Caregiver Reports of Patient-Initiated Violence in Psychosis

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Key Words: caregivers, psychosis, violence

Objective: Aggressive behaviour in psychosis is not uncommon. Community provision for people with psychosis has left informal caregivers to take on a greater role in their care. However, few studies have explored links between patient-initiated violence in mental health caregiving relationships and caregiver functioning. Our study investigated caregiver reports of aggressive acts committed by their relative with psychosis and their links to caregiver appraisals of the caregiving relationship and caregiver outcomes.

Method: Caregivers of patients with a recent relapse of psychosis, recruited to a psychological therapy trial, completed the audiotaped Camberwell Family Interview at baseline. This semi-structured interview includes questions on the quality of the relationship between caregiver and patient, and patient history of violence. Seventy-two transcripts of interviews were assessed for reports of patient-initiated violence.

Results: One-half of the caregiver sample (52.9%) reported an incident of patient-initiated violence during their interview; 62.2% of these involved violence toward themselves, and 24.3% toward property. Reports of patient violence were associated with caregiver ratings of hostility expressed toward patients, lower self-esteem, and emotion-focused coping. People caring on their own were more likely to report incidents of patient violence. Younger patients, males, and inpatients were more frequently identified as having a history of this kind of violence.

Conclusions: Our findings suggested that caregiver reports of patient-initiated violence in psychosis are not uncommon. Mental health staff need to be aware of the risks of such violence for caregivers of people with psychosis, and consider appropriate procedures for minimizing it.

Clinical Trial Registration Number: ISRCTN83557988

Rapports de soignants sur la violence initiée par les patients dans la psychose

Objectif : Le comportement agressif n’est pas rare dans la psychose. Les services communautaires pour les personnes souffrant de psychose ont laissé des soignants naturels assumer un rôle plus important dans leurs soins. Toutefois, peu d’études ont exploré les liens entre la violence initiée par les patients dans les relations de soins de santé mentale et le fonctionnement des soignants. Notre étude a examiné les rapports de soignants sur des actes agressifs commis par leur parent souffrant de psychose et leurs liens avec les évaluations des soignants de la relation de soins et des résultats pour les soignants.
Clinical Implications

- Carergivers may benefit from interventions that promote their safety through developing skills in violence resolution, problem-solving, and identifying and managing early warning signs of patient violence.
- Patients may benefit from CBT interventions to address anger management issues.
- Assessing caregivers’ experience of patient-initiated violence as part of routine risk assessment, should be considered.

Limitations

- Accuracy checks on caregiver reports of patient violence were not undertaken.
- Our study employed a cross-sectional design, which precludes causal inferences being made.
- Carergivers were predominately white, middle-aged females who were the mothers of the patients who had recently relapsed and were recruited as part of a psychological therapies trial. Caution must be taken in generalizing current findings to other caregiver groups.
of patient symptomatology. EE remains of interest to clinicians because high levels serve as robust predictors of poorer patient outcomes, including increased rates of patient relapse and inpatient readmissions. In comparison of caregivers’ experience of violent acts committed by their relative with psychosis, with the general population, people with psychosis are statistically more likely to be victims of violence. However, they also perpetrate acts of violence. This is particularly evident during the FEP and during the first year of illness. Data from a large-scale United Kingdom study of FEP cases indicated that nearly 40% of participants were aggressive at first service contact, with more than one-half reported as being physically violent. Similarly, in a small study of service users attending a routine service for people with at-risk psychosis mental states, 38% had a history of violent behaviour. Methodological limitations inherent in many studies exploring violence and psychosis (for example, definitional issues or lack of adequate control group) can influence the conclusions drawn about associations and risk factors. However, several risk factors for violence in patients with psychosis have been identified; these include younger age, polysubstance use, ethnicity, mania symptoms, patient appraisals of personal threat, and the experience of thoughts that override their sense of control. Caregivers, particularly mothers who live with patients, are more likely than members of the general public to be the target of violent acts committed by their relative with psychosis and withstand more severe injuries.

Loughland et al reported that during the preceding 12 months, almost 80% of caregivers sampled had experienced moderate to severe levels of aggression from their relatives with psychosis, which was mainly in the form of verbal aggression. More than one-fifth also reported having feared for their lives and expressed concern about the violence reoccurring. Chan found that over one-third (37.7%) of caregivers of people with a diagnosis of schizophrenia reported at least one incident of severe physical assault and one-half (52.4%) reported a minor physical assault. In a study of service users with psychosis in a community mental health team, at least 40% of caregivers had been threatened with violence from the service user since illness onset; among whom, 40% had been struck, 17% had sustained a physical injury, and 40% reported that the patient had destroyed property. In addition, 66% of caregivers reported that the patient regularly lost their temper. Reports of verbal and physical abuse in patients were positively correlated. Data taken from a small qualitative investigation suggested that caregivers may minimize or fail to appreciate the degree of threat posed by the patient’s aggression. Despite this literature, the links between patient-initiated violence and caregiver outcomes in psychosis have rarely been investigated. A small body of evidence suggests that verbal and physical aggression from patients are positively related to trauma symptoms in caregivers. Reported physical abuse by patients also shares a positive relation with caregiver reports of burden, distress, and patient-focused criticism. There have been no investigations of how patient-initiated violence relates to caregiver attributes (for example, coping styles) that are already known to impact on caregiver and patient outcomes.

Our study aimed to use the semi-structured CFI to investigate caregivers’ reports of patient-initiated violence and their links with caregiver characteristics. We predicted that reports of violence would be associated with more negative carer–patient relationships (high EE), poorer well-being (more burden and distress), dysfunctional (avoidant) coping styles, and lower self-esteem.

Method

Participants

Participants and their caregivers were recruited to the PRP Trial. This was a multi-centre British randomized controlled trial of CBT and family intervention for psychosis. All participants provided written informed consent and the South Thames Multi-Centre Research Ethics Committee provided ethical approval of the study. Details of the trial participants, method and results have been published elsewhere. Patients were recruited at the time of relapse in their positive symptoms. Patients in contact with caregivers for at least 10 hours a week were asked for consent to approach them. Caregivers were identified as the parents, spouses, or partners living with the patient, other acknowledged caregivers living with the patient, or acknowledged caregivers not living with the patient but in contact at least 3 times and 10 hours a week. Caregivers had to speak English adequately to complete the assessments.

One hundred twenty-five patients who were eligible to participate did not consent. No data exist on the suitability of their caregivers, though comparisons between patients who consented and those who did not showed that consenting patients were more likely to be men, with a history of voluntary admissions, or sexual offences. Fewer had a history of violence ever been violent in the past. EE ratings consist of critical comments (frequency count), hostility (0 to 3), emotional overinvolvement (0 to 5), positive remarks (frequency
count), and warmth (0 to 5). Caregivers are defined as high EE if they make 6 or more critical comments, and (or) score 1 or more on hostility, and (or) score 3 or more on emotional overinvolvement. EE ratings were also examined as continuous variables. Ratings were made at the time of the initial investigation by trained assessors blind to the predictions of our study.

Ratings of Patient-Initiated Violence From the Camberwell Family Interview
Ratings of caregivers reports of patient-initiated violence were made by 2 independent raters from transcripts of CFI audiotapes. Violence was defined as any aggressive act toward another person or property. Verbal aggression was not included. The Kappa statistic for violence ratings indicated excellent agreement (0.91). Raters were blind to EE ratings, and to previous ratings of carer mood, burden, and support.

The General Health Questionnaire
The GHQ-28 was used as a measure of caregiver stress and is a scaled version of the GHQ. In our study, we used the GHQ-28 total scores, and the scoring was based on the 0, 1, 2, 3 method. Higher scores indicate greater levels of distress.

The Experience of Caregiving Inventory
The ECI is a 66-item, self-report questionnaire developed to assess the subjective negative and positive experiences of caregiving. Respondents rate how often they have thought about a particular issue in the last month prior to completing the questionnaire on a 5-point scale (range: 0 never to 4 nearly always). Negative caregiving appraisal is calculated from the sum of the 8 negative ECI subscales, and positive appraisal from the sum of the 2 positive ECI subscales. The scale has good reliability and validity.

Abbreviated Coping Orientations to Problems

Rosenberg Self-Esteem Scale
This self-report measure assesses current levels of global self-esteem. It comprises 10 items measured on a 4-point Likert scale (strongly agree to strongly disagree). Higher scores are indicative of low global self-esteem.

Patient Measures
The Positive and Negative Syndrome Scale. The PANSS is a 30-item, semi-structured interview designed to rate psychotic symptomatology in relation to the last 72 hours. It has 3 subscales: positive symptoms, negative symptoms, and general psychopathology. All items are rated on a 7-point Likert scale representing increasing levels of psychopathology. Higher scores indicate higher levels of symptomatology.

Beck Depression Inventory-II. The BDI-II is a well-established, 21-item, 4-point, self-report measure for the assessment of depression in the previous 2 weeks.

Beck Anxiety Inventory. The BAI is a self-report, 21-item, 4-point measure used for the assessment of common anxiety symptoms for the past week.

Statistical Analysis
Data were analysed with SPSS for Windows, version 17.0 (SSPS Inc, Chicago, IL). Statistical tests were 2-tailed, with an alpha level of 0.05.

Results
Table 1 summarizes the caregiver and patient socio-demographic data and Table 2 presents a summary of the caregiver clinical characteristics.

Caregiver participants were mainly female, aged in their early 50s, and at least one-third were unemployed. Almost two-thirds were in partnerships. Just under 70% were co-resident with the patient and were related through being their parent or partner. Patients were mainly inpatients. They were also male, single, and at 80%, most were unemployed. Patients had an average 11.5 year illness history.

Caregivers Reports of Patient-Initiated Violence
About one-half of the caregivers reported at least 1 incident of patient-initiated violence during their CFI interview (52.9%, n = 38). Among these, 62.2% reported personal violence, 5.4% of the violence was toward other family members, 8.1% was toward people outside the family, and 24.3% was toward property.

Patient violence included incidents causing injury requiring hospital treatment: assaults involving the use of a weapon and property destruction including acts of arson. Examples are listed in Table 3.

Caregivers Correlates of Patient-Initiated Violence
This was predominantly a low EE caregiver sample (67%). While overall EE status was not related to violence (Fisher exact test \( P = 0.447 \)), the hostility component was greater in
caregivers reporting violence ($t = 2.201, df = 68, P = 0.03$, mean difference $= -0.34 [95\% CI -0.663 to -0.032]$).

Patient violence was unrelated to caregiver burden or caregiver distress ($P > 0.05$). Self-esteem was significantly lower in caregivers reporting patient violence ($t = 2.199$, $df = 60$, $P = 0.03$, mean difference $= -3.10 [95\% CI -5.92 to -0.281]$), while levels of functional coping through emotional support were significantly higher ($t = 2.902$, $df = 61$, $P = 0.005$, mean difference $= -0.56 [95\% CI = -0.956 to -0.176]$). No other differences in coping styles were found ($P > 0.05$). Reports of patient violence were unrelated to caregiver sex, age, and employment status, and whether caregivers and patients lived together (Fisher exact test $P > 0.05$). However, patient violence was more likely to be reported by a person on their own caring for a patient (Fisher exact test, $P = 0.03$).

### Patient Correlates of Violence

Violence was significantly higher in patients who were younger ($t = 2.418$, $df = 68$, $P = 0.02$, mean difference $= 6.71 [95\% CI 1.174 to 12.263]$); male (Fisher exact test $P = 0.04$); single (Fisher exact test $P = 0.047$); and those who were inpatients at the time of recruitment into the study (Fisher exact test $P = 0.02$).

### Discussion

Our study investigated caregiver reports of patient-initiated violence in psychosis using transcripts from the CFI. The caregiver sample was predominately comprised of white, middle-aged females. Consistent with other reports, just over one-half of the caregiver sample reported incidents of patient-initiated violence, of which nearly two-thirds were directed toward the caregiver. Patient-initiated violence was associated with higher levels of caregivers’ expressed hostility toward patients (a component of high EE), their lower self-esteem, and greater reported use of emotional support styles of coping. Patient violence was more likely to be reported by a person on their own caring for the patient. The results offered mixed support for our hypotheses.

EE hostility reflects a caregiver’s extreme criticism of the patient’s personality and character. Our findings are consistent with previous work linking caregiver criticism and patient-initiated violence. It is perhaps unsurprising that caregivers perceive patients with a history of violence more negatively. Given that most violence was directed

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**Table 1 Caregiver and patient social, demographic, and clinical characteristics**

| Demographic                  | Patient | Caregivers |
|------------------------------|---------|------------|
| Sex, female, %               | 27.1    | 72         |
| Age, years, mean (SD)        | 35.8 (12.0) | 52.9 (12.9) |
| Length of illness, years, mean (SD) | 11.5 (9.6) |
| Inpatient or outpatient, %   | 58.6 or 41.4 |
| Marital status, %            |         |            |
| Single                       | 65.2    | 11.8       |
| Married                      | 24.6    | 60.3       |
| Divorced or separated        | 8.7     | 13.2       |
| Widowed                      | 1.4     | 10.0       |
| Cohabiting                   |         |            |
| Other                        | 2.9     | 1.5        |
| Relationship to patient, %   |         |            |
| Parent                       | 55.1    |            |
| Partner                      | 34.8    |            |
| Sibling                      | 8.7     |            |
| Child                        | 1.4     |            |
| Living with patient, yes, %  | 69.8    |            |
| Hours of weekly face-to-face patient contact, mean (SD) | 38.5 (22.7) |
| Ethnicity, %                 |         |            |
| White                        | 85.6    | 89.7       |
| Black                        | 5.9     | 4.4        |
| Other                        | 8.5     | 5.9        |
| Employment status, %         |         |            |
| Unemployed                   | 80.0    | 34.8       |
| Employed                     | 12.9    | 40.9       |
| Other                        | 7.2     | 24.3       |
at caregivers, links with low self-esteem in caregivers are also plausible. We know that patient violence has a detrimental impact on the well-being and functioning of formal caregivers (that is, paid mental health staff), which can include sleep disturbances, stress, and posttraumatic stress disorder.\textsuperscript{58} It is also linked to burnout and low morale in staff.\textsuperscript{59} Poor self-esteem has also been associated with reports of intimate partner violence.\textsuperscript{60} The negative relation between patient violence and low caregiver self-esteem in our study are in line with such findings.

Contrary to our predictions and previous studies,\textsuperscript{42} but consistent with Loughland et al,\textsuperscript{40} we found no relation between caregiver distress, burden, and reports of patient violence. However, caregivers exposed to violence were more likely to seek emotional support from trusted others. This may help to manage possible feelings of shame and embarrassment, and buffer distress. The literature on domestic violence offers some support for this explanation.\textsuperscript{40} Interestingly, caregivers reporting violence were not more likely to engage in avoidant (dysfunctional) coping strategies.

Our results indicated that some caregivers may be at greater risk of patient-initiated violence than others. For example, caregivers defined as being on their own, being single (used here as a measure of isolation), reported more patient violence. It could be argued that caregivers on their own have fewer opportunities to access immediate support in their day-to-day caregiving role, and the presence of another adult may discourage violent incidents from occurring or escalating. Caregiving relationships have the propensity to be more intense when the caregiver is on their own, and it may be easier for caregivers to become the targets of patient's distress or unusual beliefs when they are on their own, or in more contact with the patient.\textsuperscript{40}

\textbf{Clinical Implications}

The informal caregiving role in psychosis is often challenging, with few opportunities afforded for respite. Caregivers often take on their role with no preparation time, and little training, guidance, or specialist knowledge about the illness and its impact on the patient. They can often become isolated by feelings of stigma and shame.

Caregivers are likely to benefit from interventions that promote their safety, by developing skills in violence resolution and problem-solving, and in identifying and managing warning signs, such as acute affective or psychotic symptoms, and promoting adaptive coping strategies that explicitly include pathways of how and where to access support and reduce or prevent risk.\textsuperscript{61} Equally, patients may benefit from CBT interventions to address anger management issues, early warning signs, and (or) the negative emotional sequelae that may follow their behaviour, such as regret, shame, guilt, and stigma.\textsuperscript{62}

In line with recommendations reported for domestic violence and mental health,\textsuperscript{63} the findings from our study indicate the importance of general inquiry about caregivers’ experience of patient-initiated violence as part of routine risk assessment. The training implications for mental health staff must also be considered.\textsuperscript{64,65}

\textbf{Limitations}

First, our study used indirect information from responses obtained during previously completed CFIs, and answers were not necessarily followed up, and accuracy checks on carer reports were not available. Therefore, some reports lack detail (for example, frequency of behaviours), and it is possible that our figures underestimate the actual level of violence. Exploration of the differences between caregivers who had been victims of patient-initiated violence to those who had not would have also extended our understanding of the potential impact. The patient perspective was not sought, and caregivers were not asked about carer-initiated violence, which can be an issue in other caregiving relationships.\textsuperscript{66} However, given the typical caregiving relationship in psychosis (that is, middle-aged mother caring for adult son) the risk of carer violence might be assumed to be comparatively less. Second, the cross-sectional design limits causal inference. However, the findings are in line with the available literature on intra-familial violence by patients with psychosis.\textsuperscript{41} Nevertheless, it is possible that carerger hostility and low self-esteem precede incidents of patient violence. A prospective study would help to establish the causal direction of these links. Likewise, efforts to determine the pattern of relations between caregiver self-esteem and reports of patient violence and victimization are indicated as are investigations.

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\textbf{Table 2} Clinical characteristics of the caregiver sample & \\
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\textbf{Caregiver variable} & \textbf{Mean (SD)} \\
\hline
Criticism & 3.27 (3.51) \\
Hostility & 0.21 (0.67) \\
EOI & 1.71 (1.13) \\
Warmth & 2.22 (1.16) \\
Positive comments & 1.95 (1.97) \\
Low EE or high EE, % & 67.1 or 32.9 \\
Distress, GHQ & 25.2 (13.7) \\
ECI burden & 92.8 (29.9) \\
ECI positive & 30.8 (7.78) \\
Self-esteem, RSES & 19.2 (5.70) \\
Avoidant & 14.7 (3.9) \\
Active coping & 2.72 (0.73) \\
Emotional support & 2.67 (0.81) \\
Instrumental support & 2.38 (0.76) \\
Confidante, yes or no, % & 84.4 \\
\hline
\end{tabular}
\end{center}
\caption{Clinical characteristics of the caregiver sample}
\end{table}
of the links between carer functioning and the type and severity of patient-initiated violence experienced. Third, while the sample is consistent with those described in other caregiver studies, the caregivers were predominately white, middle-aged females who were the mothers of the identified service user who had recently relapsed and recruited as part of a psychological therapies trial. Caution is therefore required in generalizing the findings to other carer subgroups (for example, caregivers drawn from black and minority ethnic groups, or spousal or sibling caregivers). Finally, the lack of a nonclinical control group precludes discussion about how common the experience of patient-initiated violence is and what, if any, are the specific issues related to a psychosis caregiving group.

### Conclusion

Patient violence may impact on carer self-image and the caregiving relationship. Given the difficulty of disclosure of violence in close relationships and the lack of direct questioning in our study, mental health staff need to be able to explore effective ways to assess such issues and intervene appropriately.

### Acknowledgements

The authors thank all of the caregivers and patients who agreed to take part in the study and the participating teams in the 4 National Health Service Trusts. They also acknowledge the input of the research workers employed on the PRP Trial for their role in data collection and entry.

This work was supported by a program grant from the Wellcome Trust (no 062452).

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| Table 3 Examples of caregiver reports of patient violence from the Camberwell Family Interview |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Violence toward caregiver | Violence toward others | Violence toward property |
| • He used to give you the odd punch and kick as he was walking by, but his mind was so confused and muddled. | • He was really violent and he ended up having to go to court for actual bodily harm and he got 240 hours community service. The only reason he didn't go to prison was because he was actually admitted to hospital and he got the help he needed because he had stopped taking his medication. | • She smashed things—she had pictures she smashed. |
| • She did hit me a few times when we used to live together. | • He had attacked his sister and we have heard about him attacking other people. | • One night he woke up and punched the wall right next to my head. I thought I would just go downstairs and sleep on the settee. |
| • He started to slap me, threaten me, and push me. This went on for a couple of days and I couldn't get anyone out to assess him. | • He started beating up my wife and being abusive to her and it just got out of hand. | • He would smash a chair. He smashed up a shop. |
| • I have passed him money in the past he squeezed it in my hand that made it bleed. He twisted my hands as if I have done something wrong and that does really get to me. | • Only after he put a man in hospital that we knew he was hearing voices—the man pushed past him and the voices told him to kill him. | • He'd smash glass. |
| • He only ever lashed out at me at once. | • He started attacking somebody in the street with the knife and he was also imagining himself as God. | • He took the car and smashed the car. He got a paving slab and slung it at the car—he was taking it out on the car—that was one of the first signs. |
| • She hit me yesterday because she wanted me to come up here every day like I used to. | • He had attacked somebody in the street with the knife and he was also imagining himself as God. | • Anything he felt voices were coming from, he has smashed up, televisions and telephones. |
| • He punched me in the face and threatened to kill me. I had a fractured rib. | • He had attacked somebody in the street with the knife and he was also imagining himself as God. | • He does lose his temper but not as bad as he used to be—he would punch holes in the doors and smash windows in. |
| • There was a period when he was violent every day. | • Came back from work and found her unconscious, and it was actually clear that he had tried to kill her. | • Burned down his bed. |
| • The day she hit me I was going to ring child line. This wasn't my mum. This is because she had escaped from hospital. | | • The next morning he jumped out of bed, went into the bathroom, and smashed the mirror. Set fire to my living room, but you cannot say nothing to him. |
| • Only been aggressive to me once, years ago. I said if you do that again I will hit you in the balls when you are fast asleep... he has never touched me since. He has got physical with my eldest daughter—he transferred it over to her. | | |
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