

Race–gender Differences in Risk and Protective Factors among Youth in Residential Group Homes

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Abstract:

Analysis reported here examined youth in residential group home placements in order to better understand how sexual behaviors, drug use, and environmental experiences differ by race and gender subgroups. Data were collected from 336 youth aged 14–21 residing in one of 41 group homes in Maryland. Chi square and logistic regression analyses were done to determine differences on study variables among the race-gender groupings. Results demonstrate not only significant health concerns overall but notable differences were also found between race-gender subgroups. Findings suggest that found race-gender subgroup differences might be informative for tailoring programming for youth of residential group home settings.

Keywords: Adolescents | Foster Care | Homeless Youth | Group Homes | Sexual Behaviors

Article:

Introduction

From 1982 to 2001 the number of youth in the foster care system (end of year point prevalence) increased 107%, from 262,000 to 543,000 (Committee on Ways and Means of the U.S. House of Representatives, 2004). An estimated 20–25% of these youth were placed in a residential group care living arrangement (U.S. Department of Health and Human Services, 1997; Whittaker, 2000) and 8% were placed in residential group care (Committee on Ways and Means of the U.S. House of Representatives, 2004). Residential group care is defined as 24-hour supervised care of youth in a residentially located home and is one component of the foster care and child welfare systems (Child Welfare League of America, 2004). Generally youth are placed in residential group care because they were removed from an unhealthy home environment by child protective services or relocated from other placements in the child welfare system such as another group home, a failed foster home placement or a juvenile justice or treatment facility

(Slesnick & Meade, 2001; US General Accounting Office, 1995; Whittaker, 2000). Residential group facilities also provide shelter to homeless, runaway and rejected/throwaway youth (Ringwalt, Greene, Robertson, & McPheeters, 1998; Rotheram-Borus, Mahler, Koopman, & Langabeer, 1996; Rotheram-Borus, Parra, Cantwell, Gwadz, & Murphy, 1996).

Many of these vulnerable youth remain in state care for long periods of time (Courtney & Barth, 1996; Moore, 1995; US General Accounting Office, 2002); federal statistics indicate that in 2001, 44% of US foster youth and 61% of Maryland foster youth had been in state-funded care for 2 or more years (Committee on Ways and Means of the U.S. House of Representatives, 2004). Other research has shown that by the time foster care youth exit the system, they have accumulated, on average, 5.5 years of time living in residential care and have had 7.6 different placements (Courtney & Barth, 1996; McMillen & Tucker, 1999). The lengthy involvement of youth in state sponsored care points to a need to better understand the health issues among these youth (Ensign, 2001).

Due to a dearth of research on this population, compounded by minimal reporting requirements placed on these public and private organizations, detailed information about the health behaviors or health care needs of these youth is limited (Committee on Ways and Means of the U.S. House of Representatives, 2004; Courtney & Barth, 1996; Ensign, 2001; Slesnick & Meade, 2001; Whittaker, 2000). Further, much of what is known is not specific to youth in residential group homes since studies on this population have commonly included homeless adolescents recruited from the streets, and youth from short-term emergency shelters and social service treatment organizations. Nevertheless, these studies have revealed significant health needs in multiple areas including sexual abuse, HIV risk behaviors, alcohol and other substance abuse, mental health concerns, and suicide (Elze, Auslander, McMillen, Edmond, & Thompson, 2001; Ensign & Gittelsohn, 1998; Ensign & Santelli, 1998; Rew, Taylor-Seehafer, & Fitzgerald, 2001; Ringwalt et al., 1998; Rotheram-Borus et al., 1996; Rotheram-Borus, Parra et al., 1996). The few studies that examined youth in residential care settings as a distinct group have also found high rates of substance abuse (Ringwalt et al., 1998; Slesnick & Meade, 2001), HIV risk taking behaviors (Elze et al., 2001; Slonim-Nevo, Ozawa, & Auslander, 1991), mental health needs (Berrick, Courtney, & Barth, 1993; Breland-Noble, Farmer, Dubs, Potter, & Burns, 2005; Li, Johnson, & Leopard, 2001; Pumariaga, Johnson, & Sheridan, 1995), and suicidal ideation and attempts (Handwerk, Larzelere, Friman, & Mitchell, 1998).

The Monitoring Adolescents in Risky Situations (MARS) study is a cross-sectional behavioral surveillance study of youth between the ages of 14 and 21 residing in state-funded group residential homes and shelters in Maryland. Analysis reported here examined sexual behaviors, drug use, and environmental experiences in race and gender subgroups in order to gain a better understanding of the needs of each subgroup and to guide program planning for youth placed in state-funded residential group care.

Methods

Data were collected from 336 youth aged 14–21 residing in one of 41 non-therapeutic group homes or shelters located throughout the state of Maryland. Most youth placed in these settings are either in the custody of state-level social services or juvenile justice administrations. A small portion of residents are youth seeking sheltered care as a result of a homeless, runaway or rejected/throwaway episode. Only 13 youth (4%) present in the group homes at the time of data collection refused participation. Eight surveys (2.4%) with highly inconsistent responses were discarded, resulting in a final sample size of 328. All youth were informed that their responses were anonymous and would not be viewed by the resident home staff. Given their current family status, youth were deemed emancipated and provided their own written informed consent before data collection. The study protocol was approved by the institutional review boards of the Johns Hopkins University Bloomberg School of Public Health; the Maryland Department of Health and Mental Hygiene; and the Centers for Disease Control and Prevention.

Based on its tested reliability (Brenner et al., 2002), the Centers for Disease Control and Prevention (CDC) Youth Risk Behavior Surveillance (YRBS) instrument provided the basis for development of a survey relevant to the experiences and needs of youth living in residential group homes and shelters. The resulting 93-item “Out of Home Youth Survey” (OHYS) maintained the structural and semantic integrity of the YRBS items used. The OHYS survey questions were supplemented with items tailored to the specific experiences of this group of youth including health behaviors, home environment, familial support, involvement in “the system,” and homelessness and runaway experiences. Like the YRBS, the OHYS is a self-administered, anonymous survey; as such, it is thought to have improved the veracity of responses to questions on sensitive topics and illicit behaviors (e.g. underage alcohol use, drug use, survival sex). Special attention was given to the process of conveying to youth their unique expertise, assuring them their responses were anonymous and that the information they provided would assist in understanding how to offer better services to youth in similar circumstances.

Logistic regression using Statistical Analysis Software (SAS) was conducted to determine the odds of risky behaviors, environmental experiences and other characteristics of race-gender subgroups (white male, white female, African American male, African American female, and other male, other female). Environmental experiences and exposures were defined as prior home environments, involvements in “the system,” experience on “the street,” drug use among peers, and experiences with forced sex. Protective characteristics included self-reported risk avoidance skills and perceived social support. Risk behaviors included high-risk sexual activities, alcohol and drug use, and experiences related to alcohol and drug use. Subjects with missing data on any given variable were removed from analyses that included that variable. Chi square and logistic regression analyses were then done to determine differences on study variables at the p -value = .05 level among the race-gender groupings. For those items with significant chi-square differences among the subgroups, simple logistic regressions were used to estimate differences between each race-gender subgroup and all others on the risk and protective variables of interest.

Results

Table 1 presents the demographics and personal characteristics, by race and gender, of the 328 youth surveyed. The majority of the respondents, 62.5%, described themselves as African American; 20.4% Caucasian and 17.1% Native American, Asian, Hispanic/Latino, or Pacific Islander; 65.5% were male and 34.5% female. There were no significant differences between groups in age categories, sexual orientation or having dropped out of school. There was, however, a difference between race-gender subgroups in suicide attempts in the past 12-month period: non-African American females reported much higher rates than the other subgroups.

Table 1 Out-of-home Youth Demographic and Personal Characteristics by Race and Gender Groupings (n = 328)

	Female (n = 113)			Male (n = 215)			Total n = 328 n (%)	p
	EA/White	AA/Black	Other	EA/White	AA/Black	Other		
	n = 22	n = 76	n = 15	n = 56	n = 136	n = 23		
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Age								
14–15	7 (31.8)	23 (30.3)	9 (6.0)	25 (44.6)	54 (39.7)	11 (47.8)	129 (39.3)	
16–17	9 (40.9)	32 (42.1)	5 (33.3)	24 (42.9)	55 (40.4)	7 (30.4)	132 (40.2)	
18–20	6 (27.3)	21 (27.6)	1 (6.7)	7 (12.5)	27 (19.9)	5 (21.8)	67 (20.4)	
Personal characteristics								
Gay, lesbian, bisexual, or “unsure” about sexual orientation	3 (13.6)	9 (12.2)	2 (14.3)	3 (5.5)	15 (11.3)	2 (9.5)	34 (10.7)	
Dropped out of school or not attending regularly	7 (31.8)	12 (16.2)	1 (7.1)	9 (16.1)	30 (22.6)	6 (27.3)	65 (20.2)	
Any suicide attempt in past year	10 (45.5)	11 (15.1)	6 (42.9)	14 (25.0)	17 (13.1)	5 (23.8)	63 (19.9)	***

***p < .001

Table 2 presents risk factors to healthy development and items representing potentially protective factors (italicized). The aggregate risk factors listed give a glimpse of the chaotic environments experienced by these youth. A third of all youth (38.9%), and more than half of the females (54.9%), reported that they left home because of physical, verbal or sexual abuse; a third of the youth (37.6) indicated that they were forced to leave home or were given up by a family member; more than half revealed that some family members used drugs (58.8%); and only half (50.6%) said that they had a family member to go to for help. The majority of the youth (59.8%) had been in “the system” for 3 or more years; a third (37.0%) had been in juvenile detention or jail in the past year; more than half (52.2%) had run away in the past year; and about a fourth (22.3%) had had a homelessness experience in the past year.

Table 2 Out-of-home Youth’s Environmental Experiences and Exposures by Race and Gender Groupings (n = 328)

	Female (n = 113)			Male (n = 215)			Total n = 328 n (%)	p
	EA/White	AA/Black	Other	EA/ White	AA/Black	Other		
	n = 22	n = 76	n = 15	n = 56	n = 136	n = 23		
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Family/home environment								
Left home due to physical, verbal or sexual abuse	13 (59.1)	41 (56.2)	8 (61.5)	16 (29.1)	40 (30.5)	5 (23.8)	123 (38.9)	***
Forced to leave home or given up by family member	12 (54.6)	29 (40.8)	7 (50.0)	16 (28.6)	47 (35.1)	9 (40.9)	120 (37.6)	
Some family members use drugs	14 (66.7)	50 (70.4)	5 (35.7)	22 (39.3)	79 (61.7)	13 (61.9)	183 (58.8)	***
<i>Has a family member to go to for help^a</i>	7 (33.3)	30 (41.7)	7 (50.0)	33 (58.9)	73 (56.6)	9 (40.9)	159 (50.6)	
Experience in ‘the system’								
Has been in the system for 3 or more years	12 (54.6)	50 (67.6)	6 (42.9)	28 (52.8)	85 (63.9)	15 (68.2)	196 (59.8)	

more years								
At least 1 night in juvenile detention/jail in past year	4 (19.1)	19 (26.0)	6 (50.0)	22 (39.3)	58 (44.6)	7 (33.3)	116 (37.0)	*
At least 1 night in drug treatment in past year	5 (22.7)	6 (8.1)	1 (7.1)	4 (7.1)	10 (7.8)	0 (0.0)	26 (8.2)	*
Street experiences								
Any on the street homeless experience in the past year	10 (45.4)	20 (27.4)	5 (35.7)	13 (23.6)	41 (31.5)	2 (9.5)	91 (28.9)	
Survival sex: sex for food, shelter, clothing, drugs, \$	4 (22.2)	10 (16.1)	2 (16.7)	7 (15.6)	35 (30.7)	2 (11.1)	60 (22.3)	**
Ran away from home at least 1 time in past year	13 (59.1)	45 (60.0)	10 (71.4)	22 (40.0)	63 (47.4)	14 (66.7)	167 (52.2)	*
Other environmental experiences and exposures								
People youth hangs out with use drugs	15 (68.2)	39 (55.7)	9 (64.3)	34 (60.7)	81 (62.3)	13 (61.9)	191 (61.0)	
Ever been raped or sexually abused	10 (58.8)	29 (50.0)	6 (50.0)	8 (17.0)	44 (39.6)	5 (33.3)	102 (39.2)	***
Forced someone into sex while they were drunk/high	2 (9.1)	6 (8.5)	0 (.0)	6 (10.7)	26 (20.0)	3 (14.3)	43 (13.7)	**
Has been forced to have sex while drunk/high	8 (36.4)	22 (31.4)	3 (21.4)	10 (17.9)	36 (27.9)	4 (19.1)	83 (26.6)	
<i>Avoids drug areas</i> ^a	13 (59.1)	33 (47.8)	8 (57.1)	22 (40.0)	53 (41.7)	10 (47.6)	139 (45.1)	
<i>Has an adult to</i>	11 (50.0)	35 (47.3)	5	34	74 (56.5)	11	170	

<i>go to for help</i> ^a			(35.7)	(60.7)		(50.0)	(53.3)	
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^aItalicized text represents possible protective factor *p < .05, **p < .01; ***p < .001

Experiences with alcohol or other drugs in combination with sexual behavior were assessed to understand their co-occurrence. In general, males were more likely than females to have been the perpetrators of forced sex on a drunk or high partner (16.9% versus 7.5%); however, both males and females were more likely to be victims than perpetrators: 31% of females and 24% of males indicated that they had been forced to have sex while they were drunk or high. Survival sex (exchange of sex for food, shelter, clothing, drugs or money) was reported by nearly a quarter of the youth (22.3%), and more than a third had been raped or sexually abused (39.2%). Two items assessing potentially protective factors indicated that 45.1% of the youth surveyed avoided areas where there were drugs and 53.3% had an adult to go to for help. These findings were consistent across the race-gender subgroups.

Table 3 presents race-gender frequencies for substance use and sexual activity behaviors with reported p-values for between-group differences. One fifth of the youth (19.6%) classified themselves as daily smokers; however, there were significant differences between the race-gender subgroups: white females were the most likely to self-identify as daily smokers. Significant race-gender differences were not found, however, for marijuana use in the past 30 days: about a third of the youth (29.9%) reported this behavior. There were significant differences in reported experience with drugs other than tobacco, alcohol and marijuana: a lower percentage of African American youth (11.8%) reported past experience or use than other peer groups (35.3%) A large proportion of youth, over one-third, indicated that they had gotten in a physical fight while they were drunk or high.

Table 3 Out-of-home Youth Substance Use and Sexual Behaviors by Race and Gender Groupings (n = 328)

	Female (n = 113)			Male (n = 215)			Total n=328 n%	p
	EA/White	AA/Black	Other	EA/White	AA/Black	Other		
	n = 22	n = 76	n = 15	n = 56	n = 136	n = 23		
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)		
Substance use								
Daily smoker	11 (50.0)	6 (8.1)	1 (7.1)	14 (25.0)	24 (18.5)	6 (28.6)	62 (19.6)	** *

Drank 5 or more drinks in a row in past 30 days	7 (31.8)	12 (16.4)	2 (14.3)	11 (19.6)	33 (24.8)	7 (31.8)	72 (22.0)	
Used marijuana 1 or more times in past 30 days	5 (22.7)	27 (37.5)	3 (21.4)	14 (25.0)	43 (32.3)	8 (36.4)	98 (29.9)	
Ever used any drug other than marijuana/alcohol/tobacco	8 (38.1)	6 (8.3)	4 (33.3)	24 (42.9)	19 (14.7)	5 (23.8)	66 (21.2)	** *
Has ever blacked out while drunk or high	8 (36.4)	13 (18.3)	6 (42.9)	14 (25.0)	32 (24.2)	6 (30.0)	79 (24.1)	
Has gotten into a physical fight while drunk or high	9 (40.9)	15 (21.1)	7 (50.0)	21 (37.5)	47 (36.2)	11 (52.4)	110 (33.5)	**
Sexual activity								
Ever had sex (vaginal, oral, or anal)	18 (81.8)	60 (83.3)	12 (85.7)	44 (80.0)	120 (92.3)	16 (84.2)	270 (86.5)	**
Had first sex experience before age 13	8 (36.4)	22 (30.6)	3 (21.4)	25 (44.6)	78 (59.1)	12 (60.0)	148 (46.8)	** *
Vaginal intercourse with 6 or more partners, lifetime	6 (27.3)	21 (28.4)	3 (21.4)	22 (39.3)	67 (50.8)	7 (33.3)	126 (39.5)	** *
Anal intercourse with 2 or more partners, lifetime	2 (9.1)	8 (10.8)	1 (7.1)	4 (7.3)	30 (22.9)	2 (9.5)	47 (14.8)	** *
Had sex 4 or more times in the last 4 weeks	1 (4.5)	14 (19.7)	3 (21.4)	3 (5.5)	28 (21.2)	2 (9.5)	51 (16.2)	*
Sex with 3 or more partners in past 3 months (vaginal or anal)	2 (9.1)	4 (5.6)	1 (7.1)	10 (18.2)	34 (28.8)	4 (20.0)	55 (18.3)	** *
Sex with 2 or more different partners on 1 day, ever	5 (22.7)	16 (21.6)	3 (21.4)	23 (41.1)	59 (44.7)	7 (33.3)	113 (35.4)	**
Alcohol or drugs before sexual intercourse	7 (41.2)	10 (17.5)	3 (25.0)	10 (23.8)	33 (28.7)	4 (30.8)	67 (26.2)	

at last sex								
Did not use a condom at the last sexual encounter	11 (64.7)	36 (60.0)	8 (66.7)	18 (40.9)	40 (34.5)	9 (52.9)	122 (45.9)	** *
Has ever had anal intercourse without a condom ^a	4 (80.0)	9 (60.0)	4 (80.0)	8 (61.5)	28 (51.9)	7 (87.5)	60 (83.3)	*
Ever been pregnant or gotten someone pregnant	6 (27.3)	24 (33.8)	3 (21.4)	9 (16.4)	38 (30.9)	2 (10.0)	82 (26.9)	
Ever been diagnosed with an STI	4 (18.2)	18 (26.1)	3 (21.4)	3 (5.4)	17 (13.2)	0 (.0)	45 (14.6)	**

^aRepresents only those who reported ever having had anal sex (n = 72) *p < .05, **p < .01; ***p < .001

The majority of the youth in this study had had sex (86.5%); nearly half indicated that they had had their first sexual experience before the age of 13 (46.8%); and a fourth (26.9%) indicated that they had ever been pregnant or gotten someone pregnant. Other sexual activity behaviors indicated considerable sexual risk exposure among this group of youth, they included: vaginal intercourse with six or more partners over lifetime (39.5%); vaginal or anal intercourse four or more times in the past 4 weeks (16.2%); vaginal, anal or oral sex with two or more partners on the same day (35.4%); and failure to use a condom at the last sexual encounter (45.9%).

Table 4 presents the logistic regression analyses by race and gender groupings. Variables that indicated a significant difference among race-gender groups in the chi-square analyses were included in the models. White and African American Females were more than twice as likely as males to report that they had left home due to physical, verbal or sexual abuse (O.R. = 2.4; p-value = .05; O.R. = 2.5; p-value = .0008). White females were more likely than their peers to have attempted suicide in the past year (O.R. = 3.8; p-value = .003); to be daily smokers (O.R. = 4.78; p-value = .0006); and to use drugs other than marijuana, alcohol, or tobacco (O.R. = 2.46; p-value = .06). African American females were more likely than their peers to report not using a condom at their last sexual encounter (O.R. = 2.09; p-value = .01); and to report having had an STI (O.R. = 2.78; p-value = .003). African American females were less likely than their peers to report using substances other than marijuana/alcohol/tobacco (O.R. = .27; p-value = .004), but they were more likely to report that some of their family members used drugs (O.R. = 1.92; p-value = .03). In contrast, white males were more likely than their peers to report use of drugs other than marijuana, alcohol, or tobacco (O.R. = 3.80; p-value = .0001) but were less likely to report that a family member used drugs (O.R. = .38; p-value = .001).

Table 4 Simple Logistic Regression Analysis by Race and Gender Groupings (n = 328)

	Female (n = 113)			Male (n = 215)		
	EA/White	AA/Black	Other	EA/White	AA/Black	Other
	n = 22	n = 76	n = 15	n = 56	n = 136	n = 23
	O.R. (p-value)	O.R. (p-value)	O.R. (p-value)	O.R. (p-value)	O.R. (p-value)	O.R. (p-value)
Demographic and personal characteristics						
Any suicide attempt in past year	3.80 (.003)	.65 (.24)	3.22 (.04)	1.44 (.30)	.46 (.01)	1.28 (.65)
Family/home environment						
Left home due to physical, verbal or sexual abuse	2.40 (.05)	2.50 (.0008)	2.60 (.10)	.59 (.10)	.54 (.009)	.47 (.15)
Some family members use drugs	1.43 (.45)	1.92 (.03)	.37 (.08)	.38 (.001)	1.23 (.39)	1.15 (.77)
Experience in 'the system'						
At least 1 night in juvenile detention/jail in past year	.38 (.09)	.52 (.03)	1.74 (.35)	1.12 (.70)	1.74 (.02)	.84 (.71)
At least 1 night in drug treatment in past year	3.82 (.02)	.98 (.97)	.85 (.88)	.83 (.75)	.90 (.80)	
Street experiences						
Survival sex: sex for food, shelter, clothing, drugs \$)	1.00 (.99)	.60 (.19)	.69 (.63)	.59 (.24)	2.30 (.005)	.42 (.25)
Ran away from home at least 1 time in past year	1.35 (.50)	1.51 (.12)	2.37 (.15)	.55 (.05)	.72 (.15)	1.91 (.18)
Other environmental experiences and exposures						
Ever been raped or sexually abused	2.35 (.09)	1.77 (.06)	1.58 (.44)	.26 (.001)	1.03 (.91)	.76 (.63)
Forced someone into sex	.61 (.520)	.51 (.15)	—	.72 (.48)	2.46 (.008)	1.05

while they were drunk/high						(.94)
Substance use						
Daily smoker	4.78 (.0006)	.30 (.007)	.31 (.26)	1.48 (.26)	.89 (.68)	1.71 (.29)
Ever used any drug other than marijuana/alcohol/tobacco	2.46 (.05)	.27 (.004)	1.91 (.30)	3.80 (.0001)	.50 (.02)	1.17 (.76)
Has gotten into a physical fight while drunk or high	1.31 (.550)	.42 (.006)	1.91 (.24)	1.14 (.67)	1.09 (.73)	2.16 (.09)
Sexual activity						
Ever had sex (vaginal, oral, or anal)	.68 (.5)	.71 (.37)	.93 (.93)	.55 (.12)	2.56 (.01)	.82 (.76)
Had first sex experience before age 13	.63 (.3)	.41 (.002)	.30 (.07)	.90 (.7)	2.35 (.0002)	1.77 (.2)
Vaginal intercourse with 6 or more partners, lifetime	.55 (.23)	.53 (.03)	.40 (.17)	.99 (.97)	2.24 (.0006)	.75 (.55)
Anal intercourse with 2 or more partners, lifetime	.56 (.44)	.63 (.27)	.43 (.42)	.40 (.09)	2.95 (.001)	.59 (.48)
Had sex 4 or more times in the last 4 weeks	.23 (.16)	1.37 (.36)	1.44 (.59)	.26 (.03)	1.87 (.04)	.53 (.40)
Sex with 3 or more partners in past 3 months (vaginal or anal)	.30 (.15)	.20 (.001)	.30 (.20)	.80 (.65)	3.60 (.0001)	1.10 (.80)
Sex with 2 or more different partners on 1 day, ever	.52 (.20)	.42 (.005)	.48 (.27)	1.34 (.33)	1.99 (.004)	.91 (.84)
Did not use a condom at the last sexual encounter	2.28 (.12)	2.09 (.01)	2.46 (.15)	.79 (.47)	.44 (.001)	1.35 (.55)
Has ever had anal intercourse without a condom ^a	.91 (.87)	.53 (.10)	1.69 (.39)	.66 (.30)	1.31 (.35)	2.83 (.04)
Ever been diagnosed with an STI	1.33 (.62)	2.78 (.003)	1.64 (.46)	.28 (.04)	.82 (.56)	—

^aRepresents only those who reported ever having had anal sex (n = 72). Results with $P < .05$ listed in bold print

African American males differed from their peers on nearly all of the sexually related items. They were more than twice as likely as their peers to have had a first sexual experience before age 13 (O.R. = 2.35; p-value = .0002); to have had anal intercourse experiences (O.R. = 2.95; p-value = .0006), and survival sex (O.R. = 2.30; p-value = .005). As shown in Table 4, African American males were also more likely than their peers to report having had more frequent sexual encounters and partners. However, African American males were also the least likely to report that they did not use a condom at their last sexual encounter (O.R. = .44; p-value = .001). Finally, African American males were more likely than their peers to have forced a drunk or high partner to have sex (O.R. = 2.46; p-value = .008) and to have spent one night in the past year in juvenile detention or jail (O.R. = 1.74; p-value = .02).

Discussion

This and other studies have validated the risks faced by youth residing in group home settings; however, this study has also endeavored to extend our understanding by revealing race and gender differences on a number of behavioral and environmental factors that may contribute to numerous health problems. Without information to help us understand how subgroups within this population differ, it is difficult to effectively plan and tailor treatment options. For example, the logistic regression analysis of the race-gender subgroupings within this study identified increased risks of white males and females for daily smoking and use of heavy drugs and the increased likelihood that white females had, in the past 12 months, spent the night in a drug treatment facility. Being alerted to this fact, program planners can more diligently screen and administer appropriate services. Similarly, many of the other findings, from white females being more likely to attempt suicide, to white and African American females being the most likely to report physical, verbal or sexual abuse, to the higher levels of sexual activity and survival sex of African American males, can be used for more effective screening and program design. At the same time, it should be pointed out that many of the measured variables indicated an inappropriately high level of risk for all of the youth regardless of the statistically significant between group differences found. For instance, while females were more likely than males to report that they had left home due to physical, verbal or sexual abuse (59% of white, 56% of African American and 62% of 'other' females) but the males had also experienced an unacceptable level of past abuses (29% of white, 31% of African American and 24% of 'other' males). In addition, not only do our findings confirm that the lives of these 'out-of-home' youth are characterized by physical and emotional abuse, drug use and unsafe sexual behaviors but these youth are also subject to inadequate familial and adult emotional support. Only 51% of the youth felt that they had a family member to go to for help and only 53% had an adult they felt they could go to. While the findings reported here highlight the unique challenges faced by each race gender subgroup, they also highlight a high level of risk for all the youth. These and other reported experiences provide a powerful marker of the chaotic home and street lives of many of these youth, which should be incorporated into their planned system care.

One aim of this study was to better understand the HIV risk factors of youth in residential group home settings. Some of the most sobering findings were the degree to which these adolescents had been victims of sexual aggression and were engaged in sexual activities. Four in ten participants (39.2%) reported a rape or sexual abuse experience, and one in five (22.3%) reported engaging in survival sex. Not only did the majority report being sexually active (87%), but many also reported experiencing sex before the age of 13 (47%), having six or more lifetime partners (40%), and having intercourse with two or more partners on the same day (35%). Compared to their peers, African American males were the most sexually active, both in terms of the number of partners and the number of encounters. And, while African American males were more likely than their peers to report using a condom at *last intercourse* (65%), the study also revealed that only 34% of the African American males, compared to 71% of all youth, reported that they *always* used a condom during intercourse. Thus a large proportion of these youth are not adequately being protected through either abstinence or barrier methods. Given the high self-reported incidence of sexual activity, and only sporadic protective sexual practices, the youth sampled appear particularly vulnerable to sexually transmitted infections and HIV/AIDS. While not reported in the tables, some survey items revealed their recognition of sexual risks and their desire to better understand the risks. When asked about their concerns regarding AIDS, a majority of the youth surveyed expressed concern about getting AIDS (48%), nearly half (45%) acknowledged that experiences in their past had put them at high risk for AIDS, and when asked, “How much do you know about AIDS or HIV infection?” nearly half (47%) said, “I wish I knew more.”

While attending to the individual level health education, skill development and supportive relationships of youth seem like obvious steps, in the long-term the overall health and well-being of all youth also are dependent on family support, home stability, emotional anchoring and positive modeling. Given the complex natures of these youths’ lives, there are no clear or simple solutions; however, understanding and incorporating found race-gender subgroup differences into programming may create more effective outcomes for youth of residential group home settings. Ideally, creative strategies should be supported and/or developed that will provide the opportunities needed for these youth to address the challenges they face, advance developmentally and become productive and healthy citizens.

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References

- Berrick, J. D., Courtney, M., & Barth, R. P. (1993). Specialized foster care and group home care: similarities and differences in the characteristics of children in care. *Children and Youth Services Review, 15*, 453–473
- Breland-Noble, A. M., Farmer, M. Z., Dubs, M. S., Potter, E., & Burns, B. J. (2005). Mental health and other service use by youth in therapeutic foster care and group homes. *Journal of Child and Family Studies, 14*(2), 167–180
- Brener, N. D., Kann, L., McManus, T., Kinchen, S. A., Sundberg, E. C., & Ross, J. G. (2002). Reliability of the 1999 youth risk behavior survey questionnaire. *Journal of Adolescence, 31*(4), 336–342
- Child Welfare League of America. (2004). CWLA Standards of Excellence for Residential Services. New York
- Committee on Ways and Means of the U.S. House of Representatives. (2004). *The Green Book, 108-6, Section 11- Child Protection, Foster Care, and Adoption Assistance*. Washington, DC: U.S. Government Printing Office
- Courtney, M. E., & Barth, R. P. (1996). Pathways of older adolescents out of foster care: Implications for independent living services. *Social Work, 41*(1), 75–83
- Elze, D. E., Auslander W., McMillen C., Edmond T., & Thompson, R. (2001). Untangling the impact of sexual abuse on HIV risk behaviors among youth in foster care. *AIDS Education and Prevention, 13*(4), 377–389
- Ensign, J. (2001). The health of shelter-based foster youth. *Public Health Nursing, 18*(1), 19–23
- Ensign, J., & Gittelsohn, J. (1998). Health and access to care: perspectives of homeless youth in Baltimore City, U.S.A. *Social Science Medicine, 47*(12), 2087–2099
- Ensign, J., & Santelli, J. (1998). Health status and service use. Comparison of adolescents at a school-based health clinic with homeless adolescents. *Archives of Pediatric Adolescent Medicine, 152*(1), 20–24
- Handwerk, M. L., Larzelere R. E., Friman P. C., & Mitchell, A. M. (1998). The relationship between lethality of attempted suicide and prior suicidal communications in a sample of residential youth. *Journal of Adolescence, 21*(4), 407–414
- Li, C., Johnson P., & Leopard, K. (2001). Risk factors for depression among adolescents living in group homes in South Carolina. *Journal of Health and Social Policy, 13*(2), 41–59
- McMillen, J. C., & Tucker, J. (1999). The status of older adolescents at exit from out-of-home care. *Child Welfare, 78*(3), 339–360

Moore, J. M. (1995). The journey toward independence: Transitional services for adolescents. In E. Mech & J. Rycroft (Eds.), *Preparing foster youth for adult living* (pp. 155–157). Washington, DC: Child Welfare League of America

Pumariega, A. J., Johnson, N. P., & Sheridan, D. (1995). Emotional disturbance and substance abuse in youth placed in residential group homes. *Journal of Mental Health Administration*, 22(4), 426–432

Rew, L., Taylor-Seehafer, M., & Fitzgerald, M. L. (2001). Sexual abuse, alcohol and other drug use, and suicidal behaviors in homeless adolescents. *Issues in Comprehensive Pediatric Nursing*, 24(4), 225–240

Ringwalt, C. L., Greene, J. M., Robertson, M., & McPheeters, M. (1998). The prevalence of homelessness among adolescents in the United States. *American Journal of Public Health*, 88(9), 1325–1329

Rotheram-Borus, M. J., Mahler, K. A., Koopman, C., & Langabeer, K. (1996). Sexual abuse history and associated multiple risk behavior in adolescent runaways. *American Journal of Orthopsychiatry*, 66(3), 390–400

Rotheram-Borus, M. J., Parra, M., Cantwell, C., Gwadz, M., & Murphy, D. A. (1996). Runaway and homeless youth. In R. J. Diclemente, W. B. Hansen & L. E. Ponton (Eds.), *Handbook of adolescent health risk behavior*. New York, NY: Plenum Press

Slesnick, N., & Meade, M. (2001). System youth: A subgroup of substance-abusing homeless adolescents. *Journal of Substance Abuse*, 13, 367–384

Slonim-Nevo, V., Ozawa, M., & Auslander, W. (1991). Knowledge, attitudes and behaviors related to AIDS among youth in residential centers: results from an exploratory study. *Journal of Adolescence*, 14, 17–33

U.S. Department of Health and Human Services, C. s. B. (1997). *National study of protective, preventive and reunification services delivered to children and their families*. Washington, DC: U.S. Government Printing Office

US General Accounting Office (1995) Health, Education, and Human Services Division. In *Foster care overview: Complex needs strain capacity to provide services* (No. GAO/HEHS-95-208). Washington, DC: US General Accounting Office, Health, Education, and Human Services Division

US General Accounting Office (2002) Health, Education, and Human Services Division. *Foster Care: Recent legislation helps states focus on finding permanent homes for children but long-standing barriers remain* (No. GAO-02-585). Washington, DC: US General Accounting Office

Whittaker, J. K. (2000). The future of residential group care. *Child Welfare*, 79(1), 59–74