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## Introduction

- HIV self-management is central to the health of people living with HIV and is comprised of the daily tasks individuals conduct to manage their illness
- Women living with HIV are confronted with social context vulnerabilities that impede their ability to conduct HIV self-management behaviors, including demanding social roles, poverty, homelessness, decreased social capital, and limited access to health care
- Our purpose was to examine the relationship between these social context vulnerabilities and HIV self-management in women living with HIV

## Materials and methods

- We conducted a cross-sectional secondary analysis of 260 women living with HIV from San Francisco and Northeast Ohio
- All social context variables, consistent with the Social Determinants of Health Framework, were assessed using validated self-report scales
- HIV Self-Management was assessed using the HIV Self-Management Scale which has three domains measuring daily health practices, HIV social support, and the chronic nature of HIV
- Data were analyzed using appropriate descriptive statistics and multivariable regression

## Results

Table 1: Demographic Characteristics of Participants

	Northeast Ohio (n=125)	San Francisco Bay Area CA (n=135)	Total (n=260)
	Frequency (%)	Frequency (%)	Frequency (%)
Mean Age (+/-SD), years	45 (9.4)	48 (8.9)	46 (9.3)
Race			
African American	91 (73)	78 (58)	169 (65)
White/Angelo	24 (19)	22 (16)	46 (18)
Other	14 (11)	29 (21)	43 (17)
Marital Status			
Single	67 (54)	85 (63)	152 (59)
Married	21 (17)	16 (12)	37 (14)
Other	36 (29)	26 (20)	62 (25)
Education Level			
11th grade or less	52 (42)	37 (27)	89 (34)
High School Diploma or Higher	76 (59)	89 (71)	165 (61)
	\$8,088 (3,000- 12,000)	\$10,140 (8,088- 12,000)	\$10,000 (6,000- 12,614)
Median Annual Income (IQR)			
Has Permanent Housing	115 (90)	100 (74)	215 (82)
Has Health Insurance	118 (91)	132 (98)	250 (94)
Type of Health Insurance <sup>3</sup>			
Medicaid	87 (76)	64 (50)	151 (62)
Medicare	18 (16)	41 (32)	59 (24)
Private, not by work	2 (1.74)	1 (0.8)	3 (1)
ADAP	4 (3)	12 (9)	16 (7)
Private, provided by work	4 (3)	11 (9)	15 (6)

Table 2 : Medical Characteristics

	Northeast Ohio (n=125)	San Francisco Bay Area, CA (n=135)	Total (n=260)
	Frequency (%)	Frequency (%)	Frequency (%)
Prescribed Anti-Retroviral Therapy	102 (86)	96 (74)	198 (80)
Undetectable HIV Viral Load	51 (52)	54 (49)	105 (50)
Mean HIV Viral Load for those with detectable values/mL (+/-SD)	17,778 (39,378)	16,668 (32917)	17,189 (35,712)
Mean CD4 cells/ $\mu$ l (+/-SD)	501.2 (363.2)	574.8 (377.8)	533.5 (375.1)

Table 3: Social Context Characteristics

	Northeast Ohio (n=125)	San Francisco Bay Area, CA (n=135)	Total (n=260)
	Frequency (%)	Frequency (%)	Frequency (%)
<b>SOCIAL ROLES</b>			
Mother	97 (91)	89 (82)	186 (86)
Have children living at home	53 (40)	30 (22)	83 (31)
Wife	25 (20)	18 (13)	43 (17)
Employee	28 (22)	26 (19)	54 (21)
Mean Perceived Social Capital (+/-SD)	2.74 (0.50)	2.70 (6.2)	2.73 (0.56)
Mean Access to Care (+/-SD)	20.6 (6.3)	22.28 (5.8)	21.45 (5.62)

Table 4: Relationship between daily self-management health practices and social context variables in women living with HIV

Model	$\beta$	95% CI	p- value	F (df)	Adjusted R <sup>2</sup>
<b>Demographic Variables</b>					
Age	0.006	-0.003-0.015	0.176		
Race	-0.072	-0.126- -0.018	0.009		
Education level	-0.058	-0.147-0.031	0.196		
Permanent housing	0.135	-0.111-0.380	0.279		
Annual Income	-3.11e-06	-0.000-5.44e-06	0.472		
<b>Social Roles</b>					
Mother	-0.216	-0.471- -0.040	0.097		
Employee	0.198	0.022-0.417	0.077		
Wife	0.043	-0.177-0.262	0.701		
Access To Care	-0.008	-0.024-0.007	0.287		
Perceived Social Capital	0.404	0.261-0.546	<0.001		
Site	0.209	0.035-0.334	0.019		
Constant	0.889	0.177-1.602	0.015	5.40 (11,123)	0.27

Table 5: Relationship between chronic nature of HIV self-management and social context variables in women living with

Model	$\beta$	95% CI	p- value	F (df)	Adjusted R <sup>2</sup>
<b>Demographic Variables</b>					
Age	0.010	0.004 - 0.056	0.001		
Race	-0.027	-0.623 - 0.007	0.120		
Education level	-0.040	-0.097 - 0.018	0.174		
Permanent housing	0.197	0.044-0.351	0.012		
Annual Income	-4.44e-06	-9.86e-06-9.89e-07	0.108		
<b>Social Roles</b>					
Mother	-0.219	-0.387- -0.052	0.011		
Employee	0.084	-0.057-0.226	0.239		
Wife	0.069	-0.073-0.212	0.338		
Access To Care	-0.012	-0.021--0.002	0.023		
Perceived Social Capital	0.218	0.124-0.311	<0.001		
Site	0.008	-0.101-0.118	0.879		
Constant	2.000	1.543-2.456	<0.001	5.57 (11,128)	0.27

## Conclusions

- We found evidence that social context vulnerabilities significantly influence HIV self-management in women
- Of the vulnerabilities examined, traditional social roles and social capital exert the most influence on HIV self-management
- Our findings support using the Social Determinants of Health Framework in analyzing self-management practices of women living with HIV

