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## POPULATIONS AT RISK

### Utilization of Services by Abused, Low-income African-American Women

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**BACKGROUND:** Little is known about health care and service utilization patterns among low-income African-American women, particularly those who report intimate partner violence (IPV).

**OBJECTIVES:** (1) Identify utilization patterns among low-income African-American women. (2) Demonstrate utilization differences by IPV status.

**PARTICIPANTS:** One hundred and fifty-three African-American women from medical care clinics at a large inner-city public hospital.

**DESIGN:** Case-control study. Predictor variable IPV assessed by the Index of Spouse Abuse. Outcome variables, health care, and service utilization, determined using the Adult Service Utilization Form.

**RESULTS:** Of the 153 participants, 68 reported high IPV levels. The mean age was 32 years, majority were poor and unemployed, and 15.7% were homeless. The overall utilization rates were low. When controlled for homelessness and relationship status, high IPV levels were associated with greater psychiatric outpatient utilization. We found differences in the use of other medical or community services by IPV group.

**CONCLUSIONS:** Women reporting high IPV levels are more likely to receive mental health services than women reporting low IPV levels, but may not have access to other needed services. Primary care providers should assess the mental health, legal, and social service needs of abused women, which will facilitate receipt of services.

**KEY WORDS:** intimate partner violence; vulnerable populations; health-care utilization.

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Intimate partner violence (IPV), a common problem in women seeking medical care,<sup>1,2</sup> is associated with health problems, poor health status, and greater health care utilization.<sup>3-5</sup> Patients from ethnic minority groups still experience barriers to health care and community services, despite strides made in understanding health care access in the United States.<sup>6</sup> Research reveals that being a poor, uninsured woman is a triple threat to receiving adequate health care.<sup>7</sup> Currently, little is known about health care and community service utilization rates among low-income African-American women, including those who are abused. Available health care utilization studies have either no or small proportions of low-income African-American women; health care utilization rates in these studies range from 36% to 46%, with 95% of abused women reporting >5 visits/year.<sup>5,8</sup> Studies on the utilization of directed IPV

services that include African-American women focus primarily on access to shelters or the criminal justice system and suggest that barriers such as lack of insurance, finances or transportation, distrust in the system can limit access to health care and community services.<sup>9-12</sup>

To our knowledge, no study has investigated health care and service utilization in low-income, African-American women or has compared health care and service utilization between abused and nonabused, low-income African-American women. This paper reports the results of a small study examining overall health care and service utilization rates and differences in these rates between low-income African-American women with and without reported high IPV levels. We hypothesized that overall utilization rates by these women would be low, and utilization rates would be higher in those reporting higher IPV levels.

## METHODS

### Participants

The study sample consists of 153 African-American women, ages 18-65, recruited for the project Supporting African-American Families, Empowering Their Youth (SAFETY) from 2 emergency care centers and 2 urgent care clinics of a large, inner-city, public hospital. Eligibility criteria were: (1) being a caregiver for at least one, 8-12-year-old child, and (2) reporting either no lifetime IPV or IPV in the past year, as determined by the Universal Violence Prevention Screening Protocol.<sup>13</sup> Exclusion criteria included: (1) medical instability; (2) cognitive impairment; or (3) psychotic symptoms.

### Measurements

Trained interviewers collected the data in a single in-person structured interview, and documented responses on the study questionnaire. All participants provided written informed consent; they received \$50 plus transportation costs upon completing the interview. The protocol was approved by the Institutional Review Board. Demographic items included in this analysis were age; relationship status; length of relationship; history of homelessness and unemployment; and household income. Intimate partner violence was measured using the Index of Spouse Abuse (ISA), a 30-item valid and reliable instrument that assesses the presence and severity of physical, sexual, and emotional IPV that has 2 valid subscales:

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ISA-Physical (ISA-P) and ISA-Nonphysical (ISA-NP).<sup>14,15</sup> A score of > 10 on the ISA-P and >25 on the ISA-NP is highly correlated with IPV.<sup>14,15</sup> Participants scoring above either of the 2 cutpoints were classified as “High IPV,” and participants scoring below both cutpoints were classified as “Low IPV”. Health care and service utilization were measured using the 19-items Adult Service Utilization Form (ASUF) developed for this study and *piloted before use*. Participants report on the frequency of utilization of the following services in the 3 months preceding the interview: medical and psychiatric emergency services; medical and psychiatric hospitalization; psychiatric day treatment, counseling, or therapy; medical clinic; women’s or homeless shelters; and other community support services (Alcoholics Anonymous, crisis hotlines) and legal services. Each item has 4 response options—never, once, twice, and 3 or more times. For the purposes of analysis, these 19 items were grouped into 7 service categories (Appendix A); due to low overall utilization rates, we categorized utilization into “Never use” and “Ever use,” except for medical emergency services, where we classified “Ever use” as 2 or more times, to account for recruitment site.

### Statistical Analyses

After calculating means (SD) for participant age, a *t*-test was used to examine differences in age by IPV status. The  $\chi^2$  test, respectively, was used for univariate and bivariate analyses (by IPV group) for the rest of the demographic variables. Frequencies were calculated for each utilization category, and utilization rates by IPV group were compared with the  $\chi^2$  test. To assess the independent effect of IPV on utilization, individual multivariate logistic regression models were constructed for each utilization category, controlling for any significant differences between IPV groups. Odds ratios (ORs) were calculated

with 95% confidence interval (CI), and a *P* value of .05 was used for all tests of significance.

## RESULTS

The mean participant age was 32.4 years (SD 6.8 years). The majority lived with a partner, had been with their partner for > 1 year, and were unemployed; 16% reported being homeless. No differences in demographic variables between women who did and did not report high IPV levels in the past year, except for homelessness and relationship status, which were added to all multivariate regression models (Table 1).

### Overall Health Care and Service Utilization Rates

Overall rates of health care and service utilization were low, compared with national averages.<sup>16</sup> Participants utilized non-emergency psychiatry and medical care more often than all other services, with one-third of the women reporting receiving both nonemergency psychiatry and medical care. Of note, only 4.4% of the participants reported shelter use, 10.3% reported using a support group, and 8.1% reported seeking legal assistance in the past 3 months (Table 2).

### Health Care and Service Utilization by IPV Group

When homelessness and relationship status were controlled for in the regression analysis, significant differences by IPV group were found in only 1 of the 7 utilization categories. Women reporting higher levels of IPV were 3 times more likely to also report using nonemergency psychiatry services (OR 3.16, 95% CI 1.49 to 6.7). There were no differences by IPV status in the use of emergency psychiatry or medical care,

Table 1. Sociodemographic Characteristics of the 153 Study Participants

	High IPV (N=68)	Low IPV (N=85)	N=153	P Value
Mean age in (SD)	32.3 (6.5)	32.2 (7)	32.3 (6.8)	.93
Relationship status, n (%)				.03
Single, unmarried	25 (37.3)	19 (22.6)	44 (29.1)	
Partner	6 (9)	22 (26.2)	28 (18.5)	
Live-in partner	9 (13.4)	16 (19)	25 (16.6)	
Married	11 (16.4)	17 (20.2)	28 (18.5)	
Separated	7 (10.4)	4 (4.8)	11 (7.3)	
Divorced	7 (10.4)	5 (5.9)	12 (7.9)	
Widowed	0 (0)	1 (1.2)	1 (0.7)	
Other	2 (3)	0 (0)	2 (1.3)	
Length of current relationship, n (%)				.24
Less than 1 wk	0	1	0 (0)	
1 wk to 1 mo	0	0	0 (0)	
1-6 mo	5	2	5 (5.1)	
6 mo- 1 y	1	6	7 (7.2)	
1-6 y	21	29	43 (44.3)	
6-10 y	11	20	28 (28.9)	
More than 10 y	3	13	14 (14.4)	
Is homeless, n (%)	15 (22.1)	6 (7.2)	21 (15.7)	.008
Is employed, n (%)	20 (29.8)	32 (38.5)	46 (34.6)	.26
Monthly household income, n (%)				.13
\$0-249	10 (15.1)	10 (11.9)	15 (11.4)	
\$250-499	14 (21.2)	12 (14.3)	23 (17.6)	
\$500-999	18 (30.5)	17 (20.2)	34 (25.9)	
\$1000-1999	13 (19.7)	22 (26.2)	32 (24.4)	
Greater than \$2000	7 (10.6)	22 (26.2)	26 (19.8)	

IPV, intimate partner violence.

Table 2. Effect of IPV on Health Care and Service Utilization

Service Utilized	High IPV (N=68), n(%)	Low IPV (N=85), n(%)	Crude Odds of Utilization (95% CI)	Adjusted Odds of Utilization (95% CI) <sup>†</sup>
Emergency psychiatry care	5 (7.35)	5 (5.9)	1.25 (0.35 to 4.32)	1.04 (0.25 to 4.27)
Nonemergency psychiatric care	31 (45.6)	18 (21.4)	3.07 (1.51 to 6.22)*	3.16 (1.49 to 6.7)*
Emergency medical care	6 (8.8)	5 (5.9)	1.54 (0.45 to 5.31)	1.51 (0.42 to 5.46)
Nonemergency medical care	24 (32.9)	27 (32.9)	1.11 (0.56 to 2.18)	1.18 (0.58 to 2.43)
Shelter use	1 (1.49)	5 (6.02)	0.24 (0.03 to 2.07)	0.21 (0.02 to 2.06)
Support group use	8 (11.9)	7 (8.33)	1.49 (0.51 to 4.35)	1.13 (0.36 to 3.5)
Legal assistance	9 (13.43)	2 (2.38)	6.36 (1.32 to 30.53)*	4.78 (0.95 to 24.02)

\*P value < .01.

<sup>†</sup>Model adjusted for homelessness and relationship status.  
IPV, intimate partner violence.

emergency medical services, nonemergency medical care, shelter, and support group use by IPV. While use of legal services differed by IPV group in bivariate analyses, IPV did not independently predict use of legal services (Table 2).

## DISCUSSION

In this small study, the overall rates of health care and service utilization are disturbingly low in economically disadvantaged African-American women, even among those who report higher levels of IPV. While those women reporting higher levels of IPV also utilize outpatient mental health services more often, no other differences emerged in health care or service utilization rates by IPV status.

Research on health care and service utilization to date has not focused specifically on utilization by abused low-income African-American women. That these women use mental health services more often than women who have no or low IPV is consistent with prior research.<sup>5,17</sup> Unlike data found in the literature on health care utilization by abused women, no other utilization differences emerged in our sample.<sup>5</sup> The disparity between the existing literature and the current study may be because of similar levels of co-morbidity. The findings may also be explained by access barriers, including financial, transportation, and distrust in system, which may have prevented appropriate utilization.<sup>9</sup>

The results also indicate that abused low-income African-American women neither seek nor seem to receive community services that they need. Community services for IPV measured included shelter use, support group use, and legal assistance. Overall rates of use were very low (range 1% to 9%); these rates are consistent with data from prior studies in this field.<sup>18,19</sup> The findings regarding use of legal services are not consistent with prior research. Low legal utilization rates (compared with national survey data)<sup>20</sup> and access barriers such as financial and transportation constraints, lack of public education, negative attitudes toward abused women, distrust of child welfare system, and lack of efficacy of protective orders may explain the results obtained.<sup>9,11</sup>

This study has a number of limitations. First, the ASUF was developed for this study, as there were no valid and reliable measures suitable for this population. Measuring utilization by self-report may have resulted in recall bias. Second, survivor perceptions of service need may have affected utilization rates. Third, this study is specific to low-income African-American women, who are caregivers for children and have access to a hospital, and cannot be generalized to African-

American women from higher socioeconomic strata, or other low-income groups. Neither can we draw conclusions regarding mechanisms that link IPV to utilization. Other limitations include the modest sample size, and potential for underreporting IPV as data were collected by in-person interviews. Finally, our comparison group may have had sufficient women reporting low-level IPV to influence utilization rates.

Our study highlights that low-income African-American women, including those in abusive relationships, have very low rates of health care and service utilization. More work is needed to understand the factors that deter appropriate utilization in this population, which will provide the groundwork for a future targeted intervention to improve health care and service access in an at-risk population. Meanwhile, generalists providing care for low-income African-American women should continue to advocate on behalf of their patients to improve access to the services they need and reduce another source of health care disparities.

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### Supplementary Material

The following supplementary material is available for this article online:

#### Appendix A. Adult Service Utilization Form.