embrace that most elemental human characteristic of sexuality.

Keywords Older adults · HIV · Stigma · Aids · Older adult sexual health · STIs

This article is part of the Topical Collection on *Current Controversies*

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Introduction

Studies of the sexual health of the older adult are few but data are emerging (Fig. 1). Although research-based data remain scant, most available data on the sexual health of older adults were generated through the prism of HIV prevention research. This paper examines the sexual behavior of older adults living with HIV/AIDS.

There is increasing focus on the sexual health of older adults, age 50 and older. This developing interest is in part driven by the inexorable shift in the age distribution of the HIV epidemic. HIV is a sexually transmitted disease. In the USA, more than half of the over 1.3 million people living with HIV are age 50 and older. It is estimated that by 2020, 70% will be age 50 and older [1–3]. Although the USA leads on this aging of the HIV epidemic, increasing prevalence patterns of older adults is seen in other countries also [4–8]. There are 36.7 million people infected with HIV globally. In Africa where there are 25.5 million people living with HIV/AIDS, it is estimated that there are 2.5–3 million older adults infected with HIV [4, 8, 9]. Most of these older adults were infected at earlier ages. Because of highly efficacious antiretroviral medications, those who were infected at an earlier age are experiencing near normal life spans. This accounts for the shift in age of those who are living with HIV. That shift is sometimes referred to as the *Greying of HIV* [10].

In 2015 in the USA, there were almost 40,000 new HIV (including AIDS) diagnoses [11]. Of these, approximately 6700 were in older adults age 50 and older. The incidence of new HIV infections for older adults has been between 16 and 17% for the last decade with the vast majority of new infections from sexual transmission. About 25% of new infections in the USA are among women. Over 80% of those newly diagnosed with HIV as well as those older adults with HIV are people of color (African-Americans or Latinos) [11]. In the

USA, certain populations evidence disproportionate HIV incidence and prevalence. These include the following: (1) men who have sex with men (MSM), especially African-Americans and Latinos of all age groups; (2) transgender and gender non-conforming individuals; (3) women of color; (4) injection drug users; and (5) sero-discordant couples (one partner is HIV positive and the other is HIV negative). Disparities are seen globally, but are country specific. In Africa, heterosexuals account for 95% of those living with HIV/AIDS, with women and men being equally affected [5, 6, 9, 12, 13].

Older Adult Sexual Behavior

A seminal paper based on a probability US sample (National Social Life, Health, and Aging Project (NSHAP)) of older adults was published in 2007 by Lindau et al. [14•]. Lindau and colleagues were among the first to observe that sexual activity and health are associated with health status. A smaller more recent study was reported in 2015 [15••]. The study noted that little was known about the sexual lives of older adults in the USA. Like other studies, sexual health is inclusive of insertive sex and relationships that are influenced by cultural norms and local attitudes. All of these factors change throughout the life-span, especially for the aging older adult. In an aging society, medical management and services related to sexual health will increase. Those changes are also affected by pharmaceuticals. Observe the sales of erectile dysfunction drugs. Viagra sales range from 1.6 to 2 billion dollars annually [16]. Certainly, those erectile dysfunction drugs affect sexual behaviors, especially for older adults. Lindau's data showed that the prevalence of sexual activity for older adults decreased with age and that the numbers reported are driven by partner availability. Many people, particularly women, "lose"—from divorce or death or severe illness like Alzheimer's—their sexual partner as they age [17••]. For women of color in the USA, especially older African-American women, partner availability is markedly decreased in their community as a result of endemic violence and high rates of incarceration [18••, 19••]. For those between the ages 57–64, 73% were sexually active. Sexual activity would decline to 53% for those 65 to 74 years old, and 26% for those 75–85 years of age. Older women's sexual activity was consistently lower than that for males at all ages. The most frequent sexual problem for men was erectile dysfunction (37%). Sexual problems in older women were low desire (43%), reduced vaginal lubrication (39%), and inability to climax (34%). The study also found that those who self-reported their health to be poor were the least likely to be sexually active.

Sexual health contributes to older adults' quality of life. If a person's health was very good, that person was twice as likely to be sexually active as those in very poor health. The Lindau study found that more than 90% of men over 50 did not use a condom either with a date or casual partner. And 70% did not use a condom when their partner was a stranger [14•]. A majority of older adult women were found to have sex without a condom [20]. For older women, the motivation to seek new relationships is driven not only by desire and seeking pleasure [21], but the powerful need for companionship that can markedly reduce the fears of loneliness and social isolation [18••, 22].

Studies found that about almost 50% of older adults living with HIV report sexual problems which include sexual dissatisfaction [23, 24••]. Chronic illness is often the etiology of sexual dissatisfaction for couples. HIV is a chronic illness. This sexual discontent reduces well-being and health outcomes [25]. Consequently, effective integration of care can increase longevity and function when well-being is enhanced by addressing the sexual health of the patient [26••]. Good sexual health mitigates life stressors that are associated with chronic illness [27, 28, 26••]. In addition, sexual health problems can be predictors of undetected illnesses such as diabetes, infections, urogenital tract conditions, or cancer. Undiagnosed and/or untreated sexual problems can be the cause of depression and associated social withdrawal and isolation often observed in the older adult. In some cases, older adults may opt to stop medications which cause side effects that affect their sex lives. Addressing these challenges can only be achieved if there is comfortable communication with

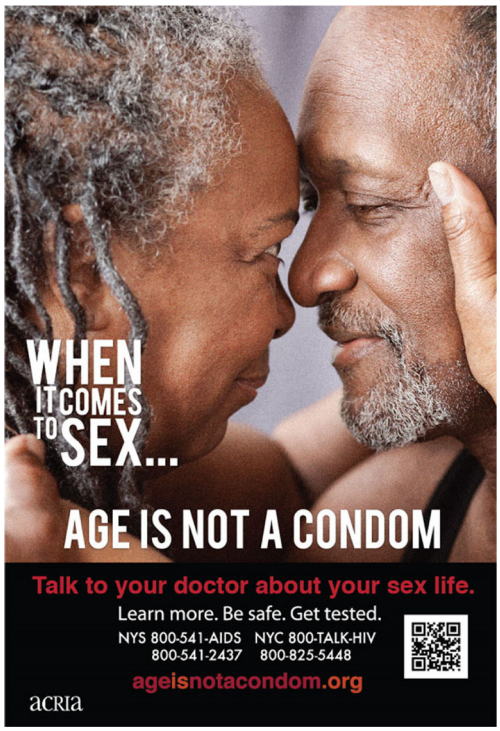

Fig. 1 Social media poster developed by ACRIA for use in bus shelters in New York City. Visit www.ageisnotacondom.org; pictures were provided by http://www.grayingofaids.org/

the medical care provider. This forms the basis by which the use of erectile dysfunction medications for men and topical estrogen for vaginal dryness in women can be introduced to increase sexual satisfaction. Yet these health management interventions will only occur if there is a dialogue between the patient and his/her clinical care provider [29].

Clinical Care Providers and Older Adult's High Incidence of AIDS

Patients and care providers make the assumption that older adults do not, or rarely, engage in sex, and they are therefore not at risk for STIs or developing sexual dysfunctions. Consequently, both are uncomfortable or reticent to initiate discussions about sex. Only 38% of men and 22% of women were found to have discussed sex with a physician since the age of 50 years [14•]. By not engaging the older adult, medical care providers have been reinforcing the myth that older adults do not have sex. One of the consequences of this prevailing attitude is that with increasing age, the likelihood of an older adult having an AIDS diagnosis at the time of initial HIV detection increases [30].

This is a common observation which reflects the larger societal belief that older adults do not engage in sexual activity and are not sexual beings. It is this myth that underlies in part the incidence of HIV infections in the at risk older adult populations. This neglect is manifested in data which consistently show that the occurrence of an AIDS diagnosis, the advanced stage of HIV disease wherein the immune system function is near collapse, is correlated with age. Both medical and non-medical care providers, as well as older adults themselves, do not perceive other older adults as engaging in sexual behaviors that increase their risk for HIV and other sexually transmitted diseases [31, 32]. Many clinical care providers are older adults themselves, yet remain unlikely to give any priority to discussing sexual health, or even taking a sexual history. Physicians prefer that their patient initiate such discussions. This reticence reflects what some might perceive as a cabal to deny that older adults engage in sexual activity. This is echoed in several underlying factors which include the following: inadequate knowledge of older adult sexuality issues; "insufficient" medical training; and the perception and belief that sexuality and intimacy are too private topics that could be offensive [33•, 29, 34••]. Curiously, assisted living and long-term care staff acknowledge that sexual activity occurs with significant frequency and are better prepared and sensitized to the sexual health needs of their older adult populations [35••, 36, 37]. There is a need to develop accepted scripts that can obtain sexual history wherein judgmental attitudes are neutralized. Stigma-driven judgmental behavior becomes a primary barrier to the inclusion of sexual health in the clinical exam domain. Those barriers are part of the reason for older adults to not initiate the topic with a medical care provider. Healthcare professionals more often underestimate the need for sexual activity in the older adult population thereby minimizing their risks of STD exposure [14•]. This reticence affects older women especially. Studies observed that older women are at increased risk for sexually transmitted disease, including HIV, because of the thinning of the vaginal walls which can facilitate HIV transmission [14•, 38••, 32, 18••, 17••]. Women who are post-menopausal perceive the elimination of a pregnancy risk to also include the elimination of the risks of STIs, including HIV [18••, 17••, 22]. A recent study of geriatric fellows and their geriatrics supervisors illustrated these challenges [39]. The study found that there was inconsistent sexual history taking. The study participants said that one of the barriers to including sexual health in geriatrics training modules was its competition with other mandated competencies and the general lack of training materials.

The context of age and HIV emerges when one examines the co-occurrence of HIV and AIDS diagnoses [30]. In New York State where HIV surveillance data are rigorously reported, providing valid detailed longitudinal data, older adults account for almost one-third of all new AIDS diagnoses with 55% occurring at ages 40 and older [40•]. Each AIDS diagnosis is an indication of the failure to test for HIV. STD testing [41••, 42•] efforts have historically failed to reach older adults which is the reason that the likelihood of an AIDS diagnosis is highly correlated with age [43, 44••, 17••, 45••, 42•, 46, 47••, 48••]. This neglect to test older adults for HIV is further emphasized by a recent New York City Department of Health 2015 report which showed that at a primary medical center where more than 5000 bio-samples collected from emergency room patients over a 2-month period, HIV prevalence was 5%. The highest prevalence was being between the ages of 50 to 59 at 9.2%, and 20% in those aged 70–79 [49•].

Risky Sexual Behavior and the Older Adult with HIV

Similar to their HIV-negative counterparts, older adults living with HIV are sexually active [43, 50]. Results from a study of almost 1000 persons 50 years and older with HIV in New York City (ROAH: Research on Older Adults with HIV) [51, 52•] show that one half of these individuals report sexual activity in the past 3 months [50, 53•]. Approximately 75% of older sexually active individuals have sex more than two to three times per month. They and others [54] also found that erectile enhancement drugs did not increase the incidence of unsafe sex practices.

Frequencies and patterns of sexual behaviors that place a person at risk for STIs differ when assessing gender and sexual orientation. For example, older men who are seropositive are more likely to be sexually active when compared to

women. Differences are found when analyzing frequency of condom use, and their use is lowest among older gay and bisexual men when compared to heterosexual peers [55, 50, 56•]. Almost 50% of both genders infected with HIV have made the decision to stop engaging in sex. This decision is driven by the toxic levels of AIDS-driven stigma wherein disclosure of one's HIV status almost inevitably results in rejection [57••, 58, 59••, 60]. Consequently, that decision prevents their having positive sexual health experiences as they age. Their choices, which are fully logical, contribute to their social isolation and sustained high rates of depression and anxiety which plague the older adult HIV populations [3, 61, 38••, 62, 63••].

Between 30 and 40% of those sexually active in ROAH did not use condoms. Both male and female HIV+ older adults report engaging in unprotected anal or vaginal intercourse [50, 57••, 43]. Engaging in this high-risk sex may be indicative of poor knowledge about HIV/AIDS transmission, especially when done in combination with substance use during sex. While condom use is effective in preventing HIV and STI transmission, older persons may not use condoms because they are unaware of the risks. Also, older men can suffer from some degree of erectile dysfunction, which makes condom use less reliable and not as viable an option [64••, 65, 66, 67••]. Topical microbicides for vaginal and anal use by women and men are being developed. The promise of such regimens is significant but its adoption by at risk groups is unknown [68••].

The recent embracing by the CDC of two HIV prevention modalities can have a significant impact on the sexual health of older adults at risk and living with HIV. These are treatment as prevention or TASP, and PrEP or pre-exposure prophylaxis. If a person infected with HIV is adherent to their HIV medications, they achieve viral suppression. If they are consistently (over 6 months) virally suppressed, the chance of infecting another person when engaging in unprotected sex is negligible [69, 70••]. Imagine the new sexual "freedom" which has been imparted by TASP. For some, this can mean the option to have unprotected sex and might even include not disclosing one's serostatus. For most older adults who have been living with HIV for as long as 25 years, this change in their "sexual" status is remarkable. Some have described this as akin to a woman post-menopausal who can no longer become pregnant, or the historic liberating effect of the contraception pill. PrEP refers to an anti-retroviral medication an HIV-negative person can take which will protect him/her from being infected with HIV, even when unprotected (condom less) sex occurs. Even though PrEP does not protect from other sexually transmitted infections, the implications for HIV prevention are considerable. Imagine a serodiscordant couple who have had to use condoms or not engage in insertive sex. If an HIV-infected person is virally suppressed and his/her partner took PrEP, the likelihood of HIV transmission is virtually zero. The impact of this on his/her sexual health will be significant.

Conclusions

It is important to note that demographic characteristics do not, in and of themselves, place individuals at risk of HIV infection. It is not skin color, ethnicity, sexual or gender identities, or age that cause HIV infection. Rather, this epidemic is now and in the future fueled by a lack of understanding by health and human service providers of the epidemic's impact on older adults as well as other contextual factors [19••]. They include poor health care, poverty, inequality, discrimination, mental health, violence toward women, and substance abuse challenges [68••]. One of the challenges for those who work in the HIV prevention domain is how to reach the older adult who is at high risk for HIV infection. Part of that challenge is the fact that people age 50 and older are not a monolithic homogenous population [19••]. People in their 5th through 9th decades of life congregate, socialize, access news and health information, and engage social media in highly varied and challenging ways. As the number of older adults living with HIV increases globally, so too will the number of older adults who carry the virus. Because most older adults have sex with their peers, understanding the sexual behavior and health of all older adults in addition to addressing ageist bias from providers will be needed to best curtail new HIV infections.

Compliance with Ethical Standards

Conflict of Interest Stephen E. Karpiak and Joseph L. Lunievicz each declare no potential conflicts of interest.

Human and Animal Rights and Informed Consent This review article does not contain any studies with human or animal subjects performed by any of the authors.

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