

Predictors of Engagement With Mental Health Services Among Mothers of Children at Risk of Maltreatment

Richard Thompson, Ph.D.
Jiyoung Kim Tabone, Ph.D.
Joan M. Cook, Ph.D.

Objective: The purpose of this research was to examine the factors associated with various levels of engagement with mental health services in a large sample of mothers at high risk of maltreating their children.

Methods: Data were collected by LONGSCAN (the Consortium for Longitudinal Studies of Child Abuse and Neglect) for 909 mothers of six-year-old children. These women reported on recent use of mental health services, with four levels of engagement: no use of services (76%), consideration of services (8%), use of and dissatisfaction with services (4%), and use of and satisfaction with services (11%). Logistic regression analyses were conducted to predict level of engagement in services. **Results:** Predictors of considering services included being formerly married, previous receipt of services, physical victimization, psychological intimate partner victimization, and depressive symptoms. Predictors of satisfaction with services were social support and lack of sexual victimization. **Conclusions:** It is important to take a broad approach to assessing mental health needs, including not only current functioning, but social networks, prior experiences with services, and trauma exposure. Further research is needed on the process of engagement in mental health services, including examination of the factors associated with satisfaction with these services. (*Psychiatric Services* 63: 913–919, 2012; doi: 10.1176/appi.ps.201100394)

A majority of individuals in the United States with significant mental health needs never receive mental health services (1). Such needs can cause unnecessary suffering, impairment, and economic loss for the individual as well as society (2). When those in need of mental health services are parents, these needs are likely to also affect their children and may lead to behavioral and school problems (3,4), family violence, and child maltreatment (5).

This study examined predictors of different levels of engagement in mental health services among mothers of children at elevated risk of, and oversampled for, child maltreatment. The overarching purpose of these analyses is to better understand the factors that predict successful and satisfactory engagement in mental health services among high-risk mothers. Such engagement has the potential to improve the functioning and well-being of mothers themselves (1,2), and re-

duce the likelihood of direct and indirect harms to their children by reducing the risk of maltreatment and family violence (5) and improving parental competence (3,4).

Engagement in mental health services can be understood as a multistep process, in which potential patients move through consideration of seeking services to receipt of them. Although engagement in services is a frequent topic of research, few studies look beyond receipt of services and examine whether services are perceived as satisfactory (6). Factors that predict engagement can operate at different levels of “distance” from the mental health encounter and the particular needs of the individual patient. At the most distal level are demographic factors, such as race-ethnicity and age, which are usually unrelated to mental health diagnoses but may influence utilization patterns. Another “prior factors” level to consider is the patient’s prior experiences with mental health services and with social systems more broadly; as with demographic characteristics, patients come in to treatment with these experiences, but patients can further reevaluate these experiences in the context of treatment. Experiences of trauma are likely to influence psychiatric symptoms directly and are more likely to be a focus of therapy. Finally, and perhaps most proximally to decisions about mental health service utilization, a patient’s overall functioning is often a key focus of treatment and may influence the course of engagement in services.

Dr. Thompson is affiliated with the Juvenile Protective Association, 1707 N. Halsted, Chicago, IL 60614 (e-mail: rthompson@juvenile.org). Dr. Tabone is with the School of Social Service Administration, University of Chicago. Dr. Cook is with the Department of Psychiatry, Yale School of Medicine, New Haven, Connecticut.

Several demographic factors have been examined as predictors of mental health services utilization. Typically, whites are more likely than members of racial-ethnic minorities to use mental health services (1,7); this disparity is also a factor among persons with an identified mental health need. There is mixed evidence that age is a factor in predicting service engagement (1,7). Higher family income is typically associated with use of services (1,8). Single adults typically have lower utilization rates (9), and persons who have been formerly married (that is, those who are divorced or widowed) have higher rates of service use (1).

Prior experiences with services may also be important. For example, a strong predictor of future mental health service use is past use (10). There is also a strong and bidirectional link between mothers' and children's use of mental health services (11). Whether this association simply indicates a marker of family attitudes toward these services or differences in access and knowledge about services remains unclear. As well, many families receive mental health services through public assistance for child welfare. Indeed, involvement in child welfare programs increases likelihood that parents will use services (12,13). Thus, although child maltreatment is a frequent negative outcome of parent mental illness, if this mental illness comes to the attention of child welfare, it can present an opportunity for intervention (13).

Trauma exposure, particularly history of victimization, is also likely to be a key predictor of service use. In general, victims of violence are more likely to receive mental health services than those without such a history (14), although there is some evidence that victims of child sexual abuse use services at a lower rate than would be expected (9). Some research indicates that intimate partner violence strongly predicts use of mental health services (10,15).

Finally, and not surprisingly, functioning and well-being predict use of mental health services. Poor mental health functioning is the strongest predictor of services, with the presence of diagnosable mental disorders dramatically increasing the likelihood

of mental health services (1,16). However, mental health services appear to be facilitated by better overall functioning. Good physical health (17) and strong social support networks (18) both increase the likelihood of receiving mental health services.

As noted earlier, most research examining mental health services as an outcome considers it a dichotomy; services were either received or not received. However, service engagement is likely a process that includes different phases of decision making (19). The act of considering whether to seek services increases the likelihood of later receiving them, even if this process is time consuming (20). Also, receiving services is distinctly different from engaging in services. In fact, most of the mental health services received do not meet standards of minimal adequacy (1) and early dropout is common (21,22). Satisfaction with services is likely to predict staying in treatment (21), as well as better clinical outcomes (23). Thus understanding both consideration of and satisfaction with services is important.

This investigation examined predictors of engagement in services in a large sample of mothers, who were enrolled with their children in a longitudinal study on child maltreatment. Four levels of engagement in services were available for analysis: no services or consideration of services, considering services but not yet receiving them, receiving services and being dissatisfied with them, and receiving services and being satisfied with them. The analyses examined factors distinguishing between three dichotomous pairings at different levels of engagement: those who considered services versus those who did not consider services, those who received services versus those who considered but did not receive services, and those who received services and were satisfied with them versus those who received services and were not satisfied with them.

Methods

Sample and design

Data used in these analyses were collected by the Consortium for Longitudinal Studies of Child Abuse and Neglect (LONGSCAN)

(24). LONGSCAN is a consortium of a coordinating center and five study sites, drawn from different geographical regions of the United States. Its mission is to investigate the antecedents and consequences of child maltreatment, and thus there was an oversampling for families reported as maltreating, with different sampling frames at each site. All sites collect data according to the commonly shared protocols at age-specific data collection points. One of the five sites, the Southwest site, selected only children who had been removed from the home and placed in foster care. The female caregivers in this region were primarily foster, rather than biological, parents (who were the caregivers of most children in the other sites). Therefore, the sample used for analysis included four sites and excluded the Southwest site. Each participating study site, as well as the coordinating center, obtained independent approval from their local institutional review board. Caregivers provided informed consent.

Data at each time point were collected from dyads of children and their mothers; data collection occurred when children were four and six years old, as well as at later ages, which are not included in the analyses reported here. Data used in these analyses were collected primarily when children were age six, although some variables were collected when children were age four. Data collection occurred from 1991 to 2001. The data used in these analyses relied in almost all cases on the mother's report, except where noted.

Measures

Participating mothers reported on mental health services they had received in the past year (25). The analyses here focused on the responses to three questions: "In the past year, did you consider seeking outside help for any emotional problem?" "In the past year, did you see someone for help with an emotional problem?" "How satisfied were you with the services you received from this person? Very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied." From these questions, four levels of services engagement

were constructed: no services or consideration of services (none), considering services but not yet receiving them (considered), receiving services and being dissatisfied with them (unsatisfied), and receiving services and being satisfied with them (satisfied).

Demographic information for the mothers included race, marital status, age, years of education, and family income. Assessment of previous systems involvement used data collected from two sources: administrative data and mother self-report when children were age four. To determine whether children had been reported to child protective services (CPS), LONGSCAN investigators at each site reviewed state and local CPS records for allegations of maltreatment of the participating children (26). Because services are frequently offered to families reported to CPS, regardless of whether specific allegations are founded (12), and because of biases in the process of substantiation of allegations (27,28), the analyses included all allegations of maltreatment that occurred before the self-report data collection.

Also, when children were age four, mothers had reported on whether they themselves had received mental health services and whether they had felt they needed such services. They also reported on whether their child received such services and whether they felt that their child needed such services.

Assessment of traumatic exposure relied on self-report by mothers. When children reached age four, mothers completed the Mothers' History of Loss and Harm Scale (Hunter WM, Everson MD, unpublished instrument, 1991) to assess the mother's history of physical and sexual victimization in childhood, adolescence, and adulthood. The questions addressed specific experiences that mothers might have had (for example, "Were you ever physically hurt by a parent or someone else: hit, slapped, beaten, shaken, burned, or anything like that?" "Has anyone ever sexually assaulted or raped you?"). Endorsement of any victimization item resulted in the person's classification as having been victimized.

In addition, mothers reported on recent intimate partner victimization,

using the Conflict Tactics Scale—Couple form (CTS) (29). The CTS measures the frequency of specific acts used by the mothers' romantic partners in response to conflict. Mothers were asked to report on incidents of physical and psychological aggression that had occurred in the prior three months. The CTS was administered only to mothers who reported having a current romantic partner; those without a romantic partner were assigned a level of zero in regard to recent physical and psychological intimate partner victimization.

Assessment of mothers' functioning included depressive symptoms, physical health, and social support. Mothers' depressive symptoms were assessed with the Center for Epidemiologic Studies Depression Scale (CES-D) (30). Mothers' physical health was assessed with a global question about current health status (rated as poor, fair, good, or excellent), which is one of the most reliable and widely used indicators of physical health functioning (31). For these analyses, mothers' health status was dichotomized into poor or fair versus good or excellent. Mothers' social support was assessed with a modified version of the Duke—University of North Carolina Functional Social Support Questionnaire (32).

Analyses

First, descriptive bivariate statistics tests (chi square analyses and analysis of variance) were conducted for the potential predictors across the four levels of service engagement. Next, three logistic regression analyses were conducted to examine predictors of mothers' level of service utilization, defined by four levels of engagement: considering versus not considering services, receiving versus considering but not receiving services, and receiving services and satisfied with them versus receiving services and not satisfied with them. In these logistic regression analyses, all predictors were entered simultaneously.

Results

Potential predictors across four levels of service engagement

Table 1 presents descriptive statistics for potential predictors across four

levels of engagement in mental health services. Demographic information, prior experiences with services, exposure to trauma, and functioning all showed significant bivariate differences across the four levels of service engagement. Of the demographic characteristics, race and marital status were strongly associated with level of service utilization. All of the variables examined in terms of prior system involvement (that is, child welfare involvement, prior mental health services for the mother, and prior mental health services for the child) predicted level of service engagement. In trauma exposure, all examined variables (physical and sexual victimization during childhood and adulthood and physical and psychological intimate partner victimization) were associated with engagement in services. Finally, all indicators of functioning examined (depressive symptoms, general health, and social support) were associated with level of engagement in services. For subsequent analyses (the logistic regression), the variables family income and years of education were not retained because they did not show any significant differences across group membership.

Prediction of mothers' engagement in services

The regression analyses are presented in Table 2. As indicated, significant unique predictors of considering mental health services included being formerly married (versus married), receiving services previously and being satisfied with them (versus not having received services), having experienced physical victimization as an adult, having experienced psychological victimization by an intimate partner, and higher levels of depressive symptoms.

In contrasting mothers who received services with those who considered but did not receive services, we found only one significant unique predictor: being formerly married (versus currently married). Finally, two factors uniquely distinguished between participants who received and were satisfied with services and those who received services and were not satisfied; mothers who had not ex-

Table 1

Sample characteristics and bivariate relationships between service use and potential predictors for 909 mothers of six-year-old children^a

Characteristic	No services (N=695)		Considered services, not received (N=75)		Received services			
	N	%	N	%	Not satisfied (N=38)		Satisfied (N=101)	
					N	%	N	%
Demographic								
Race								
White	152	22 [†]	25	33	17	45 [†]	33	33 [†]
African American	440	61 [†]	35	47	13	34 [†]	47	47 [†]
Other	103	15	15	20	8	21	21	21
Marital status								
Married	206	30 [†]	23	31	11	29 [†]	22	22 [†]
Formerly married	131	19 [†]	19	25	16	42 [†]	36	36 [†]
Single	354	51 [†]	33	44	11	29 [†]	43	43
Age (M±SD years)	32.55±9.93 [†]		33.19±8.37		34.03±8.92		34.75±7.41 [†]	
Education (M±SD years)	11.50±1.98		11.74±2.38		11.29±2.92		11.77±2.21	
Family income (\$, in thousands)	18.95±13.40		17.65±11.75		19.05±12.00		20.40±12.95	
Past involvement with services								
Child reported to child protective services	331	48 [†]	52	69 [†]	29	76 [†]	74	73 [†]
Mental health services for mother								
None	459	74 [†]	32	44	13	36 [†]	27	29 [†]
Considered	60	10	12	17	4	11	9	10
Received, not satisfied	37	6 [†]	6	8	5	14 [†]	14	15 [†]
Received, satisfied	62	10 [†]	22	31 [†]	14	39 [†]	42	46 [†]
Mental health services for child								
None	489	79 [†]	44	60 [†]	14	39 [†]	52	57
Considered	43	7 [†]	10	14	8	22 [†]	10	11
Received, not satisfied	31	5 [†]	12	16 [†]	5	14 [†]	9	10
Received, satisfied	55	9 [†]	7	10 [†]	9	25 [†]	20	22 [†]
Mother's exposure to trauma								
Childhood physical	179	29 [†]	33	47 [†]	25	70 [†]	49	53 [†]
Childhood sexual	186	30 [†]	41	58 [†]	24	67 [†]	53	58 [†]
Adult physical	256	42 [†]	48	68 [†]	29	81 [†]	68	74 [†]
Adult sexual	62	10 [†]	18	25 [†]	19	53 [§]	24	26 [†]
Intimate partner violence								
Psychological (M±SD score) ^b	1.96±4.02 [†]		3.90±5.78 [†]		3.21±5.03		2.94±5.34 [†]	
Physical (M±SD score) ^c	.31±.65 [†]		.70±2.92		1.47±5.47 [†]		.39±1.56 [†]	
Functioning								
Depression (M±SD score) ^d	11.43±9.80 [†]		17.21±12.99 [†]		20.00±12.55 [†]		15.83±12.11 [§]	
General health (fair, poor)	155	22 [†]	30	40 [†]	12	32	34	34 [†]
Social support (M±SD) ^e	39.37±9.07 [†]		34.53±9.56 [†]		33.13±8.84 [†]		36.89±8.68 [§]	

^a Values in the same row with different superscript symbols were significantly different ($p < .05$) in post hoc analyses.

^b Possible scores range from 0 to 6, with higher values indicating greater trauma.

^c Possible scores range from 0 to 9, with higher values indicating greater trauma.

^d As measured with the Center for Epidemiologic Studies Depression Scale. Possible scores range from 0 to 60, with higher values indicating more severe depression.

^e As measured with the Duke–University of North Carolina Functional Social Support Questionnaire. Possible scores range from 14 to 70, with higher values indicating better functioning.

perienced sexual victimization as adults were more likely to be satisfied with mental health services, as were participants who reported higher levels of social support.

Discussion

Predictors of mental health services were examined across four domains (demographic characteristics, prior experience with services, trauma ex-

posure, and current functioning) in a large sample of mothers of children at risk of maltreatment. Engagement with mental health services appeared to be determined by multiple factors, with unique contributions from each of the four domains examined, and to vary depending on the stage of engagement.

Several factors, from each of the four domains examined, distinguished

women who considered seeking mental health services from those who did not. Two forms of trauma (physical victimization as an adult and psychological intimate partner victimization) were associated with increased likelihood of considering services. Although treatment engagement with trauma survivors can be challenging (33), it appears that such survivors are, in fact, open to receiving service-

Table 2

Logistic regression analyses for predicting level of engagement in mental health services among 909 mothers of six-year-old children

Characteristic	Considered (N=214) versus not considered (N=695)			Received (N=139) versus considered (N=75)			Satisfied (N=101) versus not satisfied (N=38)		
	OR	95% CI	p	OR	95% CI	p	OR	95% CI	p
Demographic									
Race (reference: white)									
African American	.67	.40–1.11	.12	1.34	.52–3.48	.55	1.66	.43–6.38	.46
Other	.84	.47–1.49	.55	.82	.31–2.13	.68	.65	.17–2.51	.53
Marital status (reference: married)									
Formerly married	2.37*	1.33–4.22	<.01	2.93*	1.13–7.62	.02	1.36	.32–5.70	.68
Single	1.72	.98–3.05	.06	1.70	.62–4.62	.30	2.37	.46–12.16	.30
Age (years)	1.01	.98–1.03	.60	1.03	.99–1.08	.17	1.00	.93–1.07	.95
Prior experience									
Child reported to child protective services	1.33	.85–2.08	.21	1.02	.46–2.29	.95	.71	.19–2.65	.62
Mother's prior use of mental health services (reference: none)									
Considered	1.32	.71–2.43	.38	.83	.28–2.47	.74	2.46	.42–14.40	.32
Received, not satisfied	1.58	.79–3.16	.20	2.56	.77–8.44	.12	3.89	.70–21.63	.12
Received, satisfied	4.73*	2.90–7.71	<.01	1.53	.69–3.41	.30	2.29	.68–7.67	.18
Child's prior use of mental health services (reference: none)									
Considered	1.85	.98–3.50	.06	1.80	.65–4.79	.26	.58	.14–2.46	.46
Received, not satisfied	1.86	.93–3.74	.08	.55	.19–1.60	.27	1.11	.20–6.15	.91
Received, satisfied	1.54	.86–2.76	.15	2.74	.91–8.22	.07	1.04	.27–4.03	.95
Mother's exposure to trauma									
Childhood physical	1.25	.81–1.96	.31	1.98	.95–4.14	.07	.59	.19–1.82	.36
Childhood sexual	1.24	.80–1.94	.34	.84	.39–1.79	.65	.94	.32–2.76	.91
Adult physical	1.64*	1.06–2.55	.03	1.08	.48–2.42	.85	1.60	.42–6.06	.49
Adult sexual	1.54	.92–2.57	.10	1.18	.52–2.69	.70	.30*	.10–.91	.03
Intimate partner violence									
Psychological	1.06*	1.01–1.11	.03	1.01	.93–1.07	.91	1.04	.92–1.02	.54
Physical	1.00	.91–1.10	.99	1.00	.89–1.14	.93	.90	.74–1.10	.22
Functioning									
Depressive symptoms	1.02*	1.01–1.04	.02	1.00	.97–1.03	.84	.97	.93–1.02	.22
General health fair or poor	1.32	.86–2.03	.21	.59	.28–1.23	.16	1.68	.55–5.11	.36
Social support	.98	.96–1.00	.07	1.02	.98–1.06	.37	1.06*	1.01–1.13	.04

* $p < .05$

es. One might suppose women who are being emotionally or verbally abused would be less likely to receive external encouragement to get help because there would be less opportunity for intervention than if they went to an emergency department for physical victimization. On the other hand, dissatisfaction in their relationship with their partner may motivate these women to seek counseling, whereas those who have experienced physical victimization may prioritize services that are not primarily mental health focused.

Symptoms of depression were also associated with consideration of mental health services. Formerly married women were more likely than married or single women to consider mental health services, consistent

with nationally representative research with a general population sample (1). It is striking that only one variable distinguished between women who considered mental health services and women who received such services. It is possible that practical barriers to services are a key determinant (6), and we did not examine practical barriers. Alternatively, this finding may be related to power issues or because a cluster of covarying factors predicted receipt of services. In particular, the effects of physical victimization in the mother's childhood approached significance in these analyses.

Satisfaction with services was associated with two factors: lower rates of adult sexual victimization and high levels of social support. Prior research

has suggested the positive role that social support can play in facilitating successful mental health treatment (18). The finding that women with recent sexual victimization were especially unlikely to be satisfied with mental health services is provocative. One area of future investigation is the way that such victimization interacts with therapist characteristics, such as gender, as well as with types of mental health services to predict client engagement. Perhaps mothers who experience adult sexual victimization by men are less inclined to be satisfied with male treatment providers. Similarly, women receiving group therapy may be less satisfied with these services if they are uncomfortable disclosing trauma in a group setting. Finally, the services received

may not be focused on trauma. Qualitative research has suggested that women with trauma histories that are not addressed by their therapists tend to be dissatisfied with treatment (6).

In considering these results, it is important to keep in mind several limitations of this study. First, in comparing this study with other studies of mental health service utilization, it is important to note that the LONGSCAN studies oversampled for exposure to trauma and child welfare involvement. This is understandable, given that the focus of the LONGSCAN studies was child maltreatment, but it should lead to some caution in interpreting the results. Also, given the child welfare focus, the research participants were more likely than the general population to have low incomes and to be members of racial-ethnic minorities, especially African Americans. Perhaps for these reasons, the respondents reported lower rates of service use than samples in the general population (1) and other high-risk samples (10). Finally, the subgroups among the women who considered services were relatively small, influencing power to detect effects. Power may also have been an issue overall, given the number of variables examined.

Another set of caveats relates to the assessment of the variables in the study. Like most research in this area, these analyses relied on self-report of service utilization. Such self-reports are typically valid (34) but should be viewed as provisional. Most of the predictors (history of victimization and previous use of services) were also assessed via self-report. Finally, it is important to keep in mind that we assessed satisfaction with mental health services, which is a proxy indicator of engagement or persistence in treatment. Quality or effectiveness of services is an important area for future examination.

Conclusions

With these limitations in mind, there are several conclusions that can be drawn from this research. First, it is important to highlight the need to be broader in the assessment of mental health services. Recent research has highlighted the importance of exam-

ining adequacy of (35) as well as satisfaction with services (6). Given the differences found among those who received satisfactory treatment, those who received unsatisfactory treatment, and those who only considered treatment, this investigation underlines the need for research to move beyond the dichotomy of receipt versus nonreceipt of mental health services as an outcome (6).

This research identified, in addition to those who did not seek services, those who reported receipt of unsatisfactory treatment and those who considered treatment but did not receive it. Implicit in this way of assessing treatment is the notion that satisfactory treatment is the goal. Women who have experienced recent physical victimization or significant intimate partner conflict, as well as women with depressive symptoms, are likely to consider receiving mental health services. This consideration may be fostered through motivational interviewing or referral to mental health services by their general medical contacts.

Few factors distinguished between mothers who considered services and those who received them, suggesting that more work is needed in understanding the process by which those contemplating services actually receive them. Practical barriers such as child care, cost, and distance from treatment sites, may be key factors (6). Mothers with high levels of social support were likely to be satisfied with the mental health services they received, suggesting that social functioning may be an important metric by which they evaluate the effectiveness of services. Health care providers would likely benefit from asking about social support and engaging patients' social networks. Finally, women with recent sexual trauma were especially unlikely to be satisfied with the mental health services they received. This suggests the importance of tailoring interventions for women who have experienced such trauma with a focus on their perceived needs (9). Given the high number of women with prior child welfare involvement in this sample, these findings also highlight that comprehensive needs assessments

are necessary, not simply for child victims of maltreatment, but for their mothers as well.

Acknowledgments and disclosures

This research was supported by grants to the Consortium for Longitudinal Studies of Child Abuse and Neglect (LONGSCAN) from the Children's Bureau, Office on Child Abuse and Neglect, Administration for Children, Youth, and Families.

The authors report no competing interests.

References

1. Wang PS, Lane M, Olfson M, et al: Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62:629–640, 2005
2. Kohn R, Saxena S, Levav I, et al: The treatment gap in mental health care. *Bulletin of the World Health Organization* 82:858–866, 2004
3. Augustine JM, Crosnoe R: Mothers' depression and educational attainment and their children's academic trajectories. *Journal of Health and Social Behavior* 51:274–290, 2010
4. Burstein M, Ginsburg GS, Petras H, et al: Parent psychopathology and youth internalizing symptoms in an urban community: a latent growth model analysis. *Child Psychiatry and Human Development* 41:61–87, 2010
5. Slep AMS, O'Leary SG: Multivariate models of mothers' and fathers' aggression toward their children. *Journal of Consulting and Clinical Psychology* 75:739–751, 2007
6. Thompson R, Dancy BL, Wiley TRA, et al: The experience of mental health service use for African American mothers and youth. *Issues in Mental Health Nursing* 32:678–686, 2011
7. Neighbors HW, Caldwell C, Williams DR, et al: Race, ethnicity, and the use of services for mental disorders: results from the National Survey of American Life. *Archives of General Psychiatry* 64:485–494, 2007
8. Cook BL, McGuire T, Miranda J: Measuring trends in mental health care disparities, 2000–2004. *Psychiatric Services* 58:1533–1540, 2005
9. Joska J, Flisher AJ: The assessment of need for mental health services. *Social Psychiatry and Psychiatric Epidemiology* 40:529–553, 2005
10. Ahmed AT, McCaw BR: Mental health services utilization among women experiencing intimate partner violence. *American Journal of Managed Care* 16:731–738, 2010
11. Boyd RC, Chen E, Benton T: A pilot investigation of the rates and predictors of mental health services utilization among depressed African American mothers and their children. *Journal of the National Medical Association* 101:1096–1103, 2009

12. Libby AM, Orton HD, Barth RP, et al: Alcohol, drug, and mental health specialty treatment services and race/ethnicity: a national study of children and families involved with child welfare. *American Journal of Public Health* 96:628–631, 2006
13. Swenson CC, Brown EJ, Sheidow AJ: Medical, legal, and mental health service utilization by physically abused children and their caregivers. *Child Maltreatment* 8:138–144, 2003
14. New M, Berliner L: Mental health service utilization by victims of crime. *Journal of Traumatic Stress* 13:693–707, 2000
15. Paranjape A, Heron S, Kaslow NJ: Utilization of services by abused, low-income African-American women. *Journal of General Internal Medicine* 21:189–192, 2006
16. Elhai JD, North TC, Frueh BC: Health service use predictors among trauma survivors: a critical review. *Psychological Services* 2:3–19, 2005
17. Zivin K, Pfeiffer PN, McCammon RJ, et al: “No-shows”: who fails to follow up with initial behavioral health treatment? *American Journal of Managed Care* 15:105–112, 2009
18. Maulik PK, Eaton WW, Bradshaw CP: The effect of social networks and social support on mental health services use, following a life event, among the Baltimore Epidemiologic Catchment Area Cohort. *Journal of Behavioral Health Services and Research* 38:29–50, 2011
19. Pescosolido BA, Gardner CB, Lubell KM: How people get into mental health services: stories of choice, coercion and “muddling through” from “first-timers.” *Social Science and Medicine* 46:275–286, 1998
20. Thompson R, May MA: Caregivers’ perceptions of child mental health needs and service utilization: an urban 8-year old sample. *Journal of Behavioral Health Services and Research* 33:474–482, 2006
21. Olfson M, Mojtabai R, Sampson NA, et al: Dropout from outpatient mental health care in the United States. *Psychiatric Services* 60:898–907, 2009
22. Westmacott R, Hunsley J: Reasons for terminating psychotherapy: a general population study. *Journal of Clinical Psychology* 66:965–977, 2010
23. De Bolle M, Johnson JG, De Fruyt F: Patient and clinician perceptions of therapeutic alliance as predictors of improvement in depression. *Psychotherapy and Psychosomatics* 79:378–385, 2010
24. Runyan DK, Curtis P, Hunter WM, et al: LONGSCAN: A consortium for longitudinal studies of maltreatment and the life course of children. *Aggression and Violent Behavior* 3:275–285, 1998
25. Thompson R: The course and correlates of mental health care received by young children: descriptive data from a longitudinal urban high-risk sample. *Children and Youth Services Review* 27:39–50, 2005
26. English DJ, LONGSCAN Investigators: Modified Maltreatment Classification System (MMCS). Chapel Hill, University of North Carolina, 1997. Available at www.iprc.unc.edu/longscan
27. Drake B: Unraveling “unsubstantiated.” *Child Maltreatment* 1:262–271, 2006
28. English DJ: Current knowledge about CPS decision-making; in *Decision-Making in Children’s Protective Services: Advancing the State of the Art*. Edited by Morton TD, Holder W. Atlanta, Ga, Child Welfare Institute, 1997
29. Straus MA, Gelles RJ: Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. *Journal of Marriage and Family* 48:465–479, 1986
30. Radloff LS: The CES-D Scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement* 1:385–401, 1977
31. Krause NM, Jay GM: What do global self-rated health items measure? *Medical Care* 32:930–942, 1994
32. Hunter WM, Cox CE, Teagle S, et al: Measures for Assessment of Functioning and Outcomes in Longitudinal Research on Child Abuse. Volume 2: Middle Childhood. Chapel Hill, University of North Carolina, 2003. Available at www.iprc.unc.edu/longscan
33. Chu JA: Ten traps for therapists in the treatment of trauma survivors. *Dissociation* 1:24–32, 1988
34. Beebe TJ, McRae JA, Barnes SA: Comparison of self-reported use of behavioral health services with Medicaid agency records in Minnesota. *Psychiatric Services* 57:1652–1654, 2006
35. Witt WP, Keller A, Gottlieb C, et al: Access to adequate outpatient depression care for mothers in the USA: a nationally representative population-based study. *Journal of Behavioral Health Services and Research* 38:191–204, 2009