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PATTERNS OF SERVICE UTILIZATION AMONG PREGNANT AND PARENTING AFRICAN AMERICAN ADOLESCENTS

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This study explored factors associated with differential patterns of social and health service use among pregnant and parenting African American adolescents. One hundred seventy-seven young women between the ages of 14 and 22 took part in the study. Cluster analysis suggested three groups of users: frequent users, moderate users, and inconsistent users. These groups were distinct in terms of their frequency of service usage, perceptions of barriers to usage, and psychological and social functioning. Moderate users appeared to be healthier than either the frequent or inconsistent users, as indicated by their relatively higher levels of psychological functioning. In contrast, inconsistent users were distinguished by their high rates of sexual victimization, their low use of medical services, and their perceptions of many programmatic and personal barriers to usage. Suggestions for research and interventions that encompass the diverse needs of young African American women are made.

Adolescent childbearing is associated with a host of social and public health problems. Pregnant and parenting adolescents are at heightened risk for dropping out of school, welfare dependency, and repeated early

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pregnancies (Hayes, 1987). Moreover, babies born to adolescents are more likely than other babies to be premature and to have low birth weights, heightening their risk for mortality, neurological problems, and intellectual handicaps (Coll, 1990; Meisels & Plunkett, 1988). These negative outcomes are even more likely to occur among African American adolescents and their offspring, who often face additional adversities resulting from economic hardship and discrimination (Binsacca, Ellis, Martin, & Petitti, 1987; McLoyd, 1990; Moore & Burt, 1982). For example, the mortality rate of African American infants is almost twice that of White infants (19.6% vs 10.1%) (U.S. Department of Health and Human Services, 1986).

Although social and health services cannot entirely redress these difficult circumstances, they are an essential component of any strategy designed to disrupt this pattern of negative outcomes. Early and regular prenatal and postnatal healthcare can significantly reduce the incidence of infant mortality and improve high-risk infants' chances for healthy development (Gortmaker, 1979). In addition, social services, such as family planning, psychological counseling, supplementary education, and vocational training, can enhance the well-being of adolescent mothers (Hardy & Zabin, 1991; Schorr, 1988).

Despite efforts to increase access to such services, utilization of available services by low-income, pregnant, and parenting women continues to be distressingly low (Haas, Udvarheli, Morris, & Epstein, 1993; McGee, 1984; Piper, Ray, & Griffin, 1990). For example, only about half of all adolescent mothers begin prenatal care in the first 3 months of pregnancy, and a growing proportion do not receive any prenatal care (Edelman, 1987; Singh, Forrest, & Torres, 1989). Obstacles stemming from features of the services and from the young women's life circumstances often impede consistent utilization. However, not all young women are equally affected by these obstacles. There are differential patterns of service utilization among pregnant and parenting adolescents, and these patterns may be related to both personal and contextual variables.

Differential Patterns of Service Utilization

Researchers have identified several factors that may underlie the relatively low utilization of services by pregnant and parenting women. Financial barriers resulting from reductions in healthcare subsidies, high unemployment, and inflation have limited the use of services by many low-income, minority mothers (Binsacca et al., 1987; Farber & Harvey, 1993). Other young women face difficulties obtaining care for their preschool children or securing transportation to and from the services (Curry, 1989; Fennelly, 1990; Lia-Hoagberg et al., 1990). Many young mothers are frustrated

by programmatic barriers, such as confusing eligibility and application procedures, long lines, and inefficiencies in the system. Still others speak of unapproachable, judgmental, or intrusive professional staff (Boone, 1985; Crockenberg, 1986; McGee, 1984). Young African American women may feel particularly alienated by a lack of minority professionals and biased assessment and treatment strategies (Bui & Takeuchi, 1992; Cross, Bazron, Dennis, & Isaacs, 1989; Gibbs & Huang, 1989; Neighbors, 1985).

There is also evidence that features of adolescents' social support systems may affect service utilization (Freidson, 1961; Gourash, 1978). Assistance from one's social network is often preferable to obtaining professional services and may directly compete with formal help-seeking (Cowen, 1982; Croog, Lipson, & Levine, 1972). Birkel and Reppucci (1983) suggested that social relationships mediate utilization by providing alternative services, making referrals, facilitating access, and conveying attitudes regarding help-seeking or the magnitude of the programmatic barriers. It is unclear, however, how specific support functions (i.e., emotional support, childcare assistance, tangible assistance) influence service utilization patterns.

Young women's psychological functioning may also influence their patterns of service use. Women who suffer from psychological distress, low self-esteem, and feelings of powerlessness may be unwilling or unable to initiate or sustain the use of services. Lia-Hoagberg et al. (1990) found that over 25% of the low-income women in their study indicated that feelings of depression impeded their use of prenatal services. Similarly, those participants who were least consistent in their use of services were most likely to feel unhappy with their lives and motivated only by external factors to seek care. Others have also cited distress, low self-esteem, and an external locus of control as barriers to consistent service use (Boone, 1985; Joyce, Diffenbacher, Green, & Sorokin, 1983; Kinsman & Slap, 1992). Still, the ways in which psychological functioning may interact with other variables to differentiate patterns of service use has yet to be determined.

Another factor that has not been addressed in previous research, but that may affect young African American mothers' decisions to use services, is the experience of sexual victimization. A sizable proportion of pregnant and parenting adolescents have been sexually assaulted or abused (Boyer & Fine, 1992; Butler & Burton, 1990; Gershenson et al., 1989). Such women may be more inclined to avoid prenatal medical care because the idea of frequent gynecological checkups is too frightening (Courtois, 1988). Moreover, because sexually victimized women are at heightened risk for psychological distress (Koss & Harvey, 1991), they may have increased sensitivity to (and decreased tolerance for) the barriers and hassles associated with obtaining services. Despite its potential influence, few studies have explicitly addressed sexual victimization among African

American women (notable exceptions are Russell, Schurman, & Trocki, 1988; Wyatt, 1985, 1992) or how it may affect utilization.

Present Study

This study was designed to examine differential patterns of social and health service use among pregnant and parenting African American adolescents. We sought to understand how usage patterns were related to the young women's psychological functioning and experiences of sexual victimization. We also examined the role of social support, including the participants' use of and satisfaction with specific types of assistance. Identifying patterns of usage and the personal and contextual variables associated with these patterns may enable us to better target health and social services and increase the likelihood that high-risk women will access available services.

METHOD

Procedure

A female African American research associate recruited participants in two urban service agencies and conducted the assessments. Both agencies offer parenting and prenatal and postnatal health information; one of the agencies also provides nutritional services. Most of the services that were examined in this study (e.g., child medical care, personal and prenatal medical care, job training, counseling) were not provided at these agencies. Because availability of affordable services is a central factor in determining usage, we first ascertained that all of the services under investigation could be accessed at little or no cost in the community.[1] We could then assume that all of the services were equally available to the participants, because all lived in the same community.

Women who fit the criteria for selection into the study were contacted by agency staff. They were informed that participation in the study was voluntary and confidential and that they would receive $20 for their involvement. All of the women who were contacted agreed to participate. The initial interviews (the basis for the data reported here) lasted approximately 2 hours and were conducted at the service centers.

Participants

One hundred seventy-seven pregnant and parenting African American adolescent women between the ages of 14 and 22 (M = 18.34 years, SD = 1.79) took part in the study. Of the pregnant participants (n = 48),

52.1% were pregnant with their first child, 29.2% with their second, 16.1% with their third, and one participant was pregnant with her fourth child. Of the nonpregnant participants (n = 129), 63.6% had one child, 25.6% had two, and 10.9% had three or more children. The majority of the participants were receiving welfare benefits (90.8%) and had never been married (96%).

INSTRUMENTS

Instruments for this study assessed four general domains: (a) social support, (b) psychological functioning, (c) sexual victimization, and (d) knowledge of and obstacles to service utilization. Background demographic information was also obtained.

Social Support

The Social Support Network Questionnaire (SSNQ) is a modification and extension of the Arizona Social Support Interview Schedule (ASSIS) (Barrera, 1981). Seven social support functions are included on the SSNQ: emotional support, tangible assistance, cognitive guidance, positive feedback/social reinforcement, social participation, pregnancy-related assistance, and childcare assistance. A set of three questions was asked regarding each support function. Participants were asked to nominate individuals from whom the support was available, to estimate their need for additional support, and to rate their satisfaction with the quality of the support.

We focused on the three support functions that are theoretically related to service utilization: emotional support, childcare/pregnancy assistance, and tangible assistance. For the pregnant group, the childcare/pregnancy support variables reflect the support they received related to their pregnancy; for the parenting group it reflects the support they received for childcare assistance. Three support variables were examined: (a) amount of support (number of persons available to provide the various types of support); (b) satisfaction with this support; and (c) perception of need for more support.

Psychological Functioning

The Symptom Checklist-90-R (SCL-90-R) (Derogatis, 1983). The SCL-90-R is a self-report symptom inventory consisting of 90 items. Good levels of reliability have been found for this measure, with alpha coefficients ranging from .77 to .90 and test–retest reliabilities for the scales ranging from .78 to .90 (Derogatis, 1983). The Global Severity Index (GSI) was calculated from the total scale, as were several related sub-

scales. The GSI combines information on numbers of symptoms and intensity of perceived distress and is considered the scale's best single indicator of the current level or depth of disorder. In addition to the GSI, the Anxiety, Depression, and Somatization subscales were calculated. The Depression subscale consists of 13 items (alpha = .90) and has a test–retest coefficient of .82. The Anxiety subscale consists of 10 items (alpha = .85) and has a test–retest coefficient of .80. The Somatization subscale consists of 12 items (alpha = .86) and has a test–retest coefficient of .86 (Derogatis, 1983).

Self-esteem (Rosenberg, 1979). The Rosenberg Self-Esteem Scale consists of 10 items, each rated on a 4-point Likert-type scale ranging from strongly disagree to strongly agree. Past studies indicate an alpha coefficient of .87 and test–retest reliability of .85 (Rosenberg, 1979).

Locus of control (Nowicki & Strickland, 1973). The Nowicki–Strickland Locus of Control Scale was used to measure the extent to which participants make external versus internal attributions. High scores indicate externality. High reliability and validity levels of this measure have been reported in several studies (Nowicki & Strickland, 1973).

Sexual Victimization

Sexual Experiences Survey (Koss & Oros, 1982). A shortened version of the Sexual Experiences Survey was utilized in this study. Participants were asked about (a) unwanted kissing or fondling since age 14 (recent sexual abuse) and (b) unwanted sexual intercourse since age 14 (recent sexual assault). If the respondent answered yes to either question, they were asked a series of four follow-up questions concerning the level of sexual aggression used against them (ranging from verbal coercion to use of physical force).

Stress

Life stress (Sarason, Johnson, & Siegel, 1979). The Life Events Survey (LES) is a 57-item self-report checklist adapted from the Schedule of Recent Life Events (Holmes & Rahe, 1967). It assesses the occurrence, impact, and valence of major stressors/life events occurring in the past year (e.g., moving, divorce, death of parent). Events are rated on a 5-point scale, ranging from extremely negative (−2) to extremely positive (+2). Life stress consisted of the number of all negatively rated life events.

Parenting stress (Abidin, 1983). A shortened version of the Parental Stress Inventory (PSI) assesses stressors commonly associated with dysfunctional parenting. Participants responded to a series of five statements (e.g., my child gets upset easily over the smallest things), indicating their degree

of agreement with each of the items on a 5-point scale. High scores on this scale indicate a mother–child system that is under stress and at risk for the development of dysfunctional parenting behaviors (e.g., misinterpreting child cues or feeling inadequate, depressed, or withdrawn as parent) or behavior problems in the child involved. Studies of the test–retest reliability of the PSI have shown coefficients ranging from .65 to .96 (Abidin, 1983). Internal consistency in our sample was adequate (alpha = .65).

Service Utilization

A series of informal interviews were conducted with adolescents and staff at a service setting that was similar to those from which study participants were recruited. Initial analyses indicated no differences between these adolescents and the study participants on background variables (i.e., age, number of children, living arrangements, educational attainment, and employment). The respondents were asked to list common obstacles that they faced in their utilization of each of the following services: family planning, child medical care, personal and prenatal medical care, job training, counseling, and educational programs.

Based on this information and previous research in this area, a questionnaire was developed that contained a list of the most commonly cited personal and programmatic obstacles to use of services. Personal barriers included (a) difficulties obtaining transportation, (b) difficulties obtaining childcare, (c) financial constraints, and (d) illness. Program barriers included (a) long lines and/or too much waiting, (b) intrusive or rude staff, (c) confusing guidelines, and (d) uncertainty about helpfulness of the service. The categories *don't need it* and *other* were also included. Participants were first asked if they knew about each service. If the participant knew about or used a service, they were then asked to indicate how often they used it and which (if any) of the obstacles interfered with their use of the service.

Background Demographic Information

A set of fixed-format questions was used to obtain information on participants' age, race, living arrangements, family of origin structure, educational attainment, and employment.

Economic Strain (Pearlin, Menaghan, Lieberman, & Mullan, 1981) The Economic Strain Scale consists of nine items designed to assess chronic economic problems, such as difficulty paying bills, worrying about money, and not having enough money for essentials. Participants rated the frequency with which they experience various types of economic strain. Responses were rated on a 4-point scale, ranging from never to always.

Table 1

Mean number of services as utilized by three clusters of adolescent African American mothers

Variable	Cluster		
	Frequent Users	*Inconsistent Users*	*Moderate Users*
Infrequent medical services	0.13	1.18	0.54
Infrequent social services	0.57	0.57	0.67
Frequent medical services	2.57	1.11	1.86
Frequent social services	1.02	0.55	0.58
Program barriers to service	0.45	1.82	0.40
Personal barriers to service	1.18	1.52	1.44
Lack of need for services	2.18	2.53	4.96

Pearlin et al. (1981) reported stable test–retest reliability (mean coefficient $r = .79$), and in our sample, internal consistency was adequate (alpha $= .66$).

RESULTS

Differences in Service Utilization Patterns

Three quarters of the participants (76%) reported that they did not use at least one service because of personal reasons, and half of the sample (50%) indicated that they did not use at least one service because of program-related reasons.

To examine specific service utilization profiles, we clustered participants using a standard hierarchical clustering procedure (Ward's method) (Rapkin & Luke, in press). We selected a three-cluster solution based on two empirical criteria. First, the one-way analysis of variance (ANOVA) on each profile demonstrated significant between-cluster differences for all but two of the service utilization variables, unlike the four-, five-, or six-cluster solutions. Second, the number of participants in each cluster was large enough to allow subsequent multivariate analyses (MANOVA). The other cluster solutions resulted in groups of fewer than 15 participants, which we deemed unacceptable for further analyses. The mean scores of each cluster for the service use variables are presented in Table 1.

The three profile patterns reveal distinct patterns of service utilization among the cluster groups. The first cluster, frequent users ($n = 60$), were frequent users of both medical and social services. This group reported few barriers (either programmatic or personal) to service utilization and was characterized by a high perceived need for services. The second cluster ($n = 60$) is distinct both for participants citing many barriers to using services (both programmatic and personal) and for their low use of all services. This cluster was labeled inconsistent users because, although they cited a relatively high need for services, they exhibit an extremely inconsistent pattern of service use, particularly use of medical services (i.e., high likelihood of citing infrequent use of medical services). Moderate users, the third cluster ($n = 57$), consisted of individuals who used all services moderately, reported few barriers, and cited a relatively low need for services. There were no significant differences among cluster groups on their knowledge of medical or social services.

Demographic Differences Among Cluster Groups

To explore whether the cluster groups differed in ways other than their service utilization profiles, we completed a series of one-way ANOVAs using age, number of children, and the background demographic characteristics as dependent variables. Although the groups did not differ in relevant demographic characteristics, the moderate users perceived less economic strain than did members of the other two groups. The clusters also differed in number of children ($F[2, 176] = 2.90$, $p < .05$). Newman-Keuls multiple range tests further revealed that the inconsistent users had fewer children than did members of either of the other two cluster groups. The service utilization clusters did not differ in their parenting or pregnancy status ($\chi^2[2] = 2.6$, $p > .25$). Of the 129 parenting participants, 32% were in the high user cluster, 48% were in the inconsistent user cluster, and 20% were in the moderate user cluster. Of the 48 pregnant participants, 37% were in the high user cluster, 39% were in the inconsistent user cluster, and 24% were in the moderate user cluster.

Sexual Victimization Differences Among Cluster Groups

We completed two chi-square analyses crossing the experiences of sexual victimization with the cluster groups. As expected, women who had been recently sexually victimized exhibited a distinct pattern of service use. They were much more likely to fall into the inconsistent user cluster. Specifically, the inconsistent users were much more likely to have been recently sexually abused (23%, as compared with 14% of the frequent users and 7% of the moderate users; $\chi^2[2] = 7.13$, $p < .05$) and sexually assaulted (20%, as compared with 8% of the frequent users and 5% of

Table 2

Psychological functioning of victimized versus nonvictimized women

	Victimized (n = 39)		*Nonvictimized (n = 138)*		
Measure	*M*	*SD*	*M*	*SD*	*t*
GSI	1.13	0.51	0.68	0.49	−5.02**
Somatization	0.96	0.69	0.56	0.49	−3.41*
Anxiety	0.88	0.51	0.45	0.50	−4.68**
Depression	1.28	0.67	0.79	0.65	−4.17**
Self-esteem	31.54	4.29	34.32	4.77	3.28*
Locus of control	20.23	3.52	21.82	3.61	2.45*

* $p < .05$. ** $p < .001$.

the moderate users; $\chi^2[2] = 6.28, p < .05$). As a follow-up to these analyses, we conducted several group-level analyses to explore overall effects of sexual victimization. Compared with nonvictims, women who had been sexually victimized had significantly poorer functioning on every psychological functioning variable (see Table 2). Although level of force was unrelated to service utilization profile ($\chi^2[2] = 1.2, p > .80$), one third of the victimized women had sustained a high level of force (physical force or threat of physical force).

Service Utilization Profiles and Psychological Functioning

We performed a one-way MANOVA, with the cluster groups as the independent variable, to simultaneously explore all indices of psychological functioning (self-esteem, locus of control, and symptomatology). This analysis revealed significant differences between the groups (Wilks lambda = .82, exact $F[14, 334] = 2.53, p < .001$). Subsequent one-way ANOVAs revealed that each of the psychological functioning variables were significantly different among the clusters (see Table 3).

In essence, the univariate analyses reveal that the moderate users were functioning better than either the high users or the inconsistent users. Newman-Keuls post hoc comparisons showed that the moderate users, in contrast to both of the other user types, scored significantly higher on internal locus of control and self-esteem measures. This group scored lower on the SCL-90-R GSI index and exhibited fewer symptoms of anxiety and somatization.

Table 3

Comparison of service utilization clusters on psychological functioning variables

	Frequent Users		*Inconsistent Users*		*Moderate Users*			
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*Contrasts*[a]
Self-esteem	33.13	5.44	32.57	4.20	35.49	4.15	6.5**	3 > 1, 2
Locus of control	20.65	3.41	20.95	3.79	22.80	3.39	6.3**	3 > 1, 2
SCL-90-R								
GSI	0.91	0.59	0.86	0.54	0.57	0.39	7.2**	3 < 1, 2
Anxiety	0.63	0.56	0.62	0.58	0.40	0.43	3.7*	3 < 1, 2
Depression	1.07	0.79	0.93	0.62	0.69	0.58	4.6**	3 < 1
Somatization	0.70	0.54	0.81	0.69	0.45	0.38	6.6**	3 < 1, 2
Stress								
Parental stress	12.33	5.14	9.42	6.07	11.19	4.34	4.7**	1 > 2
Negative life events	4.82	4.14	4.80	3.19	5.80	4.27	1.4	
Economic strain	2.38	0.99	2.18	1.07	1.77	0.85	6.1**	3 < 1, 2

[a] Newman-Keuls post hoc comparisons significant at .05 level.
* $p < .05$. ** $p < .01$.

A one-way MANOVA with the social support variables as the dependent variables was also significant (Wilks lambda = .83, Exact $F[14, 334] = 1.79$, $p < .05$). The subsequent one-way ANOVAs (Table 4) show significant group differences in emotional and tangible support. Post hoc analyses indicate that, in contrast to the high users, moderate users had a low need for tangible assistance. Similarly, the moderate users indicated greater satisfaction with the tangible assistance they received than did members of either of the other two groups.

DISCUSSION

All low-income pregnant and parenting African American adolescents are not alike, and the qualities that distinguish them appear to influence service utilization patterns. Our cluster analyses revealed groups of women who were distinct in terms of their service utilization patterns. Further investigations of these specific patterns yielded cluster-level distinctions.

Moderate users appeared to have the highest level of functioning. This group showed better psychological functioning, experienced the lowest levels of economic strain, and were less symptomatic than were the other two groups. In addition, the group manifested the highest levels of self-esteem and internal locus of control. The findings indicate a nonlinear relationship between functioning and utilization. Specifically, although the moderate users had the highest levels of psychological functioning, they were not the highest in terms of service utilization. In contrast to moderate users, high users had lower levels of self-esteem, locus of control, and psychological functioning and a greater need for and less satisfaction with tangible assistance. This finding suggests that, in some cases, high service utilization may be a response to inadequate social network resources and/or poorer psychological functioning.

Perhaps the most striking of the three groups was the inconsistent users. This group was distinguished, in part, by their tragically high rates of sexual victimization. Almost 25% of these women reported recent sexual abuse or assault; 2–4 times the rate in the other groups. Not surprisingly, women who had been sexually victimized reported the lowest levels of psychological functioning. As compared with moderate users, they perceived lower levels of emotional support and lower satisfaction with tangible assistance. This group also cited many programmatic and personal barriers to usage and was generally characterized by the lowest service utilization, especially medical services.

Taken together, the findings suggest that the relatively low levels of psychological functioning among the inconsistent users may be partially explained by the higher proportion of sexually victimized women in this

Table 4

Comparison of service utilization clusters on social support network variables

Variable	*Frequent Users*		*Inconsistent Users*		*Moderate Users*		*F*	*Contrasts*[a]
	M	*SD*	*M*	*SD*	*M*	*SD*		
Perceived								
Emotional	3.67	2.19	3.52	1.66	4.47	2.72	3.10*	
Child/pregnancy	4.23	2.17	6.08	2.44	4.72	2.23	0.99	
Tangible	5.12	2.30	5.05	3.07	5.46	2.52	0.39	
Need								
Emotional	1.53	0.77	1.70	0.89	1.54	0.80	0.77	
Child/pregnancy	1.92	1.57	2.17	2.03	1.88	1.86	0.44	
Tangible	1.68	0.87	1.52	0.79	1.26	0.61	4.41*	1 > 3
Satisfaction								
Emotional	3.27	1.65	3.12	1.66	3.42	1.45	0.54	
Child/pregnancy	4.60	1.04	4.62	1.40	4.72	1.26	0.16	
Tangible	4.20	1.01	4.22	0.92	4.61	0.62	4.22*	3 > 1, 2

[a] Newman-Keuls post hoc comparisons significant at .05 level.
* $p < .05$.

cluster. Sexual victimization might lead to depression and restricted coping responses. The lower psychological functioning may, in turn, negatively effect social relationships and lead to perception of a less supportive network. In addition, sexual abuse and assault is frequently perpetuated by men with whom the victims have preexisting relationships (Courtois, 1988; Fromouth, 1986; Koss, 1990). Thus, the negative perceptions of social networks in this group may also be accounted for by the fact that some of their potential supporters may be their abusers.

The low service use pattern might also be partially accounted for by the concentration of victimized women in this group. The experience of being sexually victimized often interferes with survivors' ability to trust (Courtois, 1988; Finkelhor & Brown, 1985; Jehu & Gazan, 1983) and may disrupt a woman's ability to accept that others will help her in good faith, rather than as a means to legitimize their exploitation of her. Recently victimized women might also feel powerless or may feel that the services they could obtain are not relevant to their needs. In any case, it is distressing that the group of individuals who are perhaps most in need of services are not obtaining them. This pattern of low service use has implications not only for the welfare of the survivor but for that of her offspring.

The results of this study must be viewed in the context of the use of a relatively small sample and possible limitations associated with the recruitment of a group of women who were already involved with a human service organization. The study was also limited by its reliance on a cross-sectional design. Longitudinal studies would allow for more definitive causal conclusions regarding the role of moderator variables on service utilization. Some response biases may have also resulted from the reliance on self-report data collected by a single interviewer. Future research in this area might be strengthened through the use of several assessment techniques and multiple interviewers. An assessment approach that obtained additional indicators of the focal variables (e.g., agency records of actual service use) as well as the convergence of measures of associated functioning might be useful in this regard. Given the centrality of victimization, future studies might also incorporate a more extensive measure of sexual assault as well as a survey of nonsexual crimes such as actual and attempted assault and robbery. The patterns that were uncovered in this study are likely to have been strongly influenced by the fact that most of the participants were welfare dependent. Further research should determine whether the results generalize to women who differ from those studied, such as women with greater access to quality healthcare (cf. Koss, Woodruff, & Koss, 1990).

In addition to serving as an impetus for future research, these findings have implications for refining services for young African American women. It appears that both the actual barriers and young women's responses to such barriers affect usage patterns. A full 50% of the sample cited programmatic barriers (e.g., lines, staff, guidelines) as accounting

for their nonuse of at least one medical or social service. Although some problems may be endemic to poorly funded, overburdened services, some steps to reduce these barriers could be possible. Trainings that examined the risks and needs of low-income African American adolescent mothers might increase the sensitivity of professionals. In the course of such trainings, it would also be important to discuss the dynamics of sexual victimization and to develop strategies for better meeting the needs of survivors. Given the apparent influence of victimization on utilization, it is likely that increased sensitivity would improve usage among these young women. With such refinements, service systems might serve an important function in identifying, referring, and addressing the treatment needs of survivors (Koss et al., 1990).

A full 75% of the sample also cited personal barriers (e.g., cost, transportation, childcare) as accounting for their nonuse of at least one medical or social service. Although these barriers could be at least partially addressed through outside intervention (i.e., the provision of supplementary transportation or childcare services), it is also likely that extended family members could be involved in providing assistance and encouraging consistent utilization. Programs that incorporate members of the young women's family network in service delivery may reduce the personal barriers to usage (Crockenberg, 1986; Ooms, 1984).

These data serve as an important reminder of the variation that exists within particular groups of women and the need for diversified approaches to service delivery. Factors such as sexual victimization, psychological adjustment, and social support differ among women and are related to patterns of service utilization. Although efforts to increase overall availability and access are most salient to improving utilization rates, existing services might be better used if they were tailored to the needs of specific groups of adolescents. As we increase our sensitivity to the particular characteristics and concerns of young African American women, we can structure services in ways that are more responsive to their particular needs. This approach should improve utilization rates and, ultimately, the well-being of both adolescent mothers and their children.

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NOTE

1. In an effort to make affordable services more accessible to welfare-dependent women on Chicago's west side, we compiled and distributed a comprehensive service directory (Lennhoff, Rhodes, & Rawle, 1993). In addition to all of the services considered in this study, agencies providing services ranging from legal advocacy to daycare and housing assistance were investigated and included. Copies of this directory are available from the first author.

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