

Social Work Faculty Publications

Social Work

9-1-2011

Likelihood of Asking for Help in Caregivers of Women With Substance Use or Co-Occurring Substance Use and Mental Disorders

Suzanne Brown

Mandel School of Applied Social Sciences, Case Western Reserve University, suzanne.brown@wayne.edu

David E. Biegel

Mandel School of Applied Social Sciences, Case Western Reserve University

Elizabeth M. Tracy

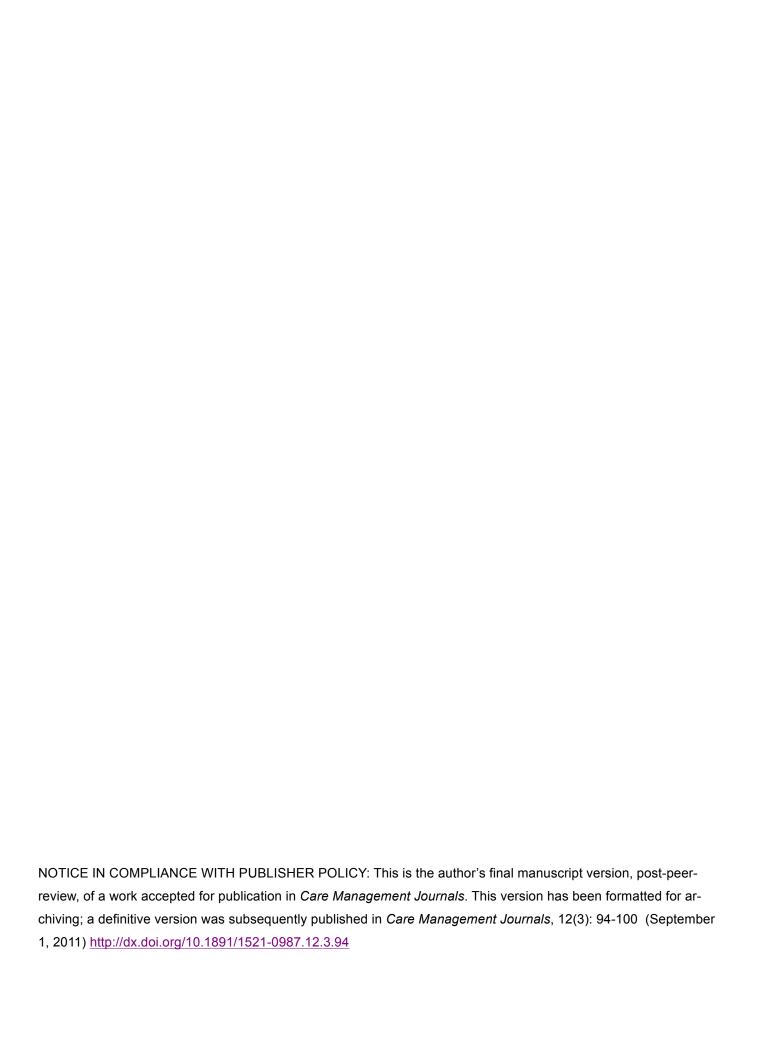
Mandel School of Applied Social Sciences, Case Western Reserve University, elizabeth.tracy@case.edu

Recommended Citation

Brown S, Biegel DE, Tracy EM. Likelihood of Asking for Help in Caregivers of Women With Substance Use or Co-Occurring Substance Use and Mental Disorders. Care Manag J. 2011; 12(3): 94–100. doi: 10.1891/1521-0987.12.3.94

Available at: http://digitalcommons.wayne.edu/soc_work_pubs/39

This Article is brought to you for free and open access by the Social Work at DigitalCommons@WayneState. It has been accepted for inclusion in Social Work Faculty Publications by an authorized administrator of DigitalCommons@WayneState.



Likelihood of Asking for Help in Caregivers of Women With Substance Use or Co-Occurring Substance Use and Mental Disorders

SUZANNE BROWN^{a†}, DAVID E. BIEGEL^{ab}, ELIZABETH M. TRACY^{ac}

- ^a Mandel School of Applied Social Sciences, Case Western Reserve University
- ^b Henry L. Zucker Professor of Social Work Practice
- ^c Grace Longwell Coyle Professor of Social Work

Abstract Family members are important to the well-being of their relatives with substance use disorders or cooccurring substance use and mental disorders. Many caregivers experience high levels of burden, negatively impacting their capacity to provide support to their ill family member. The Andersen health care utilization model (Andersen & Newman, 1973, 2005) was used to identify the impact of predisposing, enabling, and need factors hypothesized to predict caregivers' likelihood of asking for help and support with their caregiving role. The sample include
82 women recruited from outpatient or inpatient substance abuse treatment centers and 82 family caregivers nominated by these women. Findings showed that almost half of caregivers were unlikely to ask for help. Multiple regression analysis found that two need variables were statistically significant predictors of caregivers' likelihood to
ask for help. Caregivers who had higher subject burden (worry) and caregivers who provided more assistance with
daily living were more likely to ask for help. It is suggested that case managers assess the amount of worried family
caregivers' experience because their worries may provide the motivation to ask for help or to participate in help
when it is offered to them.

Keywords dual disorders, help seeking, Andersen health care utilization model, substance-dependent women

It is well established that chronic illnesses, such as substance abuse disorders, have significant effects on families and on the larger society. Families play an important role in the well-being of their relatives with substance use disorders or with co-occurring substance use and mental disorders (Biegel, Katz-Saltzman, Meeks, Brown, & Tracy, 2010; Clark, 2001; Clark & Drake, 1994; Fals-Stewart, O'Farrell, & Birchler, 2003; Tracy & Biegel, 2006). The assistance that families provide is multifaceted, including direct care, financial assistance, management of illness symptoms as well as helping their relatives' engagement and retention in treatment (Mueser, Noordsy, Drake, & Fox, 2003; Provencher, Perreault, St-Onge, & Rousseau, 2003).

Across chronic illnesses, many family caregivers experience moderate to high levels of subjective burden (worry, stigma, and displeasure) and objective burden (family disruption) as well as moderate to high levels of depressive symptomatology (Biegel, Ishler, Katz, & Johnson, 2007; Biegel, Sales, & Schulz, 1991). The lack of caregiver well-being can negatively impact their capacity to provide support and assistance to their ill family member. Research also indicates that caregiving can be an independent risk factor for mortality (Schulz & Beach, 1999). Because of the significantly worse symptomatology with which individuals with a co-occurring substance use and mental disorders present, and to the nature of these symp-

toms (Cuffel, 1996; Drake, Rosenberg, & Mueser, 1996), the impact on their families can be expected to be greater than that on families with a single disorder. In addition, family ties are also vulnerable to disruption for individuals with dual disorders (Clark, 1996).

Comorbidity of psychiatric and substance use disorders is common among women, with an estimated 50%-60% of women entering substance abuse treatment having a cooccurring mental disorder (Newmann & Sallmann, 2004). The issues faced by women with co-occurring disorders are different than those of men with co-occurring disorders. Women with co-occurring disorders report higher levels of physical, sexual, and emotional victimization than women in general and than men with dual disorders and have a greater likelihood of adverse health and social outcomes (Chander & McCaul, 2003; Newmann & Sallmann, 2004; Reed & Mowbray, 1999). However, little research has examined the impact of having a female family member with substance use or dual disorders on family members' wellbeing or on their help-seeking and receiving behavior (Biegel et al., 2007; Biegel et al., 2010).

Across chronic illness, previous research has demonstrated that lack of perceived social support by family caregivers is an important predictor of caregiver burden. For example, Biegel et al.'s (2007) study of family caregivers of low-income women with substance use disorders or co-occurring substance use and mental disorders found

[†]Corresponding author | 11235 Bellflower Rd, Cleveland, OH 44106 | sbx283@case.edu

that lower levels of caregiver support predicted higher levels of caregiver subjective and objective burden. Specifically, focusing on subjective burden, less help from friends than the caregiver wanted predicted greater caregiver stigma, whereas lower levels of support received from the care recipient predicted greater caregiver displeasure. In terms of objective burden, less help from family members predicted a greater impact of caregiving on the caregiver.

Given that lower caregiver informal social support predicts higher caregiver distress and higher caregiver distress can limit the support given to the care recipient by the caregiver, factors related to help seeking by family caregivers of low-income women with substance use disorders or co-occurring substance use and mental disorders remain an important unanswered question. Therefore, the focus of this article is to examine variables that might be expected to predict a caregiver's likelihood of asking for help in providing support for their family member with a substance use disorder or a co-occurring substance use and mental disorder.

Our approach is guided by the modified Andersen health care utilization model (Andersen & Aday, 1978; Andersen & Newman, 1973, 2005) that includes predisposing, enabling, and need characteristics of care recipients and their family caregivers (see also Bass & Noelker, 1987). The modified framework extends the original Andersen model by being more attentive to family caregiver predisposing, enabling, and need factors (Miller & McFall, 1991). Predisposing factors include demographic and socioeconomic characteristics that exist prior to the onset of illness. Enabling characteristics refer to resources that promote or inhibit help seeking. Need factors refer to care recipient illness and impairment characteristics. Thus, the research question of this study is, "What is the impact of predisposing, enabling, and need characteristics on family caregivers' likelihood of seeking informal help in their caregiving role?"

METHOD

Subjects

The study sample included 82 women and 82 family members or significant others nominated by the women. Participants were recruited using purposive sampling from either outpatient or residential substance abuse treatment centers. A family member or significant other of each woman was then nominated by the woman to participate in the study. Eligibility criteria required that women participating in the study be at least 18 years of age and have no current diagnosis of schizophrenia or other major thought disorder. Women also had to have been in substance abuse treatment for 3 weeks or more and be willing to nominate a family member or significant other who they perceived as providing them with the most social support.

Of the women who met eligibility criteria, 97% were contacted to request their study participation and 96% (n =

87) agreed to participate and nominate a family member for participation as well. Family members were contacted following the woman's interview and 82 agreed to participate in the study, 2 family members refused, whereas 3 others were unable to be contacted.

Study Design and Procedures

This is a secondary analysis of data collected through a National Institute on Drug Abuse (NIDA)-funded study that used a cross-sectional survey design (Biegel et al., 2007). Interviews with family members averaged an hour and 20 minutes to complete and used both paper and pencil instruments as well as computerized instruments. All interviewers received training involving didactic instruction on interviewing techniques and instruments as well as practice on use of the survey instruments. Interviews were conducted in private research offices on the campus of Case Western Reserve University, and caregivers were given a \$45 gift card to a local food store for their participation. Human subjects' protection was approved by the Case Western Reserve University Institutional Review Board (IRB).

As discussed previously, the Andersen health care utilization model (Andersen & Newman, 2005) was used to identify the impact of predisposing, enabling, and need factors hypothesized to predict caregivers' likelihood of asking for help and support. Predisposing variables included caregiver race, age, dual disorder status, gender, household finances, physical health, and the caregiver's relationship to the care recipient. The caregiver enabling factors examined include care recipient overall social support and the caregiver's overall social support. Caregiver need variables included severity of care recipient behavioral problems, severity of care recipient emotional problems, and caregiver burden (worry and stigma). This study used standardized instruments for data collection (Biegel, Milligan, Putnam, & Song, 1994; Tessler & Gamache, 1995), and data were collected by trained interviewers at one point in time.

MEASURES

Dependent Variable

The interval level outcome measure, likelihood of asking for help, was a single-item Likert scale measure that asked family members how likely they were to ask for help from people they knew concerning problems related to the care recipient. On this Likert scale, a response of "4" indicated that they were *very likely* to ask for help and a response of "1" indicated that they were *not at all likely* to ask for help.

Predisposing Variables

Caregiver race was coded as African American, White, or other. Age was measured in years, and gender was coded as male or female. Household finances were measured using one question that asked respondents to rate their financial situation at the end of the month on a 3-point scale ranging from 1 (some money left over) to 3 (not enough to make ends meet). Caregiver physical health status was measured by asking respondents to rate their current overall health, their satisfaction with their health, and the degree to which their daily activities were limited by health-related problems. This summated 3-item scale (Brook et al., 1979) ranged from 3 to 12 with higher scores indicating higher perceived physical health. Internal consistency of this scale within this sample was good (Cronbach's α = .79). Relationship of the caregiver to the care recipient was measured using one question that asked the caregiver to identify their relationship to the care recipient that was coded as 1 (significant other) or 0 (not significant other; siblings, parents, adult children, other relatives).

Enabling Variables

Factors that might enable caregivers to ask for help included caregiver social support and care recipient social support. Both caregiver and care recipient's overall social support was assessed using the Interpersonal Support Evaluation List (ISEL). This is a 16-item well-validated

summated scale with good reliability in our study (Cronbach's α = .81; Cohen, Mermelstein, Kamarck, & Hoberman, 1985). Higher scores indicating greater overall social support.

Caregiver Need Variables

Care recipient behavior problems were assessed using the Client Behaviors Scale (Biegel et al., 1994) that was developed for use by caregivers of individuals with mental illness and adapted for this study. This scale included 58 items that assessed multiple problem areas including problems managing money, irritability, and doing things that embarrassed the caregiver. Caregivers were asked to rate the care recipient's behaviors on a 5-point Likert scale that ranged from 0 (never) to 4 (constantly or almost constantly). The internal consistency of the summated scale was .97 and higher scores corresponded with greater care recipient behavior problems. Care recipient emotional problems were reported by caregivers who were asked to assess the extent of the care recipient's emotional problems over the past 12 months. This was assessed on a 4-point Likert scale ranging from 0 (not at all) to 3 (severe).

Table 1. Means and Standard Deviations of Predisposing, Enabling, and Need Predictors of Likelihood to Ask for Help

Independent Variables	Frequency M	SD	Actual Range	Potential Range	α
Predisposing factors					
Caregiver race					
African American	84.1%				
White	12.2%				
Other	3.6%				
Age	40.0%	13.58	18-77	18+	
CR dual disorder					
Yes	56.1%				
No	43.9%				
Gender					
Male	40.2%				
Female	59.8%				
Household finances	1.89	0.78	1-3	1-3 (high-low)	
CG physical health	9.39	2.22	3-12	3-12 (low-high)	0.79
Relationship to CR*					
Significant other	31.7%				
Not significant other	68.3%				
Enabling factors					
CR social support (ISEL)*	35.04	7.13	15-46	0-48 (low-high)	0.77
CG social support (ISEL)*	35.99	7.65	7-48	0-48 (low-high)	0.81
Caregiver need					
CR behavioral problems*	89.76	47.07	6-194	0-232 (low-high)	0.97
CR emotional problems*	1.43	1.18	0-3	0-3 (low-high)	
Amount of concrete* assistance given to CR	10.63	5.99	1-27	0-40 (low-high)	
Burden (worry)*	18.3	6.3	3-28	0-28 (low-high)	0.79
Burden (stigma)*	8.96	8.84	0-30	0-36 (low-high)	0.81
Dependent variable					
Likelihood of asking for help or assistance	2.18	1.21	1-4	1-4 (very unlikely-very likely)	

Note. CR = care recipient; CG = caregiver; N = 82; *Variables significant at the bivariate level and included in the final regression model.

Caregiver burden was assessed using the Family Experiences Interview Schedule (Tessler & Gamache, 1995), which measured caregiver burden on multiple dimensions. Two subscales were used for this analysis: Worry and Stigma. Caregiver worry was rated on a 7-item scale with responses ranging from 0 (never) to 4 (constantly or almost constantly). Caregivers were asked about the frequency of worries, regarding the care recipient, they experienced over the past 12 months. Cronbach's alpha for this subscale was .79. The Stigma subscale assessed caregivers' perceptions of how others treated or perceived them over the past 12 months as a result of care recipient's behaviors. This, too, was a 5-point scale with nine items ranging from 0 (never) to 4 (constantly or almost constantly). Cronbach's alpha for this subscale was .89. The amount of Assistance in Daily Living (ADL) care was measured by a summated scale of 8 items from the Family Experiences Interview Schedule (Tessler & Gamache, 1995). Each item was scored on a 5-point scale from 0 (never) to 4 (always) with higher scores representing more assistance from the caregiver to the care recipient.

Data Analysis

Univariate and bivariate analyses were conducted to examine the variable distributions and correlations between the variables of interest. Univariate data were reviewed for dispersion, variation, and normalcy of the distribution of the data. Exploratory bivariate analyses as well as theoretical relevance identified the significant variables (p < .05) for multivariate analyses (see Table 1)

Multicollinearity was examined among all independent variables and was found not to exceed the recommended cutoff of .8 (Allison, 1999), and all variables were normally distributed. Independent variables found significantly correlated with the outcome variable were entered into an ordinary least squares regression model using the stepwise entry method in Statistical Package for the Social Sciences (SPSS). All assumptions for multiple regression were met, as residuals were examined using normal probability plots and scatter plots, and supported the assumptions of linearity, normality, and homoscedasticity. Additionally, no significant outliers were detected. Missing data accounted for less than 10% of the data and were removed using the list-wise deletion function in SPSS.

RESULTS

Sample Characteristics

The mean age of care recipients was 34.1 years (SD = 8.5), with one half (50%) having a high school education or greater. More than four fifths (81.7%) of the care recipients were African American. Slightly more than half (51.2%) were currently residing in an inpatient treatment program, one third (32.9%) were living in their own home, with the remainder residing in the family caregiver's home (12%)

or living with a relative or friend (3.6%). Based on they experienced over the past 12 months. Cronbach's alpha for this subscale was .79. The Stigma subscale assessed caregivers' perceptions of how others treated or perceived them over the past 12 months as a result of care recipient's behaviors. This, too, was a 5-point scale with nine items ranging from 0 (never) to 4 (constantly or almost constantly). Cronbach's alpha for this subscale was .89. The amount of Assistance in Daily Living (ADL) care was measured by a summated scale of 8 items from the Family the computerized Diagnostic Interview Schedule (C-DIS), which provides a Diagnostic and Statistical Manual of Mental Disorders (DSM)-compatible diagnosis (Robins et al., 1999), more than half (56.1%) of the care recipients met the criteria for a current dual disorder (substance abuse and mental illness), whereas 43.9% had only a current substance use disorder.

The average age of the caregivers in this sample was 40 years old and 59.8% were female. African American caregivers comprised 84.1% of the sample, with 12.2% White and 3.6% other. The median monthly income for caregivers in this sample was \$1,300 and 37.8% were employed full-time, 22% part-time, and 29% unemployed (Biegel et al., 2010). When asked about their relationship to the care recipient, 31.7% were significant others, 23.2% were siblings, 19.5% were parents, 11.0% were adult children, and 14.6% were other relatives.

When asked to assess the extent of their care recipients' drug or alcohol disorders, more than half (56%) of family caregivers perceived these problems to be moderate or severe. Similarly, when family caregivers were asked to assess the extent of care recipients' emotional problems, half (50%) of family caregivers perceived these problems to be moderate or severe. More than half of caregivers (55%) indicated that they were somewhat or very likely to ask for help, whereas just less than half (45%) indicated that they were somewhat or very unlikely to ask for help pertaining to their caregiving.

Bivariate and Multivariate Analyses

As a first step in data reduction, exploratory bivariate analyses of each of the 14 independent variables discussed previously with the dependent variable, likelihood to ask for help, were conducted (see Table 1). As can be seen from Table 1, one predisposing variable, two enabling variables, and five need variables were statistically significant and subsequently entered into a stepwise multiple regression analysis. The regression model was significant (F [2, 81] = 3.408, p < .001) and accounted for 21.4% of the variance in caregiver likelihood of asking for help or support (R^2 = .214, p < .05; see Table 2). The effect size was .27, a medium effect size by Cohen's (1988) standards.

Findings of the regression analyses showed that two need variables were statistically significant predictors of likelihood to ask for help. Caregivers who had higher subjective burden (worry) were more likely to ask for help (t = 2.493, p < .05) and caregivers who provided more assistance with daily living were more likely to ask for help (t = 2.089, p < .05).

Table 2. Regression Analysis of Predictors of Likelihood to Ask for Help

Independent Variables	В	SE B	β	t			
Constant	531	.974	545				
Predisposing factors							
Relationship to CR	018	.288	077	063			
Enabling factors							
CR social support (ISEL)	.017	.019	.099	.907			
CG social support (ISEL	.017	.018	.105	.900			
Caregiver need							
Burden (worry)	.062	.025	.323	2.493*			
Burden (stigma)	011	.016	083	687			
Amount of concrete assistance given to CR	.054	.026	.270	2.089*			
CR behavioral problems*	.000	.004	.006	.042			
CR emotional problems*	.063	.122	062	519			
	R ² =.214; F=3.408**						

Note. CR = care recipient; CG = caregiver; N = 82; *p < .05. **p < .001.

DISCUSSION

Consistent with previous research, study findings indicate that caregivers of women with substance use disorders or with co-occurring substance and mental disorders do experience moderate levels of subjective burden in the form of worry and stigma in responding to the complex behavioral and emotional problems of their care recipient. However, not all caregivers are likely to ask for help or seek services to assist in their caregiving role. In this study, almost half (45%) of the caregivers indicated they were unlikely to ask for help, thus placing them at increased risk of additional burden. Previous research with this sample has shown that care recipient, behavioral problems, and lack of caregiver support contributes to a sense of increased burden and that increased burden contributes to caregiver depressive symptomatology (Biegel et al., 2010). Therefore, understanding the factors that either increase or decrease likelihood of asking for help are important both to the well-being of caregivers and for the planning of services for this population.

In modifying the Andersen health care utilization model to guide our data analytic approach, we found at the bivariate level that one predisposing factor (relationship to care recipient), two enabling factors (caregiver and care recipient social support), and five caregiver need variables (behavioral and emotional problems, amount of concrete assistance provided, and two indicators of burden) were significantly associated with caregivers' likelihood of asking for help. However, when we completed a multivariate analysis of predictors of likelihood of asking for help, only two need variables remained statistically significant in the model: caregiver subjective worry and the amount of concrete assistance provided by the caregiver. This finding

highlights the importance of determining need as experienced by the caregiver, as opposed to a focus on predisposing or enabling factors, as most salient in contributing to asking for help. For example, none of sociodemographic factors, including dual disorder status, were statistically significant in predicting likelihood of asking for help nor was overall social support a significant predictor in the multivariate model. Thus, a focus on caregiver needs is a primary implication of this study.

Implications for Practice

Treatment programs often face difficulties in encouraging family member participation in treatment, educational, or other services designed to support client progress and recovery (Dixon et. al., 2001). Given the fact that almost half the caregivers reported being not likely to ask for help, it would seem that treatment programs must rely on outreach and motivational approaches to engage them in help. This study's findings point to some potential means to motivate and involve caregivers. In terms of practice implications, case managers may want to pay attention to the amount of worry caregivers express because their worries may provide the motivation to ask for help or to participate in help that is offered to them. Perhaps a discussion based on motivational techniques (Miller & Rollnick, 1991) of their worries and the pros and cons of addressing those worries could tip the balance in favor of asking for help. In addition, caregivers who are already providing the most concrete assistance may be more likely to ask or take part in services. From a treatment provider prospective, those caregivers already providing assistance may be viewed as a lower priority than those who continue to remain uninvolved; yet, from a service delivery perspective, these are the providers who may be at most risk for further burden and at higher likelihood to take advantage of services and assistance offered. Many treatment programs take an attitude "if you build it, they will come"; these study findings suggest that building a service designed to address a particular need (for those who have worries, those providing a great deal of assistance) may yield greater caregiver participation.

In addition to offering services designed to meet needs, treatment programs may benefit from targeting specific caregiver relationships. It is interesting that more than two thirds (68.3%) of the caregivers—that is, those people who were viewed by the women in this study as providing the most support to them—were not significant others but instead were siblings, parents, adult children, and other relatives. If services are targeted exclusively, or are perceived as targeted only, to significant others, treatment programs may be missing out on reaching those caregiver relationships that provide the most support to women with substance use and/or dual disorders.

Limitations

Although this study suggests some specific directions for practice and service delivery, these should be considered in light of the study limitations. First, the primary measure for the dependent variable of interest in this study is a singleitem question about likelihood of asking for help. The study would be enhanced by a more standardized scale to measure likelihood of asking for help. In addition, it would be helpful for service planning to assess not only likelihood of asking for help but also likelihood of using available services. For example, this study cannot determine if lack of knowledge of types of services available may have influenced caregivers' ratings of likelihood to ask for help. In addition, we cannot determine if the length of time women were in treatment influenced caregiver ratings of their likelihood of asking for help. Second, power to detect statistically significant differences, especially small effect sizes in the multivariate analysis, may be a limiting factor. Generalizability of findings is limited to similar samples of low-income, African American women. Finally, although the data analysis was conceptually based, the crosssectional design limits any conclusions about causal inference.

Future Research

Future research with larger sample sizes and multiple item measures of likelihood of asking for help would allow for a more comprehensive evaluation of the application of the health utilization model. Given the fact that primary caregivers represent a diverse group of relationships, future research with a larger sample size could also determine if there are differences related to specific types of relationships. This may be particularly important given that women clients are closely tied to several caregiver relationships, with partners, as well as their own mothers and children (Savage & Russell, 2005). This study highlights the contributions provided by these caregiver relationships of women with substance use and co-occurring substance use and mental disorders and suggests some means to enhance their caregiving role.

ACKNOWLEDGMENTS

This study was supported by a Social Work Research Development Program grant from the National Institute on Drug Abuse (5 RO1 DA13944, Mark I. Singer, Principal Investigator).

REFERENCES

- Allison PD. Multiple regression: A primer. Thousand Oaks, CA: Pine Forge Press; 1999.
- Andersen RM, Aday LA. Access to medical care in the U.S.: Realized and potential. Medical Care. 1978;16(7):533–546.

- Andersen R, Newman JF. Societal and individual determinants of medical care utilization in the United States. The Milbank Memorial Fund Quarterly. Health and Society. 1973;51(1):95–124.
- Andersen R, Newman JF. Societal and individual determinants of medical care utilization in the United States. The Milbank Quarterly. 2005;83(4):1–28.
- Bass DM, Noelker LS. The influence of family caregivers on elder's use of in-home services: An expanded conceptual framework. Journal of Health and Social Behavior. 1987;28(2):184–196.
- Biegel DE, Ishler KJ, Katz S, Johnson P. Predictors of burden in families of women with substance disorders or co-occurring substance and mental disorders. Social Work Practice in the Addictions. 2007;7(1/2):25–49.
- Biegel DE, Katz-Saltzman S, Meeks D, Brown S, Tracy EM. Predictors of depressive symptomatology in family caregivers of women with substance use disorders or co-occurring substance use and mental disorders. Journal of Family Social Work. 2010;13(1):25–44.
- Biegel DE, Milligan SE, Putnam PL, Song LY. Predictors of burden among lower socioeconomic status caregivers of persons with chronic mental illness. Community Mental Health Journal. 1994;30(5):473–494.
- Biegel DE, Sales E, Schulz R. Family caregiving in chronic illness: Alzheimer's disease, cancer, heart disease, mental illness, and stroke. Newbury Park, CA: Sage Publications; 1991.
- Brook RH, Ware JE, Jr, Davies-Avery A, Stewart AL, Donald CA, Rogers WH, et al. Overview of adult health measures fielded in Rand's health insurance study. Medical Care. 1979;17(Suppl. 7):1– 131
- Chander G, McCaul ME. Co-occurring psychiatric disorders in women with addictions. Obstetrics and Gynecology Clinics of North America. 2003;30(3):469–481.
- Clark RE. Family support for persons with dual disorders. New Directions for Mental Health Services. 1996;70:65–78.
- Clark RE. Family support and substance use outcomes for persons with mental illness and substance use disorders. Schizophrenia Bulletin. 2001;27(1):93–101.
- Clark RE, Drake RE. Expenditures of time and money by families
 of people with severe mental illness and substance use disorder.
 Community Mental Health Journal. 1994;30(2):145–163.
- Cohen J. Statistical power analysis for the behavioral sciences. 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates; 1988.
- Cohen S, Mermelstein R, Kamarck T, Hoberman H. Measuring the functional components of social support. In: Sarason IG, Sarason BR, editors. Social support: Theory, research, and applications. The Hague, Netherlands: Martinus Nijhoff; 1985. pp. 73–94.
- Cuffel BJ. Comorbid substance use disorder: Prevalence, patterns of use, and course. New Directions for Mental Health Services. 1996;70:93–105.
- Dixon L, McFarlane WR, Lefley H, Lucksted A, Cohen M, Falloon I, et al. Evidence-based practices for services to families of people with psychiatric disabilities. Psychiatric Services. 2001;52(7):903– 910.
- Drake RE, Rosenberg SD, Mueser KT. Assessing substance use disorder in persons with severe mental illness. New Directions for Mental Health Services. 1996;70:3–17.
- Fals-Stewart W, O'Farrell TJ, Birchler GR. Family therapy techniques. In: Rotgers F, Morgenstern J, Walters ST, editors. Treating substance abuse: Theory and technique. 2nd ed. New York: The Guilford Press; 2003. pp. 140–165.
- Miller B, McFall S. The effect of caregiver's burden on change in frail older persons' use of formal helpers. Journal of Health and Social Behavior. 1991;32(2):165–179.
- Miller WR, Rollnick S. Motivational interviewing: Preparing people to change addictive behavior. New York: The Guilford Press; 1991.
- Mueser KT, Noordsy DL, Drake RE, Fox L. Integrated treatment for dual disorders: A guide to effective practice. New York: The Guilford Press; 2003.
- Newmann JP, Sallmann J. Women, trauma histories, and cooccurring disorders: Assessing the scope of the problem. Social Service Review. 2004;78(3):466–499.
- Provencher HL, Perreault M, St-Onge M, Rousseau M. Predictors of psychological distress in family caregivers of persons with psychiat-

LIKELIHOOD OF CAREGIVERS ASKING FOR HELP | S. BROWN ET AL.

- ric disabilities. Journal of Psychiatric and Mental Health Nursing. 2003;10(5):592–607.
- Reed BG, Mowbray CT. Mental illness and substance abuse: Implications for women's health and health care access. Journal of the American Medical Women's Association. 1999;54(2):71–78.
- Robins LN, Cottler LB, Bucholz KK, Compton WM, North CS, Rourke KM. Diagnostic interview schedule for the DSM-IV. St. Louis, MO: Washington University, School of Medicine, Department of Psychiatry; 1999.
- Savage A, Russell LA. Tangled in a web of affiliation: Social support networks of dually diagnosed women who are trauma survivors.
 The Journal of Behavioral Health Services & Research.
 2005;32(2):199–214.
- Schulz R, Beach SR. Caregiving as a risk factor for mortality: The Caregiver Health Effects Study. Journal of the Amercian Medical Association. 1999;282(23):2215–2219.
- Tessler R, Gamache G. Toolkit for evaluating family experiences with severe mental illness. Cambridge, MA: Human Services Research Institute; 1995.
- 31. Tracy EM, Biegel DE. Personal social networks and dual disorders: A review of the literature and implications for practice and future research. Journal of Dual Diagnosis. 2006;2(2):59–88.