

Influence of Age on Sexual Risk Behaviors and Condom Use Attitudes Among Heterosexual Women with Histories of Methamphetamine Use and Partner Violence

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BACKGROUND

- ◆ Midlife/older adults (ages 45+) make up 25% of people living with HIV/AIDS, with midlife/older women representing 34% of newly diagnosed HIV cases and 41% of newly diagnosed AIDS cases.
- ◆ Women engage in sexual activities well into their 70's and 80's, but may not utilize HIV/STI prevention methods due to physiological changes associated with sexual dysfunction (e.g., vaginal dryness and stiffness, male impotence, etc.) and reduced likelihood of becoming pregnant.
- ◆ The two major modes of HIV transmission for women are high-risk heterosexual contact and injection drug use, which is more prevalent in midlife/older adults.
- ◆ Physical/sexual partner violence (PV) among drug-using women is 3-5 times higher compared with women who do not use drugs, which often operates in a cyclical pattern with substance abuse increasing the risk for future PV and PV increasing the risk of substance abuse.
- ◆ Several studies examine the effects of one or two HIV risk factors (i.e., female drug-populations); however, little is known about the HIV risk of older/midlife women with histories of PV and drug use.

PURPOSE

This study compared sexual risk behaviors, condom use attitudes and HIV knowledge between midlife/older women (ages 45+) and younger women (ages 18-44) reporting methamphetamine (MA) use and PV in San Diego, CA.

METHODS

A sequential mixed methods design used themes from qualitative in-depth interviews (n=18) to inform logistic regression analysis of data from HIV-negative, heterosexual, MA-using women enrolled in an HIV behavioral intervention trial in San Diego, CA who reported lifetime PV (n=154).

FASTLANE2 & Women's Study

Between 2006 and 2010, an HIV behavioral intervention (FASTLANE2) designed to reduce high-risk sexual practices, MA use, and depressive symptoms was conducted among a community-based sample of HIV-negative, heterosexual, MA-using men and women, ages 18+ (n=432). In 2011, Women's Study (WS), retrospectively explored contextual HIV risk factors of PV, drug use and attitudes towards female-initiated HIV prevention methods (i.e., female condoms and self-administered topical microbicide gels). WS utilized criterion sampling to select female participants from FASTLANE2 reporting lifetime PV, either physical or sexual, where the perpetrator was a sexual partner (i.e., spouse, steady, client, casual, stranger or anonymous male partner) (n=18).

Qualitative Analysis

The 1st, 2nd and 4th authors read through WS transcripts independently, using open-coding techniques, and constructed a codebook based on study aims and interview guide content (i.e., deductive), as well as themes that emerged in the transcripts (i.e., inductive). Team members met regularly to discuss transcript content, coding progress (using MAXQDAplus10) and resolve codebook discrepancies as needed using.

Dependent variable

Age group cut-offs were defined as the average age at which a woman begins to experience physiological changes (i.e., perimenopause) as part of the natural aging process.

Quantitative Analysis

Baseline data from FASTLANE2 was used to perform a secondary data analysis using logistic regression to examine associations between sexual risk behaviors, condom use attitudes and HIV knowledge and age.

RESULTS

Table 1 Characteristics of Study Participants in Women's Study (Qualitative) and FASTLANE2 (Quantitative)

Characteristic	Women's Study n=18 n (%)	FASTLANE2 n=154 n (%)
Mean age (range)	41.2 (26-57)	36.6 (18-63)
Age 18-44	12 (66.7)	121 (78.6)
Age 45+	6 (33.3)	33 (21.4)
Race/ Ethnicity	White	7 (38.8)
	African American	6 (33.3)
	Latina	4 (22.2)
	Asian/Other	1 (5.5)
Lifetime physical PV only	5 (27.8)	77 (51.7)
Lifetime sexual PV only	1 (5.5)	14 (9.4)
Lifetime physical & sexual PV	12 (66.7)	58 (38.9)
Currently in an abusive relationship (last 2 months)	3 (16.7)	48 (31.1)



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Table 2 Emergent Themes and Examples from Midlife/Older Participants (Women's Study)

Qualitative Themes	Examples
Physiological Determinants: Women discussed physiological characteristics that develop with age, in both men and women, that influence their condom use. Some described vaginal dryness, loss of elasticity in the vaginal channel, discomforts during sexual intercourse, and impotence.	<i>"It's gonna be hard 'cause I haven't had any [sex] in so long, it was kind of tight, you know. It was really tight. . . I'm dry because my age, you know. It's not as wet like it used to be, you know. My age. So that's why it be so tight. That's why I was telling him to get some lotion. . ."</i> ("Charlotte," African American, age 57)
HIV/AIDS Knowledge: HIV misconceptions were noted in the context of safe sex practices and injection drug use. One woman associated her sexual partner's physical appearance and hygienic practices with an HIV-negative status, while another woman rationalized not having contracted HIV after many years of injecting drugs, by her vein size.	<i>"A girl, young girl's not gonna have that boldness in her to where she's gonna tell the guy. . . so she's gonna be protected. Know what I mean? But um uh like uh not all women are picky, like I am, but um yeah, I'm picky. I am, I'm picky so. It's different for an older women I think. For me at least it is."</i> ("Gloria," Latina, age 49)
"Dodging the Bullet": Women described their potential for contracting HIV in the past (e.g., sex work, rape, unsafe drug practices, physical violence, unprotected sex with high-risk partners) and expressed uncertainty around their future status.	<i>"I'll probably be paying the price for that for who knows how long, you know. So, hopefully nothing turns up later, you know. Guess we'll find out."</i> ("Betty," Latina, age 47)

Table 3 Demographics, Sexual Risk Behaviors, Knowledge and Attitudes of Heterosexual Women with Histories of Drug Use and Partner Violence in San Diego, CA, 2006-2008

Characteristic	Age 18-44 yrs (N=121)	Age ≥ 45 yrs (N=33)	P-value
Marital Status	Never married	62 (51.2%)	8 (24.2%)
	Married	10 (8.3%)	3 (9.1%)
	Separated/Filing for Divorce	18 (14.9%)	8 (24.2%)
	Divorced/Widowed	31 (25.6%)	14 (42.2%)
Unemployed	94 (77.7%)	30 (90.9%)	0.135
Annual Income < \$20,000	10 (8.3%)	4 (12.1%)	0.500
Ever convicted of a felony	58 (47.9%)	21 (63.6%)	0.120
Presence of an STI/STD ^a	24 (19.8%)	3 (9.1%)	0.200
Median # of sex partners (IQR) ^a	2 (1,4)	4 (0,6)	0.179

^a Last 60 Days, self-reported

RESULTS CONTINUED

Characteristic	Age 18-44 yrs (N=121)	Age ≥ 45 yrs (N=33)	P-value
Median % of unprotected vaginal sex acts with a spouse/steady partner (IQR)	100 (85,100)	100 (100,100)	0.183
Median % unprotected vaginal sex acts with a casual/anonymous partner (IQR)	100 (46.6,100)	100 (62.3,100)	0.901
Having unprotected sex while high on MA with spouse/steady partner some or most of the time ^b	83 (80.6%)	18 (75.0%)	0.541
Having unprotected sex while high on MA with casual/anonymous partner some or most of the time ^b	68 (75.6%)	20 (80.0%)	0.643
Self-efficacy for condom use ^c , mean score (SD)	3.19 (0.7)	2.87 (0.7)	0.027
Positive intentions to engage in HIV prevention behaviors ^d , mean score (SD)	3.5 (1.2)	3.5 (1.2)	0.991
Positive outcome expectancies for condom use ^e , mean score (SD)	2.1 (0.6)	1.9 (0.6)	0.042
HIV Knowledge (% correct) ^f , mean score (SD)	89.4 (10.8)	85.3 (12.0)	0.047
Positive attitudes towards HIV prevention behaviors ^g , mean score (SD)	3.8 (1.3)	4.0 (1.1)	0.541

^b 4 point Likert Scale from Never to Very Often; ^c 11 items, 4 point Likert Scale from Strongly Disagree to Strongly Agree;

^d 3 items, 5 point Likert Scale from Very Bad to Very Good; ^e 12 items, 4 point Likert Scale from Strongly Disagree to Strongly Agree;

^f 18 true/false items; ^g 3 items, 5 point Likert Scale from Very Bad to Very Good

Table 4 HIV Risk Factors Independently Associated with Midlife/Older Women (vs. Younger Age) Among Women Reporting Histories of Drug Use and Partner Violence in San Diego, CA; 2006-2008 (n=154)

Factor	Adjusted OR	95% CI
Self-efficacy for condom use	0.49	0.27-0.87
HIV knowledge (% correct)	0.96	0.93-0.99

OR, odds ratio; CI, confidence interval; Adjusted for marital status, current living situation, education and ever having a felony conviction

CONCLUSIONS

- ◆ Compared to the younger age group, being in the midlife/older age group was significantly associated with lower self-efficacy and lower HIV knowledge after controlling for demographics. However, sexual risk behaviors were not associated with age.
- ◆ Reduced self-efficacy for condom use and reduced HIV knowledge may be due to a women's inability to request condom use in an abusive relationship or lack of exposure to HIV/AIDS prevention programs.
- ◆ Less positive outcome expectancies for condom use (possibly due to physiological barriers) was significantly associated with midlife/older age in the bivariate analysis; possibly suggesting insufficient power to detect potential significant association in multivariate analysis given the small sample size.
- ◆ Future HIV prevention efforts should expand age appropriate HIV education programs targeting midlife/older women, while addressing the lack of communication between patients and medical professionals, late testing, physiological barriers associated with age, and past and present contextual HIV risk factors (e.g., sex work, drug use, PV).

SELECTED REFERENCES

Engstrom et al., 2011; Semple et al., 2004; Stockman et al, 2011; El-Bassel et al., 2011; El-Bassel et al., 2010; Altschuler et al., 2008; Mugavero et al., 2007; Additional references available upon request.



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