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Fear and Anger in Delusional (Paranoid) Disorder: The Association with Violence

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We report a series of 15 patients with delusional (paranoid) disorder as defined in DSM–III–R. All were supervised by a forensic psychiatry service after violent or threatening acts. We hypothesised that delusions and actions in these patients would be congruent with an abnormal mood characterised by fear and anger. Informants and the patients indicated a pervasive and persistent abnormality of mood (fear and defensive anger), with delusions and actions that were congruent with this mood during the offence and for over a month before. Other behaviours, such as fleeing or barricading to avoid delusional persecutors, were also consistent with congruence of mood and delusions. In all cases, violent acts and mood were congruent, but in three cases the violent act was unrelated to delusions. Although a study such as this does not demonstrate that the mood abnormality is primary, we believe moods of fear and anger in delusional disorder are not sufficiently recognised as part of the disorder.

Lewis (1970), reviewing the history of paranoia, describes cycles of fashion in its definition and supposed aetiology. The trend at present is towards narrower definitions of delusional disorder (paranoia) which emphasise abnormalities of understanding rather than abnormalities of emotional state (American Psychiatric Association, 1987; World Health Organization, 1987). This debate has recently been revived by Zigler & Glick (1988) who argued that delusional disorder is a 'depression equivalent' or 'masked depression' but this argument has met much criticism (Sorensen *et al*, 1988).

There are, however, descriptions of mood states other than depression, mania and anxiety, such as 'Verstimmung' or 'ill-humoured mood state'. 'Verstimmung' has tended to be conflated with depression by English-speaking psychiatrists (Fish, 1985, p. 74). Irritability has found its way into the diagnostic criteria for depression, dysthymia and mania (American Psychiatric Association, 1987) despite the absence of a consensus on the meaning of terms such as dysphoria and irritability in English (Snaith & Taylor, 1985; Gabriel, 1987). To revive interest in 'irritable dysphoria' and its place in paranoia, Berner *et al* (1987) have cited the theories of Specht (1908) who regarded irritability as a distinct entity. Psychiatric practice in the English-speaking world has not traditionally looked for or recognised congruence between delusions and moods of anger or fear, although congruence does not necessarily imply that mood is the primary disorder.

We report here a series of patients given a DSM–III–R diagnosis of delusional disorder who were supervised by a forensic psychiatry service because of their violent or threatening behaviour. For a diagnosis of delusional (paranoid) disorder, DSM–III–R requires the presence for at least one month of 'non-bizarre' delusions (i.e. involving situations that occur in real life); hallucinations if present are not prominent; behaviour is not obviously odd or bizarre; major depression or manic syndrome if present during the illness is only for brief periods relative to the total duration; organic factors or classic schizophrenic features are not present. Kendler *et al* (1989) explain that hallucinations are allowed at all only to accommodate such abnormal experiences as tactile, somatic and olfactory misperceptions of the sorts commonly associated with non-bizarre delusions, e.g. infestation.

We formulated three hypotheses: that an affect of fear and anger was common in patients with delusional disorder who had acted violently; that delusions and affect were congruent both before and at the time of the acts of violence which brought them eventually to our attention; and that this represented a pervasive and persistent alteration of affect out of proportion to the patients' circumstances or any events that might have precipitated the illness.

Method

Between 15 April 1982 and 1 May 1990, 126 patients were admitted to a regional secure unit serving an area of south-east England. Notes were extensive in each case, and included frequent mental state examinations and descriptions of mental state at the time of the offence based on interviews with the patient, witness statements, and interviews with family and other informants. Old hospital notes and records of previous convictions were obtained.

The check-list included all features required for the diagnosis of delusional disorder as well as related and

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alternative diagnoses. Types of delusion present in each case were particularly recorded. The pervasive affects during the illness before the offence and at the time of the offence were rated as present or absent for the dimensions of mood (fear, anger, sadness, and friendliness) suggested by McNair *et al* (1971). The informant for this rating was also noted. Estimates were also made from witness and informant statements of the duration of illness and of affective state before the offence. The offence was used to tether the rating of mood to a defined time in the course of the illness and also to compare the contributions of mood and delusion to a well-described act.

Notes of all patients given a discharge diagnosis of paranoid psychosis, and notes of any other patients who had delusions without hallucinations, were abstracted by the first two authors independently using a check-list. Where the abstracts differed, reference to informant source for the rating led to an agreed rating in each case. The third author also had personal knowledge of each patient.

Behavioural problems related to the illness were also noted, particularly behaviour towards intimates since this is the situation where irritable mood is most likely to be acted out (Weissman *et al*, 1971).

Results

From the total admissions there were 14 patients who met DSM-III-R diagnostic criteria for delusional (paranoid) disorder. All were men, reflecting the predominance of males in the total admissions for the period (116 of 126, or 92%). A 15th patient, a woman, was added because of her prolonged out-patient contact with the service following discharge from a special hospital. Full details of her previous admissions elsewhere were available. She was included as every effort was made to include all such patients known to the service.

There were three homicides, a further four cases which could have resulted in homicide and five further assaults causing injury. Two patients made only threats of violence to specific persons incorporated into their delusions and one of these deliberately damaged property to attain the safety of prison as did one other patient. One patient had offended by driving a van full of female co-workers at high speed through several traffic lights, greatly frightening his passengers.

Mean age at onset of first illness was 29.8 years (median 31, range 17–49). Mean age at the time of the offence was 34.9 years (median 34, range 23–45), and the mean duration of the episode of illness before the offence, based on informants' estimates, was 16.8 months (median 18, range 1–60).

Congruence of delusions and affect

In every case, the delusions held appeared to be congruent with the pervasive affect in the period (over a month in all but one case) before the offence which led to admission. The same affect was present at the time of the offence in all but one patient, who became angry, having previously been fearful.

Although affect was disturbed in tandem with delusions in all cases, the offence was not directly related to the delusions in three patients who had not incorporated the victim into their delusions. Careful assessment of mental state at the time of the assaults gave no indication that the victims had even briefly been incorporated into the patients' delusional systems. In each of these cases, the affect at the time of the offence was clearly related to the pre-existing disturbance of mood, suggesting that the disturbance of mood (fear, anger or both) was pervasive and extended beyond the content of delusions.

No patient had clear evidence of depressive episodes or features of mania lasting more than one week before their offence, although four patients showed grief for their victims in various forms in the course of recovery. Patient 1 showed a complete shift in the affective congruence of his beliefs during his episode of grief when he developed delusions of poverty and nihilism, later reverting to his persecutory beliefs when his mood returned to one of fear and suspicion.

Delusions and affect

All patients had persecutory delusions. Themes included reference regarding mockery, either sexual or physical, unwelcome sexual interference (without abnormal experiences) and threats of violence by poisoning or direct assault. Preoccupation with loss of control in a relationship (jealousy and infidelity) was evident in seven cases. Four patients had grandiose delusions and these were in each case accompanied by delusions of infidelity. The patients with grandiose delusions all believed that they had been prevented from achieving their deserved place in the world. The belief, therefore, accommodated the disproportionate force of the patients' angry reaction to perceived slights.

Table 1
Fear and anger[1] surrounding violence in patients with delusional (paranoid) disorder

Patient	During offence		Before offence		
	fear	anger	fear	anger	duration: months
1	0	1	0	3	3
2	0	1	0	1	12+
3	3	0	3	3	24
4	3	3	3	3	36
5	3	0	3	3	18
6	3	3	3	3	60
7	3	0	3	3	18
8	3	0	3	0	18
9	3	1	2	1	2
10	0	1	0	1	1
11	1	0	2	1	6
12	0	3	3	3	30
13	2	1	3	1	6
14	3	0	3	0	12
15	3	0	3	0	6

1. For anger and fear, 0 = not reported as present, 1 = present by patient's own account, 2 = as described by others, 3 = patient and others both describe fear and anger as present.

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It was not unusual for patients to have more than one delusional system, e.g. somatic delusions and unrelated delusions of persecution or infidelity. In these cases, at least one of the separate systems was highly organised and both were internally consistent.

There was evidence for a clear change of affect at the onset of illness in nine cases, while there was a perceptible accentuation of premorbid affect to the extent of impairment in the remaining six.

Table 1 shows the ratings of affect during the illness before and during the offence. Duration of this affective state is based on informants' accounts except in one case where a diary kept by the patient was the only evidence of mental state before the offence. Although ratings were attempted equally for all four moods of the profile of mood states, only one patient was rated as sad before the offence (he was also rated angry and fearful) and one other was rated happy (also rated angry). All patients were rated positive by informants' accounts and the patients' own accounts for fear or anger. Three patients had evidence of fear only, and three had evidence of anger only. The others all had both fear and anger, although the patients more often described fears, while informants described outbursts of anger.

A pervasive affect of fear for some time before the offence was suggested by behaviour such as frequent changes of address, or long journeys to evade persecutors, and barricading themselves into their rooms (Table 2). Some patients had taken to carrying weapons for protection from their imagined persecutors. Three patients had asked the police for protection from persecutors. Overall, this sort of evidence of fear was found in eight cases. Patient 15 also carried a weapon but this was for revenge against persecutors rather than out of fear.

Table 2
Patient actions during the symptomatic period under study: escape and defence

Patient	Moves[1]	Travel[2]	Barricades[3]	Weapon[4]
1	0	0	2	0
2	0	0	0	0
3	0	0	1	0
4	2	2	2	1
5	2	2	0	0
6	0	0	2	1
7	0	0	0	0
8	0	1	0	0
9	0	0	0	0
10	0	0	0	0
11	0	0	0	0
12	0	2	0	1
13	0	0	0	1
14	0	0	0	0
15	0	0	0	0

For each heading, 0 = nil, 1 = present before onset of illness, 2 = present with onset of illness, 3 = both.
1. Frequent changes of address to escape persecutors.
2. Frequent aimless travel to escape persecutors.
3. Barricades self into home for protection (more than once in every case).
4. Carries weapons because of fear of attack.

Table 3
Patient actions during the symptomatic period under study: irritability and coercion

Patient	Family violence[1]	Family coercion[2]	Coercive sex[3]	Stranger violence[4]
1	3	3	0	0
2	1	3	1	0
3	1	2	0	0
4	0	2	0	0
5	0	2	0	1
6	3	3	0	0
7	0	3	0	0
8	3	2	0	0
9	1	3	1	1
10	0	0	0	0
11	2	2	2	0
12	2	2	0	0
13	3	3	0	1
14	0	0	0	1
15	2	2	0	1

For each heading, 0 = nil, 1 = present before onset of illness, 2 = present with onset of illness, 3 = both.
1. Assaults family members.
2. Enforces own will through threats.
3. Incest or complaint by spouse of 'excessive sexual demands'.
4. Assaults strangers.

Although violence is not in itself evidence of anger, violent acts were frequent (Table 3) in the period before the offence. Assaults on strangers and police, family violence, sexually coercive behaviour towards family members, and other coercive behaviour in the family were all common. In each case, the types of behaviour were associated with the threat of violence or actual violence, expressed in loud and demonstrative terms, and arose from general irritability when family members refused to comply with their wishes. Only one patient had not been assaultive to family or strangers before the offence, only two had not previously assaulted family members. It was not surprising, therefore, that wives, mothers or relatives supported the patients' beliefs in six cases and had stopped openly questioning them in a further four.

Of the three patients whose mental state was rated positive for anger but not for fear, one also displayed 'escape' behaviour, taking long train journeys to evade persecutors. Of the three rated for fear but not for anger, two showed irritable and coercive behaviour towards their families in the month before the offence. From all the information available, therefore, it appears that fear or anger was prominent in all patients, while both probably coexisted in twelve.

The affects at the time of the offence are shown in Table 1. In no case was anger or fear described during the offence if it had not been present previously. Variance between occasions was accounted for by failure to report one or other affect during the offence. It was not possible to say whether there was a genuine change of affect in the context of action or whether patients and witnesses were simply less observant or coherent in their reporting of such violent incidents. Although numbers are small, it is of interest that the reporting of fear was more vulnerable to this tendency than the reporting of anger.

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Six of the offences appeared entirely impulsive, while brief planning (less than an hour) was evident in two. Three out of four cases, apparently experiencing only fear at the time of the offence, planned the offence for more than an hour, while those apparently experiencing only anger at the time were in five out of six cases impulsive (unplanned) or only briefly prepared.

Eight patients offended against spouses or relatives, five of whom were cohabiting with the victim. The remaining seven offended against strangers or casual acquaintances who could not have precipitated the illness or provoked the violent incident.

There was evidence of a real precipitating event for the illness in cases 7 and 10. They commenced their jealous preoccupations after chance suggestions by others that their wives were interested in other men. In each case, however, they developed these fears into elaborate and grotesque delusions. There was a possible precipitating event in three further cases. An example was patient 3, who said he had been ridiculed at school for going bald. He was not in fact going bald, and whether he had been ridiculed for this at school at the onset of his preoccupation, or his classmates played on his fears once they knew of them, could not be distinguished. In either case, it was evident that the patient was excessively sensitive to such teasing, as were other patients.

Discussion

There is a long history of psychiatric interest in abnormal affects of anger and irritability. Hunter & Macalpine (1963, pp. 55–58) quote John Downame's treatise on anger of 1600 and many descriptions of 'raving madness' can be found from later centuries. In spite of this, few current psychiatric textbooks in English contain any reference to irritability (Snaith & Taylor, 1985) or anger.

In accordance with our first hypothesis, in this series, fear or anger were prominent in all cases and occurred together in most.

Our second hypothesis concerned the congruence of mood, delusion, and violent actions. The affective state of projective fear and defensive anger was congruent with delusions in all cases. Of particular interest was the patient whose delusions about his wife changed from persecutory to nihilistic and back again as his mood changed from fear to grief and back to fear. The congruence of mood and violent action was also complete.

Our third hypothesis was that the affective state described above was pervasive and out of proportion to any possible precipitating event. There was evidence that the affective state was so pervasive as to be associated in three cases with violent behaviour even against those not incorporated into delusions. The evidence of behaviour such as frequent changes of address, barricading, frequent aimless travel to evade persecutors, carrying weapons and irritable or violent behaviour in the months before the violent offence suggests that the mood motivating patients to act on their beliefs was not merely a brief state. Where there were identifiable precipitating events, the subsequent disturbance was certainly disproportionate.

It is clear that this study, using retrospective case-note material, could not distinguish between a primary mood disorder with delusions arising secondary to the mood (as in depression) and a delusion whose content gives rise to affects of fear and anger. We have, however, demonstrated that such an affect is common in those with delusional disorder who act violently, that it is pervasive and prolonged and is associated with violent actions even where the victims appear not to have been incorporated into delusions.

The recognition of fear and anger as a clinical feature of delusional (paranoid) disorder is important, as angry, threatening, and violent behaviour is commonly used as a reason for excluding patients from psychiatric care (Coid, 1988) and even to stigmatise them (Lewis & Appleby, 1988).

Studies which consider the possibility of mood disorders other than depression and mania have reported high incidences of 'irritable mood' in variously defined paranoid disorders (Schanda & Gabriel, 1988).

This abnormal mood had been present in many cases in the present series for years before their referral to the forensic psychiatric service. Many patients had long histories of illness-related domestic violence which often went unremarked either by their previous psychiatrists or the police. The referral bias to the forensic service may be more likely due to severity of illness rather than atypical features. This could be tested by systematic observation of mood and behaviour in relation to delusions in a non-offender population of patients.

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