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Identifying Depression in a National Sample of Caregivers Involved with Child Welfare

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Abstract

Objectives—Identifying depression is the first step in provision of treatment across service settings but can be challenging for non-mental health providers. This study examines how caseworker identification of depression among parents and other caregivers during the child welfare investigation or assessment process varies as a function of different agency, caseworker, and case characteristics.

Methods—Data were drawn from the second National Survey of Child and Adolescent Well-Being (NSCAW II), a national probability sample of children referred to U.S. child welfare agencies between February 2008 and April 2009. The study sample was comprised of 889 parents and other caregivers whose children initially remained at home and whose confidential responses on the World Health Organization Composite International Diagnostic Interview Short-Form indicated a major depressive episode within the last 12 months. Weighted logistic regression examined predictors of caseworker identification of caregiver depression at the agency, caseworker, and case level.

Results—Investigative caseworkers identified mental health needs in only 38% of caregivers. Caseworkers were more likely to identify caregiver mental health needs when child welfare agency policy specified use of a standardized mental health assessment and when the maltreatment report came from a health or mental health provider relative to other sources, such as teachers or family members. Investigative caseloads were negatively associated with identifying depression.

Conclusions—Structured mental health assessments may help non-mental health professionals identify mental health needs among vulnerable populations.

INTRODUCTION

Parental depression disproportionately affects economically and socially disadvantaged populations and poses significant risks to family functioning and child well-being(1–4). Depressed parents and other caregivers are more likely to behave aggressively towards their children and utilize more disengaged, withdrawn, or intrusive parenting styles(5–8).They are also less likely to adhere to or benefit from recommended treatment programs and to bring their children for recommended preventive health services(9–12).The cumulative negative effect on child well-being can be severe. Compared to children whose caregivers are not depressed, children of depressed caregivers exhibit decreased social competence, experience more emotional and behavioral problems in adolescence and early adulthood, and incur greater health expenditures(13–16).

Children involved with Child Protective Services (CPS) are at particularly high risk because their parents often experience domestic violence and/or other prior trauma that can exacerbate effects of parental depression on child safety and well-being(17, 18). For many of these families, CPS involvement represents an opportunity to connect with needed services. Evidence-based treatment can reduce or eliminate symptoms of depression (19–22). Remission of parental depression has in turn been linked to improvements to children's behavioral health symptoms and functioning (23–25).Unfortunately, studies of community samples suggest that only 30% of depressed adults receive any treatment for their illness(26). Among parents and other caregivers involved with child welfare, treatment rates may be as low as 20%(27).

Identifying caregiver depression is the first step in provision of treatment across service settings, but can be challenging for child welfare caseworkers. Depression can manifest as anxiety or somatic conditions, which caseworkers generally receive little to no training in how to identify(28–31).Fear of losing their children may also affect caregivers' willingness to report mental health needs(32, 33).As a result of these and other factors, caregiver depression is often under-identified in the child welfare investigation or assessment process(34).

To provide policymakers and administrators with information useful in improving the frontline investigation process, this study examines agency practices, caseworker attributes, and case characteristics related to child welfare caseworker identification of parental depression. Child welfare agency practices hypothesized to positively affect caseworker identification of depression include use of standardized mental health assessments in the investigation process and strength of collaboration with local mental health providers. Standardized mental health screening and assessment tools can improve diagnosis of parental depression and aid in developing appropriate treatment plans(35).While the effect of child welfare agency collaboration with local mental health providers on caregivers has not been previously examined, such ties have been shown to improve children's access to mental health services (36, 37); prior research has also found that co-location of child welfare caseworkers with credentialed alcoholism and substance abuse counselors can facilitate identification of caregiver substance use and subsequent treatment referrals(38).

Caseworker attributes hypothesized to affect identification of caregiver depression include education, job tenure (i.e., experience), and caseload (i.e., competing demands).Although many caseworkers lack the clinical and communication competencies necessary to detect caregiver depression(28),caseworkers with a formal education in social work or psychology may be better prepared to investigate complex family needs than caseworkers without such training(39). Job tenure and caseload may also influence identification of caregiver needs through their effects on caseworkers' ability to effectively engage with families and respond to their needs(40).Manifestation of depression can be subtle, and eliciting candid information about mental health status can be challenging. These skills may evolve over time as caseworkers gain experience working with families; hence, investigative caseworkers' years in child welfare are hypothesized to be positively associated with detection of caregiver depression. In contrast, caseworkers with excessive caseloads may overlook caregiver depression because they are forced to conduct superficial investigations (41). Thus, in the current study, investigative caseworker caseload is hypothesized to be negatively associated with caseworker identification of caregiver depression. Finally, at the case level, maltreatment reports initiated by health care providers were hypothesized to increase identification of caregiver depression because such professionals are more likely to routinely screen for depression and to communicate concerns about caregiver mental health needs to caseworkers (42–44).

METHODS

Data Sources

Data were drawn from the National Survey of Child and Adolescent Well-Being (NSCAW), the only national, longitudinal study of families subject to maltreatment investigations or assessments conducted by CPS(45).NSCAW includes two cohorts of children spaced approximately ten years apart. Given significant changes in child welfare practices over the last decade, the current study utilizes only data from the second cohort (NSCAW II). A two-stage cluster sampling approach was utilized in which primary sampling units (PSUs) were first selected, each corresponding to the geographic area served by a single CPS agency. Within these PSUs, a total of 5,873 children aged 0 to 17.5 years sampled from all CPS investigations or assessments conducted between February 2008 and April 2009.

Baseline (wave one) data collection occurred between March 2008 and September 2009, on average approximately 4 months after the completion of the child welfare investigation. Information on child welfare agency practices was obtained through structured interviews with directors of each of the 86 child welfare agencies in the NSCAW II sample. Detailed assessments of family context and well-being were collected through structured, face-to-face interviews with current caregivers, children, and their investigative caseworkers. Permanent primary caregivers whose children initially remained in-home following investigation were administered a series of validated instruments regarding their mental health status via Audio Computer-Assisted Self Interview, a methodology shown to increase reporting of sensitive behaviors(46).Investigative caseworkers were separately asked to provide information on their background and work practices, including caseload, as well as their assessment of a given family's behavioral health; this entailed referring to families' case records to increase information accuracy(45). Finally, maltreatment report source and type were obtained from the National Child Abuse and Neglect Data System (NCANDS); these administrative data were linked to NSCAW with families' permission(47).Additional information on NSCAW procedures are provided in Appendix I, and also extensively described elsewhere (45, 48).

Given our interest in identifying parental depression, the study sample was restricted to permanent, primary caregivers whose confidential, self-reported responses to a validated screening instrument indicated major depression within the last 12 months. A total of 889, or 23%, of caregivers met these criteria.

Measures

Caregiver depression—Caregiver depression was assessed using the World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF)(49), a standardized interview that screens for mental health disorders using criteria established in the Diagnostic and Statistical Manual of Mental Disorders (50, 51).The CIDI-SF has been validated for use with the general population, with an overall diagnostic classification accuracy of 93% for major depressive episodes (49). Consistent with the suggested CIDI-SF scoring method(52), caregivers were classified as having a major depressive episode if they reported a two-week period during the preceding 12 months in which either a dysphoric mood or anhedonia was experienced to a significant degree as well as at least three other symptoms of major depression.

Identification of caregiver mental health treatment needs—Investigative caseworkers' identification of caregiver mental health treatment needs was operationalized as a dichotomous variable, set to 1 if the investigative caseworker indicated that the permanent primary caregiver needed services for "an emotional, psychological, or other mental health problem like depression, bipolar disorder, schizophrenia, etc." in the last 12 months and otherwise set to 0.

Agency practices—Agency use of standardized mental health assessments was indicated by a dichotomous variable, set =1 if the director responded yes to a question asking whether the child welfare agency "has used a standardized mental health assessment for parents during the investigation process" and 0 if the agency director responded no. Consistent with literature suggesting that having a combination of different inter-organizational arrangements reflects stronger overall collaboration between agencies(53, 54), strength of ties was measured as the number of distinct relationships each child welfare agency director reported with mental health providers. Examined relationships included having a memorandum of understanding or other formal inter-agency agreement, cross-training of staff, joint budgeting or resource allocation, and child welfare agency co-location with a mental health partner.

Caseworker attributes—Caseworker education was indicated by whether the caseworker's highest degree was a non-social work bachelor's or less (referent), Bachelor of Social Work (BSW); Master of Social Work (MSW), or other graduate degree. Caseworker experience was operationalized as the number of years the caseworker reported working in child welfare and caseload as the average number of new investigations per month assigned to the caseworker.

Case characteristics—Maltreatment report source was categorized based on whether the initial maltreatment allegation was made by medical or mental health personnel, or by another type of reporter, e.g., educator, social service personnel, or non-professional (47). We also controlled for several other factors that might affect caseworker ability to identify caregiver depression, including the most serious type of alleged maltreatment(6, 55); the presence of a co-occurring substance use disorder(56–58);caregiver African American, Hispanic, or other minority race/ethnicity such as American Indian or Asian, Hawaiian, or Pacific Islander(59);the caregiver's biological or functional relationship with the child(60); and child age(26). Caregivers were identified as having a co-occurring substance use disorder if their confidential self-reported responses on either of two validated instruments, the Alcohol Use Disorders Identification Test (AUDIT)or the Drug Abuse Screening Test (DAST–20), indicated harmful use or dependence(61, 62).Caregivers whose AUDIT scores were 5 or higher or whose DAST-20 scores were 6 or higher were considered to meet this criterion(63–66).

Analyses

Although NSCAW data have a hierarchical structure, our sample did not meet criteria for use of multilevel modeling (67–69). Consequently, we conducted a single-level logistic regression model using the Stata 12.0 -svy- module, which accounts for probability weights and stratification as well as correlations in outcomes across families served by the same child welfare agencies. Phi and biserial correlations between independent variables were all less than 0.4 and variance inflation factors (VIF) <2.5, below the threshold at which multicollinearity might be a concern in logistic regression. Twenty multiply imputed datasets were created using the multivariate normal imputation method within the Stata 12.0 MI module to handle missing data. Weighted t-tests following imputation did not reveal any statistically significant differences between imputed and unimputed variables; therefore, only imputed results are provided below.

RESULTS

As shown in Table 1, although all of the caregivers in the sample had CIDI-SF scores indicating a major depressive episode in the past 12 months, investigative caseworkers identified mental health needs in only 38% of those caregivers. One quarter of caregivers (25%) were investigated by CPS agencies whose directors reported agency use of a standardized mental health assessment during investigation. For approximately 11% of cases in our sample, the initial maltreatment report was made by medical or mental health personnel. The majority of these cases (88%) were reported by medical rather than mental health personnel, and over half involved children less than one year of age.

To supplement multiple logistic regression results in Table 1, we also calculated predicted probabilities for all statistically significant variables to illustrate the magnitude of the association with caseworker identification of caregiver depression (70). In keeping with our hypothesis, agency use of a standardized mental health assessment for parents in the investigation process was associated with a 45% higher probability that caseworkers would identify caregiver depression. Also as hypothesized, each additional case assigned per month to investigative caseworkers decreased caseworker probability of identifying caregiver depression by 1%.The probability of identifying caregiver depression increased by 21%when the initial maltreatment report was made by medical or mental health providers rather than by social services personnel, law enforcement, education, or non-professional sources (e.g., relatives, friends, and neighbors). Contrary to our hypothesis, child welfare agency ties with mental health providers were not associated with detection of depression. Finally, among the measures included as covariates, caseworkers' probability of identifying depression increased by 22% when caregivers were Native Indian, Asian, Hawaiian, or Pacific Islander rather than non-Hispanic whites.

DISCUSSION

To the best of our knowledge, this study is the first to examine factors associated with child welfare caseworker identification of caregiver depression. Data from this large, national sample of children referred to CPS indicate that even among families deemed sufficiently low risk to retain custody of their children, rates of major depression are disproportionately high:23% of caregivers had CIDI-SF scores indicating a major depressive episode within the last 12 months, a rate more than three times higher than the estimated 12-month prevalence of major depression in the general population(71).Identification of caregiver depression is a critical first step to connecting these vulnerable families to appropriate treatment. However, identifying depression may be challenging for case workers, who identified mental health needs for fewer than 40% of caregivers in our sample. This finding is consistent with prior research suggesting substantial under-identification of mental health needs among families involved with the child welfare system (27, 72), and represents a missed opportunity for intervention.

Efforts to improve identification of depression in this population must take into account the current child welfare context. Caseworkers face significant pressure to close cases quickly, which may limit their ability to detect and meaningfully respond to families' service needs (41, 73). Their training in mental health is also often inadequate, further limiting their ability to identify parental depression (28, 73). Given these constraints, validated screening instruments may help caseworkers quickly identify families in need of further assessment. Current study findings indicate that caseworkers were more likely to identify caregiver depression when agencies used standardized mental health assessments during the investigative process. These findings are consistent with research in health care settings indicating that clinicians are more effective at detecting depressive symptoms when using structured clinical interviews or screeners(74–76), and reinforce the important role such tools can play in identifying mental health disorders. Most screening and assessment tools currently used during child welfare investigation do not directly address caregiver mental health, or do so only through a single, binary item (77, 78). Brief, valid, and easily scored and interpreted measures of depression such as the Patient Health Questionnaire (PHQ) (79–81) have been developed that could be readily incorporated in the investigation process and administered by caseworkers and other personnel during office, clinic, or home visits. Inclusion of such measures in agency policies may play an important role in instantiating their use.

Although prior research has found that strength of child welfare agency ties with local providers are associated with families' service access and outcomes (36, 37, 82), such ties were not significant in the current study. It is possible that practices such as cross-training and co-location may be important for facilitating service access and coordinating care only after need has already been identified. NSCAW data do not include information on the purpose of collaborative ties; further research is needed to examine the extent to which collaboration with local mental health providers may be of use to caseworkers during the investigation process.

Findings do, however, suggest the important role that medical and mental health professionals can play in identifying parental depression(42).These professionals are more likely to have the clinical competencies necessary to identify depression, and may communicate this information when reporting child maltreatment. Although such professionals report a relatively small proportion of maltreatment cases (8% nationally(83)), it is also possible that they encounter the highest-risk families. Further research is needed to understand associations between maltreatment report source and caseworker identification of parental depression.

While the magnitude of association between caseload and caseworker identification of depression was small, findings are also consistent with prior research suggesting that high caseloads can compromise casework practices (41). Constrained resources and high turnover make it difficult for agency managers to reduce the number of cases assigned to each worker; however, the high potential costs of missed opportunities to identify families' needs contributes to the case for making adequate staffing a high priority.

Findings also indicate the need for attention to potential effects of caregiver race/ethnicity on caseworker identification of mental health needs. In the current study, investigative caseworkers were significantly more likely to identify depression in Native Indian, Asian, Hawaiian, or Pacific Islander minorities than in non-Hispanic whites. While the explanation for differential identification of depression in this subgroup is unclear, prior research has demonstrated disparities in mental health access among Asians as well as non-Latino whites, African-Americans, and Latinos (84). Additional research is needed to better understand this phenomenon and its potential effect on service access.

Several limitations constrain this study. First, the current study relied on caregiver responses to the CIDI-SF to identify depression. While validated for use with the general population(49),this instrument was developed for screening rather than diagnostic purposes and has not been specifically tested with child welfare or minority populations. Contextual and/or cultural differences may affect the sensitivity and specificity of results; for example, caregivers involved with child welfare may conceal certain behaviors, warranting the use of lower cut-points than those applied here. In addition, only the depression scales of the CIDI-SF were included in NSCAW, precluding the ability to examine a wider range of mental health disorders. Since caseworkers were asked whether caregivers had any "mental health problem like depression, bipolar disorder, schizophrenia, etc." but caregivers were only asked about depression, we were also unable to determine the accuracy with which caseworkers identified caregiver depression. Nonetheless, we believe that focusing on major depression is still critical given its high prevalence among caregivers involved in child welfare and its impact on both caregivers and children. Finally, NSCAW did not ask caseworkers about training in the use of standardized mental health assessments, which could also have affected how effectively they used these tools.

CONCLUSION

Child welfare investigations focus on child safety, but also represent important opportunities to identify and address family needs. Parental depression is currently under-identified in this high-risk population. Use of standardized screening and assessment tools may improve caseworker identification of caregivers' mental health needs. Inclusion of such measures in agency practice directives could help instantiate their use.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1

Sample characteristics and logistic regression analysis of factors associated with caseworker identification of caregiver mental health treatment needs (N=885)

	Descriptive statistics	Logistic regression results[a]		
Variable Name	**% ± M SD**	**OR**	**S.E.**	**95% CI**
Caseworker identification of mental health needs	38			
Agency use of standardized assessment tool	25	1.68*	.43	1.01 – 2.80
Agency ties with mental health providers	1.88 ± .96	.88	.09	.71 – 1.09
Caseworker education				
Bachelor's or less (referent)	55			
BSW	18	1.29	.45	.64 – 2.60
MSW	16	1.61	.61	.75 – 3.45
Other graduate degree	11	.91	.34	.43 – 1.93
Caseworker years in child welfare	7.10 ± 5.44	1.02	.02	.98 – 1.07
Average # new cases to investigate (per month)	12.24 ± 7.96	.98*	.01	.97 – .99
Maltreatment report source				
Medical or mental health provider	11	2.36*	.97	1.04 – 5.39
Other (referent)	89			
Type of alleged maltreatment				
Neglect (referent)	34			
Physical abuse	16	1.19	.45	.56 – 2.55
Sexual abuse	9	.75	.36	.29 – 1.96
Substance abuse	13	.81	.28	.40 – 1.62
Domestic violence	9	.51	.19	.25 – 1.05
Other type of abuse	19	1.67	.56	.86 – 3.25
Co-occurring substance use disorder	19	1.51	.38	.91 – 2.51
Caregiver race/ethnicity				
White (referent)	57			
African-American	15	.85	.28	.44 – 1.65
Hispanic	22	.94	.22	.59 – 1.50
Other	6	2.47*	1.08	1.03 – 5.93
Caregiver relationship to child				
Mother (referent)	89			
Father	5	.84	.40	.32 – 2.17
Other	6	1.35	.49	.66 – 2.78
Child age in years	7.25 ± 4.59	.99	.03	.94 – 1.05

[a] Average Relative Variance Increase (RVI) = .01

*$p<.05$