*Sexual Health in HIV and Aging

- Consistent with the primary care guidelines, the health care team should screen older persons at each visit for high-risk behavior or evidence of sexually transmitted diseases, and then provide a tailored prevention message. A more general prevention message should be given at each visit to all patients. Developing a routine way to elicit the patient's sexual history that avoids judgmental attitudes and asks the patient for permission to discuss sexual function will make it easier to gather the necessary information.
- In HIV discordant couples, there is a special need to emphasize safe sexual practices and full adherence to ART use.
- Use of erectile dysfunction medications or other measures for impotence in men and topical estrogen products for vaginal dryness in women can enhance sexual satisfaction, but care in their use is necessary. The prescription should be linked to specific educational efforts on safe sexual practices.
- PrEP is recommended as one prevention option in those at substantial risk of HIV acquisition for sexually-active adult MSM, for adult heterosexually active men and women, for adult injection drug users and to be discussed with HIV-discordant couples, as an option to protect the uninfected partner

For those at high risk, sexual behavior has more often been defined through the narrow prism of HIV prevention. But, sexual health is broadly defined as more than just the absence of dysfunction or disease. Sexual health is a significant element contributing to the quality of life of older adults.

There is evidence that positive sexual health protects against those stresses that arise from chronic illness thereby improving health outcomes (Bodenmann 2005). Most recently this observation has been seen to occur in HIV discordant couples (Gamarel et al. 2014). Research supports the view that a gay couple's sexual health sex life, is a function of the quality of their overall relationship. That relationship, and not social perceptions or approval are correlated with positive sexual satisfaction (Sprecher et al. 2004; Berg et al. 2007). Studies (Trotta et al. 2008) found that about half of those with HIV report sexual problems which include sexual dissatisfaction. Sexual dissatisfaction within couple relationships occurs in the presence of chronic illnesses which in turn reduces personal well-being and health outcomes (Diamond et al, 2012).

Poor quality of life can significantly affect medication adherence as well as patient directed health care decisions that are an integral part of multimorbidity management. Sexual dysfunction can be a side effect of medications, be associated with a past medical/surgical history, or, sexual abuse as well as the oppressive effects of stigma. The successful integration of sexual health care can decrease morbidity and mortality, and enhance well-being and longevity in the patient (Bickley 2008).

Health-care professionals more often underestimate the desire for and level of sexual activity in the older adult population thereby neglecting their risk for STI exposure (Lindau et al. 2007). In fact, CDC

reports that STI diagnoses in those 65 years and older are increasing and similar to trends in the 20-24-year-old age group (CDC 2013). Quite simply they do not believe that older adults, and especially older adults with HIV, are sexually active. This failure to engage the older adult, and particularly the older adult living with HIV, in a conversation about sexual health and the need for safe sex practices has consequences, which include the spread of HIV. The landmark study by Lindau al. (2007) found that 73% of people aged 57-64 reported having sex in the previous year, as did 53% of those aged 64-75 and 26% of those aged 75-85. Among those who were sexually active, the majority reported having sex two to three times a month. Interest in sex, however does decline with age, especially due to poor health or not having access to a partner. If a person's health was very good, that person was twice as likely to be sexually active as those in very poor health.

Care providers cannot assume that older adults are not sexually active. They are at risk for STI's and sexual dysfunction and are likely to feel uncomfortable initiating discussions with their health care provider. 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 having an AIDS diagnosis at the time of initial HIV detection increases (CDC 2011). Primary prevention for HIV and STI's in older adults should be a priority for the medical team. Unless identified and addressed the sexual health of the older HIV+ patient will have a negative impact on health outcomes. As well, secondary prevention to minimize HIV transmission is needed.

Sexual Behavior in Older Adults with HIV/AIDS

Similar to their HIV-negative counterparts, older adults living with HIV are sexually active. 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) (Karpiak 2006; Brennan et al. 2009) show that one half of these individuals report sexual activity in the past three months (Golub et al. 2010; Golub et al. 2011). Approximately 75% of older sexually active individuals have sex more than 2 to 3 times per month. They and others (Cook et al. 2010) also found the erectile enhancement drugs did not increase the incidence of unsafe sex practices.

Detailed studies have begun to examine sexual behavior in older adults living with HIV/AIDS (Szerlip et al 2005; Arnsten & Klein, 2007; Golub et al. 2010; Golub et al. 2011; Lovejoy et al. 2008; Szerlip et al. 2005; Brennan et al. 2011). The frequency of unprotected insertive sex is high among older adults with HIV. About 41% of the sexually active older adults with HIV in the ROAH Study report unprotected anal or vaginal sex in the past 3 months (Golub et al. 2010; Golub et al. 2011). Different frequencies and patterns of sexual risk behavior have been found among older HIV infected adults by gender and sexual orientation. As an example, older HIV-infected men (regardless of sexual orientation) are more likely to be sexually active compared to women, but condom use rates are lowest among gay and bisexual self-identified males, compared to heterosexuals (Golub et al. 2010; Lovejoy et al. 2008). Studies have also found that older women are at higher risk of STI because of vaginal atrophy that may contribute to increased exposure (Lindau et al. 2007). These older post-menopausal women perceive the elimination of the risk for pregnancy as extending to the elimination of the risk for STIs including HIV. As older adults living with HIV begin to internalize

the emerging consensus that a low or non-detectable viral load is commensurate with low infectivity (but not zero) they are likely to engage in more sexual risk sex behaviors, avoiding the need to disclose their status and not use a condom. Also, reports suggest that for various reasons, older MSM have paired with younger MSM, thereby increasing risk (Mustanski &Newcomb 2013). Such increased behavioral risk needs to be discussed at regular visits with appropriate counseling given (Aberg 2013). However, for persons continuing such behavior referral to a program that offers behavioral modification strategies, including group and phone interventions is needed (Aberg 2013; Illa et al. 2010;Lovejoy et al. 2011) as well as adoption of the daily use of Truvada (CDC 2014).

Primary Prevention Issues (see also Detection and Screening for HIV in Older Adults

CDC surveillance data (CDC - 2011) show that 17% (1 in 6) of all new HIV infections occur at age 50 and older in the US. That incidence rate has increased from 11% in 2002 (CDC - 2004). Between 30-40% of sexually active HIV infected adults report unprotected anal or vaginal intercourse (Golub et al. 2010 & 2011). Such risk-taking may be associated with less knowledge about HIV/AIDS and recent substance use. Condom use is effective in preventing HIV and STI transmission. However, 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. Topical microbicides for vaginal and anal use by women and men are being developed. A recent clinical trial of pre-exposure chemoprophylaxis (PrEP)with an existing ART in negative MSM subjects found a 44% reduction in the incidence of HIV (Grant et al. 2010). The promise of such regimens is significant but its adoption by at risk groups is unknown. This finding has been extended to heterosexual men and women, and guidance has been published (CDC 2014). Parallel studies show that treatment of an HIV-infected partner in HIV discordant couples reduces significantly the rates of sexual transmission of HIV (Cohen et al. 2011; CDC, 2014).

Studies consistently demonstrate associations between unprotected sex and negative affect, including depression and anxiety. Research finds high levels of depression, loneliness, anxiety, and chronic stress across gender, race/ethnicity, and sexual orientation among older adults with HIV (Grov et al. 2010; Heckman et al. 2000; Kalichman et al. 2000; Stall et al. 2003) Increasingly, distress and mental health problems are emerging as critical determinants of risk behavior among HIV infected adults.

Most prevention efforts exclusively stress negative psychological factors as predictors of risk behavior. HIV prevention efforts have largely adopted a pathogenic perspective, identifying psychological factors that increase HIV risk behavior. Yet these pathogenic approaches are being reassessed. The use of salutogenic models that engage health promoting factors such as positive psychological functioning (Ryff & Singer 1998) and health behaviors are being assessed (Golub et al. 2011). For the older adult, placing emphasis on positive psychological health factor may represent a better long-term predictor of optimal health outcomes. This approach necessitates that health care providers acknowledge the psychological resources of their clients many of whom are long-term HIV survivors exhibiting a high level of resiliency.

How to Talk to Older Adults about Sexual Health

The following are examples of elements of social and psychosocial assessment (Nusbaum & Hamilton 2002) that can assist in creating a setting where patients feel comfortable expressing the details of their sexual health:

- Do you have any questions or concerns about your sexual functioning? (open ended question)
- Have you noticed any problems or changes with your ability to have or enjoy sex?
- Has your present illness (or medications) affected your sexual function?
- Do you ever have pain with intercourse?
- *Women*: Do you have any difficulty achieving orgasm?
- *Men*: Do you have any difficulty obtaining and maintaining an erection? Difficulty with ejaculation?
- Do you have, or have you ever had, any risk factors for HIV? (List blood transfusions, needle stick injuries, IV drug use, STDs, partners who may have placed you at risk, exchanging money for sexual activity, use of alcohol or drugs in association with sexual activity)
- Have you ever had any sexually related diseases?
- What do you do to protect your partner from contracting HIV?
- Do you or your partner use condoms? Always? Sometimes? or Never?

Historic Change for Sexual Health: High Impact Prevention (HIP)

The recent CDC approval of the use of an ARV, Truvada, taken daily as an HIV prevention strategy is historic (CDC 2014), Some suggest that there are parallels to the introduction of "the pill". Providers must familiarize themselves as must their patients with this prevention option now approved. Its impact on the sexual health of older adults with and without HIV infection may well be immense and signal the beginning of the end of AIDS (CDC, 2014).

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