

# Impact of Patients' Psychiatric Hospitalization on Caregivers: A Systematic Review

Bridget E. Weller, Ph.D., Madelaine Faulkner, M.P.H., Otima Doyle, Ph.D., Stephanie S. Daniel, Ph.D., David B. Goldston, Ph.D.

**Objective:** A systematic literature review was conducted to assess the impact of patients' psychiatric hospitalizations on caregivers.

**Methods:** A systematic search of the Web of Knowledge, PsycINFO, and MEDLINE (PubMed) was conducted for peer-reviewed articles published in English before August 31, 2013. Qualitative, quantitative, and mixed-methods studies were included if they focused on the outcomes of caregivers of either adult or youth patients and presented data collected directly from caregivers of patients who had been psychiatrically hospitalized.

**Results:** Twenty-nine articles met the inclusion criteria. The review found that caregivers are heterogeneous in their reaction to patients' psychiatric hospitalization; however, many report distress. Many caregivers have reported experiencing stigma, disruptions in daily life, worse general medical health,

economic strain, and changes in relationships after hospitalization. Negative reactions to the hospitalization may decrease over time, but distress can remain elevated compared with the general population. Nonetheless, many caregivers have also reported experiencing positive changes as a result of the hospitalization. The reaction of caregivers may be influenced by the severity of the patient's psychiatric problems as well as the caregiver's demographic characteristics and style of coping.

**Conclusions:** Caregivers experience a range of reactions to psychiatric hospitalizations. Providing caregivers with psychoeducation about their possible reaction to hospitalization and teaching them coping techniques may improve clinical outcomes for patients. Future research is needed to understand the heterogeneity in caregivers' reactions to patients' psychiatric hospitalization.

*Psychiatric Services* 2015; 66:527–535; doi: 10.1176/appi.ps.201400135

The trend toward brief psychiatric hospitalizations may place increased demands on caregivers, both during and after a patient's psychiatric hospitalization. Short inpatient stays may increase caregivers' need to adjust and resolve seemingly insurmountable circumstances with little or no external support, both during the patient's stay and after discharge. Furthermore, caregivers may need to support the patient after discharge because symptoms persist.

This article presents results from a systematic literature review that addressed three questions: What are the effects of psychiatric hospitalization on caregivers of patients? Do the effects on caregivers change over time? What factors influence the impact of the psychiatric hospitalization on caregivers? This review extends previous reviews (1,2) by focusing on multiple ways that psychiatric hospitalizations can affect caregivers of patients with a variety of psychiatric problems—not just those with a particular diagnosis.

## METHODS

This review was informed by three database searches: Web of Knowledge, PsycINFO, and MEDLINE (PubMed). Drawing on Angold and colleagues' work (3), our review examined multiple

ways that caregivers can be negatively affected (well-being, stigma, relationship changes, daily life, economic strain, and general medical health) and positively affected by the psychiatric hospitalization of the person they care for. Search terms included psychiatric or mental health AND inpatient or admission or hospital AND family members or caregiver or parent. Abstracts published before August 31, 2013, were reviewed; relevant articles and their reference lists were examined against inclusion criteria. Studies were included if they focused on caregiver outcomes, collected data from caregivers of patients (of any age) who were psychiatrically hospitalized for any reason, and were peer reviewed and published in English. Studies were excluded if they recruited caregivers from both inpatient and outpatient settings (4,5) or included data collected before 1980 (6–9). All articles (N=111) were independently reviewed by two authors. Discrepancies about whether a study met inclusion criteria were discussed (N=20), and consensus was obtained. Twenty-nine articles met inclusion criteria.

## RESULTS

Characteristics of caregivers and patients in the 29 articles are presented in Table 1. Thirteen studies focused on caregivers

of adults, eight on caregivers of youths, two on both, and six did not specify. Seven studies indicated whether patients had possible previous hospitalizations, and 24 included patients' age. Time between hospitalization and follow-up assessments was not provided in six studies, but in the other studies data were collected from baseline (during hospitalization) to approximately four years after the hospitalization. Table 2 summarizes methods used and areas of influence on caregivers.

### Effects of Psychiatric Hospitalization on Caregivers

*Psychological well-being.* Twenty-eight studies examined caregivers' psychological well-being. Qualitative interviews with caregivers of adults indicated that caregivers felt isolated and confused when dealing with mental health professionals (10). Further, caregivers of adults hospitalized for the first time reported experiencing disbelief and shame (11). In one study, 32 caregivers of adult patients with bipolar affective disorder reported feeling helpless, hopeless, and confused about the patient's behavior. In a study of 37 sibling-caregivers of adults with schizophrenia, siblings reported experiencing psychological distress as a result of the illness and the patient's management of the illness (11).

Using data from caregivers of youths, quantitative studies that compared caregivers of hospitalized individuals with caregivers of individuals not hospitalized found that the former group experienced more distress (12–15). For example, three days after their adolescent was admitted to the hospital, caregivers of the hospitalized youths reported experiencing more distress than caregivers of adolescents who had not been hospitalized, as measured by the general severity index of the Symptom Checklist 90 (SCL-90) (14). In addition, fathers of suicidal adolescents who also had mood disorders reported more somatic symptoms, hostility, anxiety, and depression than either fathers of nonhospitalized adolescents or fathers of adolescents hospitalized for other reasons, even after the analysis controlled for severity of adolescent depression (13). Mothers of youths hospitalized for mood disorders, regardless of whether the youths had a history of suicidal behaviors, reported more somatic symptoms, obsessive-compulsive symptoms, anxiety, and hostility than mothers of nonhospitalized adolescents; these differences were not significantly different after the analysis for severity of adolescent depression (13).

Using quantitative and qualitative methods, one study assessed parents' well-being before their adolescent attempted suicide, after first learning of the attempt, and the day after the attempt (16). Across time points, mothers reported increased sadness, anxiety, hostility, and caring. Fathers reported more sadness and caring after the suicide attempt than before the attempt, but they reported less anxiety than mothers.

Findings regarding caregivers' mental health are not uniform across studies. For example, in a study of 63 caregivers of adults with a first onset of schizophrenia, fewer than 10% of female caregivers experienced significant distress, as reflected by global severity scores on the SCL-90 (17). Similarly, caregivers (N=32) of geriatric patients did not report elevated scores on the Brief Symptom Inventory (18).

*Stigma.* Caregivers may experience stigma associated with patients' psychiatric hospitalization. Stigma may be reflected in caregivers' negative self-valuation, feelings of shame or embarrassment, or perceptions of being viewed or treated differently by others, presumably because of their caretaking role and association with the patient (19). Caregivers may also be self-devaluing or concerned about others' perceptions about causes of the illness, such as genetics or the patient's upbringing.

Six studies addressed caregivers' experiences of stigma (19–24). Caregivers of 16- to 24-year-olds with nonaffective psychotic disorder reported feeling ashamed, describing schizophrenia as “the ‘s’ word” and “a dirty word” (22). Caregivers of 25 adults in an extended care hospital reported “struggling” with the patient's mental illness, wariness regarding their family's and community's reaction to the illness, and selective acknowledgment of the illness among relatives (23). Similarly, caregivers of young adults reported not sharing information about the illness and hospitalization with friends or coworkers and, in one instance, with the hospitalized person's siblings (20). Caregivers also reported exacerbated feelings of isolation experienced during the hospitalization (20). In a cross-sectional quantitative study, the extent to which 156 caregivers of patients hospitalized for psychosis who were between the ages of 16 and 26 and who had disclosed their mental illness to others were assessed six months posthospitalization (19). Forty percent of caregivers either concealed the hospitalization from everyone or told only a few people.

*Daily life.* Six studies examined changes in caregivers' daily life. Five studies focused on caregivers of adults (18,21,25–27), and one study did not report the patients' age (28). In assessments conducted at least six months after hospitalization, almost 30% of 125 caregivers reported disruption in their everyday activities (26). Caregivers (N=162) of patients hospitalized for violence or suicide attempts made similar reports using a semistructured, reliable, Swedish instrument (25). Three weeks after discharge, 28% of caregivers reported lost leisure time, 33% reported not being able to have company, and 16% quit working (25). Twelve percent of caregivers (N=41) of adults with bipolar disorder reported limitations in their work, and among caregivers who worked outside the home, 76% reported that they reduced the number of hours they worked or took time off (21). In contrast to these findings, 32 caregivers of geriatric patients reported life changes on the Life Experience Survey that were not significantly different from those of a normative sample of college students (18). Caregivers commonly reported changes in sleeping and eating patterns.

*Economic strain.* Five studies examined economic strain among caregivers (21,23,26,29,30). In a sample of 125 caregivers of adults, 38% reported financial strain six months after the patient was discharged (26). Similarly, of 41 caregivers of adults with bipolar disorder who were interviewed two years

**TABLE 1. Characteristics of caregivers and patients in 29 studies reviewed<sup>a</sup>**

Study and country	Caregiver type	Caregiver race	Patient race and age group	Previously hospitalized	Patient diagnosis
Bauer et al., 2011 (37); Germany	18 spouses, 7 parents, 3 children, 3 siblings, 1 friend	nr	nr	nr	32 bipolar disorder
Clarke and Winsor, 2010 (20); Canada	9 mothers, 1 father	nr	nr; adults	nr	nr
Dore and Romans, 2001 (21); New Zealand	15 parents, 13 partners, 9 other relatives, 3 friends, 1 sibling	nr	nr; adults	nr	Bipolar disorder
Gerson et al., 2009 (22); U.S.	9 mothers, 3 fathers, 1 brother, 1 aunt	nr	5 white, 4 Hispanic, 3 black, 1 East Asian; youths and adults	nr	6 schizophrenia, 6 psychotic disorder NOS, 1 schizoaffective disorder
Hanson, 1995 (10); U.S.	20 mothers, 9 fathers, 2 wives, 2 sisters, 1 in-law	nr	nr; adults	Average of 5.6	nr
Heru et al., 2004 (31); U.S.	24 spouses, 8 parents, 4 children, 2 others, 1 sibling	nr	nr; adults	nr	22 major depressive disorder, 17 bipolar disorder
Heru and Ryan, 2004 (32); U.S.	11 spouses, 4 parents, 2 children, 2 others	nr	nr; adults	nr	10 major depressive disorder, 9 bipolar disorder
Hinrichsen and Lieberman, 1999 (17); U.S.	33 mothers or stepmothers, 11 fathers, 7 siblings, 6 spouses, 4 other family	nr	27 white, 24 black, 12 Hispanic, Asian, or other; adults	First	45 schizophrenia, 13 schizoaffective disorder and depression, 5 schizoaffective disorder and manic
King et al., 1993 (13); U.S.	53 both parents, 26 single biological parents, 13 biological and stepparents, 7 neither parent	nr	91 white, 6 other, 5 black; youths	nr	51 major depressive disorder and suicidal behaviors, 23 behavior disorder and suicidal behaviors, 18 dysthymia, 16 anxiety disorder, 14 eating disorder, 9 bipolar disorder, 2 psychotic disorder
King et al., 1997 (12); U.S.	74 parents	nr	57 white, 6 black, 3 other; youths	nr	48 major depressive disorder, 16 conduct disorder, 15 dysthymia, 12 alcohol use disorder, 10 other substance use disorder, 10 social phobia, 9 ADHD, 8 generalized anxiety disorder, 7 oppositional defiant disorder, 7 eating disorder, 6 separation anxiety disorder, 6 PTSD, 4 bipolar disorder, 1 depressive disorder NOS
Kjellin and Ostman, 2005 (25); Sweden	45 spouses, 42 parents, 18 children, 42 siblings or other relatives, 8 close friends	nr	nr; adults	nr	48 schizophrenia, delusional disorders, schizoaffective disorder, schizophreniform disorder, or atypical psychosis; 67 affective mood disorder, 40 other
Knox and Singh, 2007 (38); U.S.	51 mothers, 4 grandmothers, 3 fathers, 1 foster mother	nr	48 white, 5 black, 4 Hispanic, 4 biracial or other; youths	nr	nr
Lauber et al., 2003 (28); Switzerland	64 caregivers	nr	nr	nr	Schizophrenia
Möller-Leimkühler, 2005 (33); Germany	65 spouses, 17 parents, 1 brother	nr	nr	nr	Schizophrenia, major depressive disorder

*continued*

TABLE 1, *continued*

Study and country	Caregiver type	Caregiver race	Patient race and age group	Previously hospitalized	Patient diagnosis
Möller-Leimkühler, 2006 (34); Germany	52 spouses, 16 parents, 1 brother	nr	nr	nr	Schizophrenia, major depressive disorder
Möller-Leimkühler and Obermeier, 2008 (36); Germany	51 spouses, 11 parents	nr	nr	nr	Schizophrenia, major depressive disorder
Möller-Leimkühler and Mädger, 2011 (35); Germany	52 spouses, 11 parents	nr	nr	nr	Schizophrenia, major depressive disorder
Ostman et al., 2000 (27); Sweden	35 parents, 26 spouses, 11 children, 7 other relatives, 3 nonrelatives	nr	nr; adults	nr	54 psychosis; 34 major depressive disorder, bipolar disorder, or anxiety disorder; 12 other
Owens and Qualls, 1997 (18); U.S.	22 children, 5 spouses, 4 parents, 1 sibling	nr	23 white; adults	nr	nr
Phelan et al., 1998 (19); U.S.	29 spouses, 94 parents who live with patient, 45 parents who do not live with patient, 27 others	154 white, 247 black, 14 Hispanic	nr; youths and adults	First	nr
Puotiniemi et al., 2001 (29); Finland	55 mothers, 23 fathers, 1 stepmother	nr	nr; youths	79% first hospitalization	nr
Puotiniemi et al., 2002 (30); Finland	55 mothers, 23 fathers, 1 stepmother	nr	nr; youths	79% first hospitalization	Emotional and conduct disorders, major depressive disorder, ADHD, eating disorders
Ronan et al., 2008 (14); U.S.	60 parents	nr	nr; youths	nr	25 major depressive disorder, 13 dysthymia, 7 ADHD, 7 adjustment disorder, 5 conduct disorders, 2 anxiety disorders, 1 schizophrenia
Schmid et al., 2009 (11); Germany	37 siblings	nr	nr; adults	nr	37 schizophrenia
Snell et al., 2010 (15); U.S.	35 mothers, 2 fathers, 1 nonparental figure	nr	nr; youths	32% previously hospitalized	Major depressive disorder, bipolar II disorder, adjustment disorder with depressed mood, and depressive disorder secondary to a general medical condition
Solomon et al., 1988 (23); U.S.	13 parents	nr	16 white; adults	Average of 9	Schizophrenia
Stueve et al., 1997 (24); U.S.	180 caregivers	93 white, 43 black, 43 Hispanic	nr; adults	nr	Schizophrenia, major depressive disorder
Thompson and Doll, 1982 (26); U.S.	53 parents, 44 spouses, 30 siblings, children, or relatives	73 white	nr; adults	nr	nr
Wagner et al., 2000 (16); U.S.	19 biological mothers, 6 biological fathers, 5 stepfathers, 1 stepmother, 1 adoptive mother, 1 adoptive father, 1 grandmother	20 white, 3 black, 1 Hispanic	18 white, 3 black, 2 Hispanic; youths	nr	Serious suicide attempt

<sup>a</sup> nr, not reported

**TABLE 2. Methods and outcomes for primary caregivers in 29 reviewed studies<sup>a</sup>**

Study and country	Data source <sup>b</sup>	Time of assessment	Primary outcome
Bauer et al., 2011 (37); Germany	Problem-focused semistructured interviews	nr	Degree of patients' illness, degree of support
Clarke and Winsor, 2010 (20); Canada	Qualitative interviews	nr	Personal well-being, stigma
Dore and Romans, 2001 (21); New Zealand	Semistructured interviews using the General Health Questionnaire	2 years posthospitalization	Personal well-being, stigma, daily life, economic strain, relationship changes, positive impact
Gerson et al., 2009 (22); U.S.	Qualitative interviews	During hospitalization	Personal well-being, stigma
Hanson, 1995 (10); U.S.	Qualitative interviews	nr	Personal well-being
Heru et al., 2004 (31); U.S.	Caregiver Strain Scale, visual analog scales	nr	Personal well-being, general medical health, positive impact
Heru and Ryan, 2004 (32); U.S.	Family Assessment Device, MOS-36, Caregiver Strain Scale, Instrumental Activities of Daily Living	1 year posthospitalization	Positive impact
Hinrichsen and Lieberman, 1999 (17); U.S.	Health and Daily Living Form, Dementia Management Strategies Scale, Patient Rejection Scale, Burden Interview, SCL-90	Shortly after admission	Personal well-being, coping, caregiver attributes
King et al., 1993 (13); U.S.	SCL-90-Revised, SAS-SR, McMaster Family Assessment Device	During hospitalization	Personal well-being
King et al., 1997 (12); U.S.	SCL-90-Revised, SAS-SR	During hospitalization and 6 to 8 months posthospitalization	Personal well-being, relationship
Kjellin and Ostman, 2005 (25); Sweden	Semistructured questionnaire	1 month after admission	Personal well-being, daily life
Knox and Singh, 2007 (38); U.S.	Parenting Stress Index	During hospitalization	Personal well-being
Lauber et al., 2003 (28); Switzerland	Semistructured interviews	4 years and 3 months after admission	Personal well-being, daily life, relationship changes
Möller-Leimkühler, 2005 (33); Germany	5-minute speech sample, Family Questionnaire, semistructured biographical interviews, family burden questionnaire, subjective beliefs of competence and control (German questionnaire), NEO Five-Factor Inventory, perceived social support (German questionnaire), Lancashire Quality of Life Profile	Baseline, with unspecified details	Personal well-being, coping
Möller-Leimkühler, 2006 (34); Germany	Qualitative interview, generalized stress response, Ways of Coping Checklist (German version), subjective beliefs of competence and control, NEO Five-Factor Inventory, perceived social support, subjective well-being, SCL-90-Revised, Lancashire Quality of Life Profile	1 year posthospitalization	Personal well-being, stress, diagnoses
Möller-Leimkühler and Obermeier, 2008 (36); Germany	Qualitative interview, generalized stress response, Ways of Coping Checklist (German version), subjective beliefs of competence and control, NEO Five-Factor Inventory, perceived social support, subjective well-being, SCL-90-R, Lancashire Quality of Life Profile	2 years posthospitalization	Personal well-being, burden

*continued*

TABLE 2, *continued*

Study and country	Data source <sup>b</sup>	Time of assessment	Primary outcome
Möller-Leimkühler and Mäddger, 2011 (35); Germany	NEO Five-Factor Inventory, family burden questionnaire, SCL-90	2 years posthospitalization	Personal well-being, gender differences
Ostman et al., 2000 (27); Sweden	Semistructured questionnaire	During hospitalization	Personal well-being, care, support
Owens and Qualls, 1997 (18); U.S.	Life Experiences Survey, Burden Interview, Brief Symptom Inventory, responsible family member evaluation form	During hospitalization	Personal well-being
Phelan et al., 1998 (19); U.S.	Open-ended questions from SAS	Baseline, with unspecified details and 6 months postbaseline assessment	Stigma
Puotiniemi et al., 2001 (29); Finland	Questionnaires with 93 items (5-point Likert scales) on 5 topics: coping, coping demands, coping strategies, coping resources, and social support	During hospitalization, with measures provided, unspecified when returned	Personal well-being, economic strain, Relationship changes
Puotiniemi et al., 2002 (30); Finland	Questionnaires, open-ended questions about social support	During hospitalization, with measures provided, unspecified when returned	Economic strain, relationship changes
Ronan et al., 2008 (14); U.S.	SCL-90-R, Life Experiences Survey, problem solving inventory, 3 subscales from the McMaster Family Assessment Device	3 days after admission	Personal well-being
Schmid et al., 2009 (11); Germany	Narrative interviews	nr	Personal well-being, relationship changes, positive impact
Snell et al., 2010 (15); U.S.	Semistructured interviews, global assessment of each caregiver's emotional state, caregiver interviews	During hospitalization and 2 to 6 weeks after first assessment	Personal well-being
Solomon et al., 1988 (23); U.S.	Qualitative interviews, survey item	During hospitalization	Stigma, economic strain, relationship changes
Stueve et al., 1997 (24); U.S.	Perceived burden scale, Brief psychiatric symptom scale, caregiver help scale, network help scale, network quality scale	Baseline, with unspecified details, and 6 to 12 months postbaseline	Personal well-being, stigma
Thompson and Doll, 1982 (26); U.S.	Index of family member embarrassment, incomplete-sentence blank test	Recruitment began six months postdischarge, other details unspecified	Personal well-being, economic strain, burden
Wagner et al., 2000 (16); U.S.	Reaction to suicide attempt scale (modification of statement rating scale), family history interview	During hospitalization	Personal well-being

<sup>a</sup> nr=not reported<sup>b</sup> MOS-36, Medical Outcomes Study 36-Item Short Form; SCL-90, Symptom Checklist-90; SAS-SR, Social Adjustment Scale-Self Report Form

after the hospitalization, 27% reported a reduction in their income (21). Similar findings were reported by other researchers (23) who used assessments conducted during the hospitalization. Furthermore, caregivers of youths reported a link between economic strain and coping difficulties (29,30). Economic strain may result from the cost of treatment and travel to the hospital or treatment site (23).

**General medical health.** Two studies examined the impact of the psychiatric hospitalization of adult patients on caregivers' general medical health (28,31). Caregivers of individuals with

depression or bipolar disorder reported more bodily pain and less energy than individuals in the community who were matched by age (31,32). In the second study (patients' age unspecified), 16% of caregivers of patients with schizophrenia reported that the illness had an impact on their or a family member's general medical health (28).

**Relationships.** Six studies examined the relationships between caregivers and adult patients (8,11,21,23,28,29), and another examined changes in caregivers' relationships with others after hospitalization (23). On the basis of data collected two years



after the patient was discharged, 90% of caregivers felt their relationship with the patient was distant (21). Moreover, 44% of the caregivers (especially partners) reported experiencing violence from the patient or feared experiencing such violence. Partners also reported sexual relationship issues, which sometimes persisted after the patient recovered. In a sample of 64 caregivers of patients with schizophrenia, 73% reported that their relationship with the patient had partly worsened since the hospitalization, which occurred about four years before the assessment (28). In contrast to changes in relationships with the patient, caregivers in one study did not report changes in relationships with others in general after hospitalization (23). Caregivers of youths made similar reports—no effect (15) or negative effect (29,30).

*Positive impact.* Four studies reported that the hospitalization had a positive impact on caregivers (11,21,31,32). Caregivers reported that caregiving was rewarding (31) or that it improved relationships when the patient was doing better (21). One caregiver reported, “He’s more open with me now than he used to be. And I’m more nurturing than I used to be. I take more care of him and listen more” (21). Similarly, in the narratives of sibling-caregivers of patients with schizophrenia, siblings reported a “deeper bond” with the sibling, a “more intense bond among family members,” and other positive outcomes (11). Further, siblings reported that their experience with the patient often shaped their choice to work in the social sector.

### Changes Over Time

Six studies focused on the effects of psychiatric hospitalization over time on caregivers (15,32–36). In a series of studies from Munich, Möller-Leimkühler and colleagues (33–36) examined the impact on caregivers of individuals (age unspecified) with schizophrenia or depression. Using data collected three weeks postdischarge (baseline), they found that 71% of caregivers reported changes in their daily routines and that 64% reported restrictions in leisure activities because of problems related to patients’ behavior. Caregivers also reported higher levels of distress than normative samples, as measured by the SCL-90 (33). These negative effects continued one year after discharge, although the level of impairment or interference was often less severe than reported at baseline (34). Two years after discharge, caregivers reported few changes in their daily lives or being bothered by the patient; however, compared with normative scores, their scores remained elevated (36). In addition, caregivers did not report a significant improvement in their well-being, as measured on the SCL-90, from year 1 to year 2.

Another study examined whether caregivers of individuals with depression (N=12) were affected differently from caregivers of adults with bipolar disorder (N=10) in the year after hospitalization (32). The authors reported decreased strain among caregivers of patients with bipolar disorder and no change among caregivers of patients with depression, although these findings did not reach significance because of the small sample.

A study by Snell and colleagues (15) examined changes in depression and anxiety among caregivers of youths with various diagnoses. From one week to three weeks post-hospitalization, 35 caregivers rated their distress by using a Likert scale; their ratings decreased significantly from week 1 to week 3.

### Factors Influencing the Impact on Caregivers

Fifteen studies examined factors associated with how caregivers are affected by a patient’s psychiatric hospitalization (13,17–19,24–26,29–31,34–38), particularly the reason for the hospitalization and the patient’s diagnosis. Most of these studies focused on caregivers of adult patients. In several studies, compared with caregivers of patients hospitalized for other reasons, caregivers of patients hospitalized for a suicide attempt reported more issues with negative well-being (that is, mental health problems and worry) (25,37). Compared with caregivers of patients with depression, caregivers of patients with bipolar disorder reported more changes in their lifestyle, worse family functioning, and not feeling as much reward for providing care one year after discharge (32).

Caregivers’ demographic characteristics (such as gender, race-ethnicity, and socioeconomic status) also were identified as potential factors associated with the impact of hospitalization on caregivers. Among caregivers of adults, gender differences were not associated with caregiver reports of stigma (26) or psychological distress (36). On the other hand, results of one study indicated that mothers of youths who are psychiatrically hospitalized may experience more changes in their lives than fathers (13). With regard to racial and ethnic differences, black caregivers in one study reported less impact than white and Hispanic caregivers on their roles and responsibilities (24). The role of caregivers’ socioeconomic status is unclear. One study noted that caregivers with high socioeconomic status reported more stigma than individuals with lower socioeconomic status (19), whereas this difference was not noted in another study (26).

Four studies examined caregivers’ coping (17,29,30,38). Caregivers of adults reported using avoidance coping strategies, which was linked to more negative changes in their daily life (17). Caregivers of youths reported using emotional and instrumental or hands-on support (30), and access to respite care was associated with less stress (38). Despite these resources, caregivers of youths reported needing more support (29,30).

Factors that change over time may also explain how caregivers are affected. One study (patients’ age unspecified) provided the following reasons for changes over time: “[expressed emotion], patients’ residual symptoms, patients’ global functioning, neuroticism, emotion-focused coping, problem-focused coping, self-efficacy, general negative stress response, perceived social support, additional life stressors, extraversion, sociability, openness, conscientiousness” (36). Caregivers’ personality traits were associated with caregivers’ well-being, with higher scores for neuroticism, as measured by the NEO Five-Factor Inventory, associated with poorer well-being (35).

## DISCUSSION

This systematic review of 29 articles highlights the impact of patients' psychiatric hospitalization on caregivers. Caregivers experience a range of positive and negative reactions to hospitalization; they have reported decreasing negative impacts over time (36) and more negative emotional experiences than the general population (14). Several factors may explain differences in caregivers' experience, including the severity of the patient's psychiatric problems. Further, caregivers experience a continuum of reactions to caring for patients after hospitalization, with some reporting few disruptions and others reporting multiple impacts, including disruptions in daily activities and stigma. This heterogeneity in reactions may be partly attributable to the characteristics of caregivers and patients. Caregivers' reactions may also be influenced by coping style, cultural-ethnic perceptions of mental illness, and beliefs about mental illness.

### Practice Implications

Results of this review have implications for practice. Clinicians should include caregivers in treatment and discharge planning to enhance caregivers' capacity to support the patient during and after hospitalization. Caregivers need education about the negative effects that severe psychiatric difficulties may have on them. Such education may normalize and validate the caregivers' reactions and assist caregivers in developing and using coping skills to handle stresses during and after hospitalization. Teaching caregivers stress management skills (for example, breathing exercises and daily walks) or providing referrals for community resources (for example, the National Alliance on Mental Illness or the local mental health association) may decrease stresses associated with the patient's hospitalization (20,39).

Educating clinicians about potential caregiver reactions may also improve clinical outcomes for patients. Clinicians need to be aware that caregivers may be dealing with their own issues related to hospitalization or other issues and may need resources and referrals after the patient's discharge.

### Research Implications

Several directions for future research are suggested. First, researchers need a consistent way of operationalizing impact (positive and negative) to increase ease of drawing conclusions across studies. Second, new comprehensive conceptual or theoretical models are needed. Existing models focus on stress and coping (17,29,30) without considering factors identified in this review (for example, characteristics of caregivers and patients) or cultural and ethnic differences. Of the 29 studies reviewed, three included data on caregivers' race-ethnicity, eight reported patients' race-ethnicity, and one focused on cultural and ethnic differences. In addition, duration of the illness, number of hospitalizations, and caregiver satisfaction with hospitalization and staff are factors potentially related to the impact on caregivers and need further study. None of the reviewed studies examined the impact of these factors on caregivers' reactions,

whereas research on caregivers of individuals hospitalized for nonpsychiatric reasons has shown negative impacts on caregivers, including on financial status (40), caregiver-patient relationship quality (41), and patient functioning and caregiver support (42). Third, greater understanding is needed of the heterogeneity of effects of psychiatric hospitalizations on caregivers, with a focus on characteristics of patients' illness (for example, duration of illness, patients' age, and degree of risk for harm). Identifying profiles of caregivers' experiences after hospitalization could illuminate different ways that caregivers are affected and could inform practice.

## CONCLUSIONS

Caregivers experience positive and negative reactions to patients' psychiatric hospitalization. Research is needed to determine which specific characteristics of caregivers and patients are most highly associated with caregiver outcomes, providing a platform for informing interventions and, ultimately, for improving clinical care for patients and their caregivers.

### AUTHOR AND ARTICLE INFORMATION

Dr. Weller and Dr. Goldston are with the Department of Psychiatry and Behavioral Sciences, Duke University School of Medicine, Durham, North Carolina (e-mail: [bridget.weller@duke.edu](mailto:bridget.weller@duke.edu)). Ms. Faulkner and Dr. Daniel are with the Center for Youth, Family, and Community Partnerships, University of North Carolina at Greensboro. Dr. Doyle is with Jane Addams College of Social Work, University of Illinois at Chicago.

The research was supported by the National Institute of Mental Health of the National Institutes of Health (NIH) under award number R01MH081947. The content is solely the responsibility of the authors and does not necessarily represent the official views of NIH.

The authors report no financial relationships with commercial interests.

Received March 27, 2014; revision received September 12, 2014; accepted October 27, 2014; published online February 17, 2015.

### REFERENCES

1. Loukissa DA: Family burden in chronic mental illness: a review of research studies. *Journal of Advanced Nursing* 21:248–255, 1995
2. Fadden G, Bebbington P, Kuipers L: The burden of care: the impact of functional psychiatric illness on the patient's family. *British Journal of Psychiatry* 150:285–292, 1987
3. Angold A, Messer SC, Stangl D, et al: Perceived parental burden and service use for child and adolescent psychiatric disorders. *American Journal of Public Health* 88:75–80, 1998
4. Corcoran C, Gerson R, Sills-Shahar R, et al: Trajectory to a first episode of psychosis: a qualitative research study with families. *Early Intervention in Psychiatry* 1:308–315, 2007
5. Zendjidian X, Richieri R, Adida M, et al: Quality of life among caregivers of individuals with affective disorders. *Journal of Affective Disorders* 136:660–665, 2012
6. Hoening J, Hamilton MW: The schizophrenic patient in the community and his effect on the household. *International Journal of Social Psychiatry* 12:165–176, 1966
7. Herz MI, Endicott J, Gibbon M: Brief hospitalization: two-year follow-up. *Archives of General Psychiatry* 36:701–705, 1979
8. Wing JK, Monck E, Brown GW, et al: Morbidity in the community of schizophrenic patients discharged from London mental hospitals in 1959. *British Journal of Psychiatry* 110:10–21, 1964
9. Grob M, Edinburg G: How families view psychiatric hospitalization for their adolescents: a follow-up study. *International Journal of Social Psychiatry* 18:14–21, 1972



10. Hanson J: Families' perceptions of psychiatric hospitalization of relatives with a severe mental illness. *Administration and Policy in Mental Health and Mental Health Services Research* 22:531–541, 1995
11. Schmid R, Schielein T, Binder H, et al: The forgotten caregivers: siblings of schizophrenic patients. *International Journal of Psychiatry in Clinical Practice* 13:326–337, 2009
12. King CA, Hovey JD, Brand E, et al: Suicidal adolescents after hospitalization: parent and family impacts on treatment follow-through. *Journal of the American Academy of Child and Adolescent Psychiatry* 36:85–93, 1997
13. King CA, Segal HG, Naylor M, et al: Family functioning and suicidal behavior in adolescent inpatients with mood disorders. *Journal of the American Academy of Child and Adolescent Psychiatry* 32:1198–1206, 1993
14. Ronan GF, Dreer LE, Gerhart JI: Adolescent psychiatric patients and their parents: comparison with a non-clinical cohort. *International Journal of Adolescent Medicine and Health* 20:405–418, 2008
15. Snell C, Marcus NE, Skitt KS, et al: Illness-related concerns in caregivers of psychiatrically hospitalized children with depression. *Residential Treatment for Children and Youth* 27:115–126, 2010
16. Wagner BM, Aiken C, Mullaley PM, et al: Parents' reactions to adolescents' suicide attempts. *Journal of the American Academy of Child and Adolescent Psychiatry* 39:429–436, 2000
17. Hinrichsen GA, Lieberman JA: Family attributions and coping in the prediction of emotional adjustment in family members of patients with first-episode schizophrenia. *Acta Psychiatrica Scandinavica* 100:359–366, 1999
18. Owens SJ, Qualls SH: Family stress at the time of a geropsychiatric hospitalization. *Family Relations* 46:179–185, 1997
19. Phelan JC, Bromet EJ, Link BG: Psychiatric illness and family stigma. *Schizophrenia Bulletin* 24:115–126, 1998
20. Clarke D, Winsor J: Perceptions and needs of parents during a young adult's first psychiatric hospitalization: "we're all on this little island and we're going to drown real soon." *Issues in Mental Health Nursing* 31:242–247, 2010
21. Dore G, Romans SE: Impact of bipolar affective disorder on family and partners. *Journal of Affective Disorders* 67:147–158, 2001
22. Gerson R, Davidson L, Booty A, et al: Families' experience with seeking treatment for recent-onset psychosis. *Psychiatric Services* 60:812–816, 2009
23. Solomon P, Beck S, Gordon B: Family members' perspectives on psychiatric hospitalization and discharge. *Community Mental Health Journal* 24:108–117, 1988
24. Stueve A, Vine P, Struening EL: Perceived burden among caregivers of adults with serious mental illness: comparison of black, Hispanic, and white families. *American Journal of Orthopsychiatry* 67:199–209, 1997
25. Kjellin L, Ostman M: Relatives of psychiatric inpatients: do physical violence and suicide attempts of patients influence family burden and participation in care? *Nordic Journal of Psychiatry* 59:7–11, 2005
26. Thompson EH, Doll W: The burden of families coping with the mentally ill: an invisible crisis. *Family Relations* 31:379–388, 1982
27. Ostman M, Hansson L, Andersson K: Family burden, participation in care and mental health: an 11-year comparison of the situation of relatives to compulsorily and voluntarily admitted patients. *International Journal of Social Psychiatry* 46:191–200, 2000
28. Lauber C, Eichenberger A, Luginbühl P, et al: Determinants of burden in caregivers of patients with exacerbating schizophrenia. *European Psychiatry* 18:285–289, 2003
29. Puotiniemi T, Kyngäs H, Nikkonen M: Factors associated with the coping of parents with a child in psychiatric inpatient care. *International Journal of Nursing Practice* 7:298–305, 2001
30. Puotiniemi TA, Kyngäs HA, Nikkonen MJ: The resources of parents with a child in psychiatric inpatient care. *Journal of Psychiatric and Mental Health Nursing* 9:15–22, 2002
31. Heru AM, Ryan CE, Vlastos K: Quality of life and family functioning in caregivers of relatives with mood disorders. *Psychiatric Rehabilitation Journal* 28:67–71, 2004
32. Heru AM, Ryan CE: Burden, reward and family functioning of caregivers for relatives with mood disorders: 1-year follow-up. *Journal of Affective Disorders* 83:221–225, 2004
33. Möller-Leimkühler AM: Burden of relatives and predictors of burden: baseline results from the Munich 5-year-follow-up study on relatives of first hospitalized patients with schizophrenia or depression. *European Archives of Psychiatry and Clinical Neuroscience* 255:223–231, 2005
34. Möller-Leimkühler AM: Multivariate prediction of relatives' stress outcome one year after first hospitalization of schizophrenic and depressed patients. *European Archives of Psychiatry and Clinical Neuroscience* 256:122–130, 2006
35. Möller-Leimkühler AM, Mädger F: Personality factors and mental health outcome in caregivers of first hospitalized schizophrenic and depressed patients: 2-year follow-up results. *European Archives of Psychiatry and Clinical Neuroscience* 261:165–172, 2011
36. Möller-Leimkühler AM, Obermeier M: Predicting caregiver burden in first admission psychiatric patients: 2-year follow-up results. *European Archives of Psychiatry and Clinical Neuroscience* 258:406–413, 2008
37. Bauer R, Gottfriedsen GU, Binder H, et al: Burden of caregivers of patients with bipolar affective disorders. *American Journal of Orthopsychiatry* 81:139–148, 2011
38. Knox M, Singh T: Parenting stress in primary caregivers of psychiatrically hospitalized children. *Psychiatry On-Line*, 2007. Available at [www.priory.com/psych/Parental\\_stress.htm](http://www.priory.com/psych/Parental_stress.htm)
39. Melnyk BM: Intervention studies involving parents of hospitalized young children: an analysis of the past and future recommendations. *Journal of Pediatric Nursing* 15:4–13, 2000
40. Gardiner C, Brereton L, Frey R, et al: Exploring the financial impact of caring for family members receiving palliative and end-of-life care: a systematic review of the literature. *Palliative Medicine* 28:375–390, 2014
41. de Graaff FM, Mistiaen P, Devillé WL, et al: Perspectives on care and communication involving incurably ill Turkish and Moroccan patients, relatives and professionals: a systematic literature review. *BMC Palliative Care* 11:17, 2012
42. Sander AM, Maestas KL, Clark AN, et al: Predictors of emotional distress in family caregivers of persons with traumatic brain injury: a systematic review. *Brain Impairment* 14:113–129, 2013